

déjà **review**

Psychiatry

- Great for last-minute clerkship and board review
- Written by medical students who aced the USMLE Step 2 CK
- Rapid-fire, quick hit format for maximum retention
- Study-enhancing illustrations, mnemonics and insider advice
- Clinical vignettes chapter preps you for cases you'll see on the exam

REMEMBER
WHAT YOU ALREADY
KNOW

Abilash A. Gopal
Alexander E. Ropper
Louis A. Tramontozzi, III

DEJA REVIEW™

Psychiatry

NOTICE

Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required. The authors and the publisher of this work have checked with sources believed to be reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication. However, in view of the possibility of human error or changes in medical sciences, neither the authors nor the publisher nor any other party who has been involved in the preparation or publication of this work warrants that the information contained herein is in every respect accurate or complete, and they disclaim all responsibility for any errors or omissions or for the results obtained from use of the information contained in this work. Readers are encouraged to confirm the information contained herein with other sources. For example and in particular, readers are advised to check the product information sheet included in the package of each drug they plan to administer to be certain that the information contained in this work is accurate and that changes have not been made in the recommended dose or in the contraindications for administration. This recommendation is of particular importance in connection with new or infrequently used drugs.

DEJA REVIEW™

Psychiatry

Abilash A. Gopal

MD Candidate, Class of 2008
Tufts University School of Medicine
Boston, Massachusetts

Alexander E. Ropper, MD

Class of 2007
Tufts University School of Medicine
Boston, Massachusetts

Louis A. Tramontozzi III, MD

Class of 2007
Tufts University School of Medicine
Boston, Massachusetts



Medical

New York Chicago San Francisco Lisbon London Madrid Mexico City
Milan New Delhi San Juan Seoul Singapore Sydney Toronto

Copyright © 2008 by The McGraw-Hill Companies, Inc. All rights reserved. Manufactured in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

0-07-159460-4

The material in this eBook also appears in the print version of this title: 0-07-148832-4.

All trademarks are trademarks of their respective owners. Rather than put a trademark symbol after every occurrence of a trademarked name, we use names in an editorial fashion only, and to the benefit of the trademark owner, with no intention of infringement of the trademark. Where such designations appear in this book, they have been printed with initial caps.

McGraw-Hill eBooks are available at special quantity discounts to use as premiums and sales promotions, or for use in corporate training programs. For more information, please contact George Hoare, Special Sales, at george_hoare@mcgraw-hill.com or (212) 904-4069.

TERMS OF USE

This is a copyrighted work and The McGraw-Hill Companies, Inc. ("McGraw-Hill") and its licensors reserve all rights in and to the work. Use of this work is subject to these terms. Except as permitted under the Copyright Act of 1976 and the right to store and retrieve one copy of the work, you may not decompile, disassemble, reverse engineer, reproduce, modify, create derivative works based upon, transmit, distribute, disseminate, sell, publish or sublicense the work or any part of it without McGraw-Hill's prior consent. You may use the work for your own noncommercial and personal use; any other use of the work is strictly prohibited. Your right to use the work may be terminated if you fail to comply with these terms.

THE WORK IS PROVIDED "AS IS." MCGRAW-HILL AND ITS LICENSORS MAKE NO GUARANTEES OR WARRANTIES AS TO THE ACCURACY, ADEQUACY OR COMPLETENESS OF OR RESULTS TO BE OBTAINED FROM USING THE WORK, INCLUDING ANY INFORMATION THAT CAN BE ACCESSED THROUGH THE WORK VIA HYPERLINK OR OTHERWISE, AND EXPRESSLY DISCLAIM ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. McGraw-Hill and its licensors do not warrant or guarantee that the functions contained in the work will meet your requirements or that its operation will be uninterrupted or error free. Neither McGraw-Hill nor its licensors shall be liable to you or anyone else for any inaccuracy, error or omission, regardless of cause, in the work or for any damages resulting therefrom. McGraw-Hill has no responsibility for the content of any information accessed through the work. Under no circumstances shall McGraw-Hill and/or its licensors be liable for any indirect, incidental, special, punitive, consequential or similar damages that result from the use of or inability to use the work, even if any of them has been advised of the possibility of such damages. This limitation of liability shall apply to any claim or cause whatsoever whether such claim or cause arises in contract, tort or otherwise.

DOI: 10.1036/0071488324



Professional



Want to learn more?

We hope you enjoy this McGraw-Hill eBook! If you'd like more information about this book, its author, or related books and websites, please [click here](#).

Contents

	Faculty/Student Reviewers	viii
	Introduction	ix
	Acknowledgments	x
Chapter 1	CLASSIC PSYCHOLOGY	1
	Psychoanalytic Theory and Freud / 1	
	Psychosocial Development and Erikson / 6	
	Cognitive Theory / 9	
	Behavioral Theory / 10	
	Miscellaneous Theories / 10	
	Types of Psychotherapy / 13	
Chapter 2	MOOD DISORDERS	17
	Introduction / 17	
	Major Depressive Disorder / 17	
	Bipolar I Disorder / 21	
	Bipolar II Disorder / 24	
	Other Mood Disorders / 25	
Chapter 3	ANXIETY DISORDERS	29
	Introduction / 29	
	Panic Disorder / 30	
	Social Phobia / 32	
	Specific Phobia / 33	
	Obsessive-Compulsive Disorder / 34	
	Posttraumatic Stress Disorder / 35	
	Acute Stress Disorder / 36	
	Generalized Anxiety Disorder / 37	
	Adjustment Disorders / 38	
Chapter 4	PSYCHOTIC DISORDERS	41
	Introduction / 41	
	Schizophrenia / 43	
	Schizophreniform Disorder / 48	
	Schizoaffective Disorder / 49	
	Brief Psychotic Disorder / 49	
	Delusional Disorder / 50	
	Shared Psychotic Disorder / 51	
	Other Psychotic Disorders / 51	

Chapter 5	PERSONALITY DISORDERS	53
	Overview / 53	
	Cluster A (“Weird”) / 55	
	Cluster B (“Wild”) / 58	
	Cluster C (“Worried”) / 64	
Chapter 6	CHILDHOOD DISORDERS	69
	Mental Retardation / 69	
	Learning Disorders / 72	
	Developmental Coordination Disorder / 73	
	Communication Disorders / 74	
	Autistic Disorder / 75	
	Asperger Disorder / 77	
	Rett’s Disorder / 77	
	Childhood Disintegrative Disorder / 78	
	Attention Deficit Hyperactivity Disorder / 79	
	Conduct Disorder / 81	
	Oppositional Defiant Disorder / 83	
	Tourette Disorder / 83	
	Nocturnal Enuresis / 85	
	Selective Mutism / 86	
	Separation Anxiety Disorder / 86	
	Social Phobia in Childhood / 88	
	Generalized Anxiety Disorder in Childhood / 88	
Chapter 7	COGNITIVE DISORDERS	89
	Delirium / 89	
	Dementia / 92	
	Amnesic Disorders / 100	
Chapter 8	SOMATOFORM DISORDERS, FACTITIOUS DISORDERS, AND MALINGERING	103
	Somatization Disorder / 105	
	Undifferentiated Somatoform Disorder / 107	
	Conversion Disorder / 107	
	Pain Disorder / 109	
	Hypochondriasis / 111	
	Body Dysmorphic Disorder / 113	
	Factitious Disorders / 114	
	Malingering / 117	
Chapter 9	SLEEP DISORDERS	119
	Epidemiology and Etiology / 119	
	Diagnosis and Treatment / 120	

Chapter 10	SUBSTANCE-RELATED DISORDERS	127
	Introduction / 127	
	Alcohol / 128	
	Sedatives and Hypnotics / 132	
	Opiates / 133	
	Cocaine and Amphetamines / 135	
	Phencyclidine (PCP) / 136	
	Hallucinogens / 137	
	“Club Drugs” / 137	
	Marijuana / 138	
	Caffeine / 138	
	Nicotine / 139	
Chapter 11	EATING DISORDERS	141
	Introduction / 141	
	Anorexia Nervosa / 141	
	Bulimia Nervosa / 145	
	Blnge Eating Disorder / 147	
Chapter 12	MISCELLANEOUS DISORDERS	149
	Sexual Disorders / 149	
	Impulse Control Disorders / 155	
Chapter 13	LAW AND ETHICS IN PSYCHIATRY	157
	Professional Responsibilities / 157	
	Admission to a Psychiatric Hospital / 159	
	Informed Consent / 160	
	Competence and Capacity / 161	
	Medical Malpractice / 162	
Chapter 14	PSYCHOPHARMACOLOGY	163
	Antidepressants / 163	
	Mood Stabilizers / 164	
	Antipsychotics / 166	
	Anxiolytics / 170	
	Psychostimulants / 171	
	Drugs Used in Alzheimer’s Dementia / 171	
Chapter 15	CLINICAL VIGNETTES	173
	Index	219

Faculty Reviewers

Sean Blitzstein, MD

Director, Psychiatry Clerkship
Clinical Professor of Psychiatry
University of Illinois at Chicago School of
Medicine
Chicago, Illinois

Student Reviewers

Patrick Burnside, MD

Class of 2007
Brody School of Medicine
Eastern Carolina University
Greenville, North Carolina

Brian Piltz, MD

Class of 2005
University of Washington School of
Medicine
Seattle, Washington

J. Scott Gabrielsen

MD/PhD Candidate
University of Utah School of Medicine
Salt Lake City, Utah

Introduction

Deja Review Psychiatry was written with the intent to provide 3rd-year medical students with a comprehensive overview of the information they will encounter in their Psychiatry clerkship. The information is presented using brief, bullet-point questions and answers in order to improve the usability of the text without sacrificing content. We attempted to draw students' attention to important and high-yield concepts by using boldface terms and stylized exclamation points. In addition, we encourage students to spend time learning the material presented in the final chapter consisting of "clinical vignettes," which model the format of both the Boards and Psychiatry shelf exams.

Our primary goals are that the text is easy-to-use, clear, and comprehensive. Since this is the initial publication of *Deja Review Psychiatry*, we invite students that use the book to send us suggestions for improvements to be incorporated into future editions.

Thanks for reading, and good luck on the wards!

Abilash A. Gopal
Alexander E. Ropper, MD
Louis A. Tramontozzi III, MD

Acknowledgments

To all those who have opened our eyes to the great possibilities in medicine...

...and in particular, to those who have provided us with support, encouragement, and advice throughout this exciting project, such as Dr. Allan Ropper, Meghan Tramontozzi, and our respective families.

Classic Psychology

! What are the three main psychological theories that contribute most to psychotherapy?

Psychoanalytic, cognitive, and behavioral

PSYCHOANALYTIC THEORY AND FREUD

Who is known as the father of psychoanalytic theory?

Sigmund Freud

What two concepts form the basis of Freud's theories on human behavior?

1. Unconscious motivations
2. Early developmental influences

What are the three major twentieth-century psychodynamic schools?

1. Ego psychology
2. Self-psychology
3. Object relations theory

! What are the names and functions of Freud's three-part psychic structure of mind?

1. *Id*—the mind's drives and instincts; these are always unconscious
2. *Ego*—resolves conflict and allows adaptation to one's environment
3. *Superego*—sense of right and wrong as created by parental and societal morality

What is the major function of the ego, and how does it accomplish this function?

The ego serves to reduce anxiety by employing a variety of defense mechanisms. Some of these mechanisms are considered to be more functional and mature than others.

! What is a defense mechanism?

An unconscious reaction employed by the ego in an attempt to decrease anxiety when confronted with feelings or ideas causing distress.

How does an immature defense mechanism differ from a mature one?

Immature defense mechanisms distort reality to a greater degree than mature.

When are defense mechanisms pathologic?

- When they do not actually reduce anxiety
- When they prevent adaptation to a stressful situation
- When they decrease anxiety at the expense of increasing anxiety in the future

! What are examples of mature defense mechanisms?

SSIRAH for the mature wine drinkers

- *Somewhat mature*: Sublimation, Suppression, Intellectualization, Rationalization
- *Most mature*: Altruism, Humor

! What are examples of immature defense mechanisms?

DIAPeRS for the immature

DDD: Denial, Displacement, Distortion

II I: Identification, Introjection, Isolation

P: Projection

RRR: Reaction formation, Regression, Repression

S: Somatization

! What is sublimation?

The conversion of unacceptable feelings or ideas into more acceptable actions. For example, a man is angry at his boss and unconsciously wishes to hurt him but instead he goes to the gym for an intense workout.

! What is suppression?

Avoiding distressing emotions or events while keeping them as components of conscious awareness by occupying oneself with other emotions or events. For example, a man who is having symptoms of a heart attack goes to the emergency room to be examined rather than be overwhelmed with fears about dying.

What is intellectualization?

Changing an emotionally disturbing problem into an entirely cognitive one. For example, a woman undergoing a divorce begins to read books about the legal and sociologic aspects of the process.

What is rationalization?

Distorting reality to make an undesirable event more palatable. For example, a student who is not elected to an honor society remarks that he is

What is altruism?

better off because he would have had to attend several meetings that would be wasteful of his time.

Decreasing one's own anxiety or fears about a problem by helping or caring for others. For example, an obese woman lobbies for legislation to rid public schools of vending machines that sell soda.

What is humor?

Making light of one's own situation in an effort to decrease anxiety. For example, a bald man who is rejected on a date later tells bald jokes about himself to his friends.

! What is denial?

The unconscious refusal to acknowledge an event that allows a person to forget that such an event has occurred. For example, when asked by her new primary care physician, a breast cancer survivor says that she has no past medical problems.

! What is displacement?

Redirecting disturbing emotions about an object, idea, or event to a less threatening substitute. For example, a woman who was raped by a stranger complains that her husband does not respect her body.

What is distortion?

Altering one's perception of disturbing aspects of an external reality to make it more acceptable. For example, a motorist who is pulled over for running a stop sign explains that the stop sign was placed in an inconspicuous place.

What is identification?

Placing oneself in the shoes of another person who is perceivably more powerful or highly regarded. For example, in an effort to be promoted, an employee starts to carry a briefcase identical to that of his boss as well as wear a necktie while his coworkers do not.

What is introjection?

The absorption of qualities belonging to another person or object into one's own persona. For example, a shy teenager transfers to a high school

What is isolation?

where he joins the soccer team. He befriends the captain of the team and begins to act as he does: aggressively, loudly, and defiantly.

Making a traumatic event more tolerable by separating the emotional experience from the physical event. For example, a survivor of the World Trade Center tragedy in New York City describes the cost and mechanics of tearing down the remaining steel structure without alluding to the emotional toll he has suffered.

! What is projection?

Taking distressing feelings, particularly anger and guilt, and attributing them to others. For example, a woman angry about burning her dinner accuses her roommate of being angry with her.

! What is reaction formation?

Converting an unacceptable or distressing emotion into its opposite. For example, a daughter angry at her mother for never being around when she was growing up visits her in the nursing home every week with fresh flowers.

What is regression?

Escaping back into an earlier developmental stage when confronted with a distressing event or feeling. For example, a patient who learns of her lung cancer diagnosis begins to skip around the halls of the hospital singing songs from her childhood.

What is repression?

Burying a distressing event or feeling into the unconscious to avoid or postpone confrontation. For example, a patient dying of emphysema is not aware that she will die despite what several doctors have told her.

! What is somatization?

The transference of an emotional distress into a physical manifestation. For example, a child angry that he has to eat vegetables claims that he has a stomachache.

What is the basis of drive psychology?

! What are the stages of psychosexual development?

Freud believed that infants have pleasure-seeking drives and pass through specific stages of psychosexual development.

In chronologic order, each stage describes the source of gratification for the individual:

1. *Oral*—first 18 months of life. The infant stimulates himself or herself by biting, sucking, or feeding. Excessive stimulation may lead to “oral fixation” and problems of dependency later in life.
2. *Anal*—between 18 and 36 months. As the child is struggling to exert autonomy, he or she seeks pleasure in controlling the passage of stool, receiving stimulation from holding it in or letting it out. Overly strict or inconsistent toilet training may result in the acquirement of “anal traits” such as stubbornness or inflexibility as seen in obsessive-compulsive personality.
3. *Phallic*—begins at 3 years of life. The child discovers his own penis or her own clitoris as a source of pleasure. There is a transition in the search for gratification from one’s body to an external source.
 - *Oedipal*—between 3 and 5 years of age and resultant from the search in the phallic stage. Males compete with their fathers as they struggle with their erotic love for their own mother. Resolution of this struggle ends in identification with their father and transference of love to other women. Females struggle similarly with erotic love for their father and competition with their mother. (Later referred to as the Electra Complex by Jung.)
4. *Latency*—between 5 and 11–13 years of age. Psychosexual development

	takes a back seat to more pressing tasks at hand such as developing relationships with peers and acquiring necessary skills.
	5. <i>Genital</i> —begins with puberty and ends in young adulthood. This marks a momentous return of psychosexual development as the adolescent begins to relate to peers in a sexual way in the journey toward a suitable partner and away from parental figures.
In the context of drive psychology, what is conflict theory?	After wrestling with the ways that their own instincts and sexual drives alternatively blend and clash with both reality and their own conscience, individuals arrive at a developmental compromise.
Under Heinz Kohut's school of Self-Psychology, what is necessary for the formation of a stable sense of self?	Motivational support and consistency from caregivers in childhood, nurturing, and positive validation throughout adulthood. Without this an individual may become overly needy and dependent on others.
What is object relations theory?	Idea that the ego-self exists only with respect to external or internal objects
How are internal objects defined in object relations theory?	Internalization of external objects such as early parental interactions
How did theorists such as Melanie Klein and Otto Kernberg advance object relations theory?	In explaining the development of personality, they shifted focus away from the importance of satisfying drives and instead elaborated on the meaning of relationships to other objects, or important people in one's life.
How did child observation contribute to object relations theory?	This led to the concepts of attachment and separation.

PSYCHOSOCIAL DEVELOPMENT AND ERIKSON

- ! How did Erik Erikson's theory of ego development differ most from that of Freud's?

Freud's theories concentrated mostly on early events in an individual's life, which presaged later personality.

What are the major concepts behind Erikson's life cycle theory?

Erikson developed a psychosocial model of continual ego development throughout specific task-oriented stages along the continuum of birth to death.

- The ego is continually developing throughout life.
- An individual passes through specific developmental stages of life.
- Each stage presents the individual with a psychosocial challenge.
- The challenge arises from a conflict between whether or not to make a developmental change in response to the demands of the outside world.
- Successful resolution of each challenge leads to progression to the next stage and subsequent ego development.
- Failure to resolve these crises results in regression and inability to successfully complete future stages.

! What are the names of each of Erikson's life cycle stages, when do they occur, and what is their significance?

1. *Trust versus mistrust* (birth to 18 months): The needs of the infants are too numerous to be met by them so they must rely on their caretakers. If the caretaker accomplishes the task of providing for the infant, then trust in the world will be established. Otherwise, a sense of mistrust will be created.
2. *Autonomy versus shame* (18 months to 3 years): Still dependent on their caretakers, the growing children may begin to interact with the world on their own as they learn how to walk, talk, and control urination and defecation. If the caretaker provides for the infant and enables these steps toward independence, then the infant will feel righteous in the first attempt at autonomy. If this is not the case, the infant will be ashamed that he or she strayed away from the caregiver.

3. *Initiative versus guilt* (3–5 years): Increasing curiosity of the outside world leads to further independent exploration. When the child makes mistakes or breaks rules in a nurturing psychosocial environment, he or she feels guilty but is able to self-reflect, learn, and move on in his or her exploration. The fulfillment of forbidden wishes leads to guilt.
4. *Industry versus inferiority* (5–13 years): As the child continues to learn he or she begins to apply knowledge, synthesize material, and accomplish tasks. Such skills lead to the development of self-identity supported by continual constructive feedback from the caregiver.
5. *Identity versus role confusion* (13–21 years): Period of adolescence during which the individuals become increasingly aware of how others perceive them. Seeking out peer approval, the individuals experiment with various versions of their own identity until they have developed a solid, stable sense of self.
6. *Intimacy versus isolation* (21–40 years): Now that an identity has been packaged, the individual searches for human connections that will be symbiotic with this identity. By interacting with others, one's identity will be exposed, which can provoke anxiety. The cost of anxiety is balanced with the threat of isolation and lack of human connection.
7. *Generativity versus stagnation* (40–60 years): During this period, the individuals step outside of their personal space of accomplishments to examine how their role in life can contribute to society. Expansion of the individual's scope of impact leads to consideration of the

welfare of future generations. Failure during this period is characterized by the inability to think about the lives of others.

8. *Ego integrity versus despair* (60 years to death): As an individual approaches the end of life he or she can choose to look back on the past with satisfaction and fulfillment or with the feeling of regret that his or her life traveled the wrong course. The satisfied individual will face death with acceptance, whereas the regretful individual will face death with fear and despondency.

COGNITIVE THEORY

! What is the focus of cognitive theory?

Cognitive theory focuses on *how* the individual experiences events rather than the events themselves.

What is a schema or cognitive framework?

A certain way of thinking about oneself, others, or the world. Adopting a particular schema determines how a person will feel about an event.

! According to cognitive theory, how do schemas lead to psychopathology?

- A pattern of behavior develops based on faulty schemas.
- Faulty schemas arise from previous negative experiences and are distorted by irrational beliefs.
- These schemas are reinforced through the powerful emotions they elicit.
- When an individual attributes an irrational emotion to a particular event, he or she may suffer from its psychological or physical consequences.

What are some examples of cognitive distortions?

1. *Arbitrary inference*: coming to a conclusion without adequate evidence
2. *Dichotomous thinking*: classifying an experience as one extreme or the other

3. *Overgeneralization*: making a general conclusion on the basis of one event
4. *Magnification*: making too much out of a bad thing
5. *Minimization*: making too little out of a good thing
6. *Selective abstraction*: focusing on one negative aspect to make a conclusion while ignoring the positive aspects
7. *Personalization*: incorrectly or inappropriately attributing external events to oneself

BEHAVIORAL THEORY

What is the basis of behavioral theory?

Behaviors are learned from the environment or through reward.

What is modeling?

The observation and replication of someone else's behavior.

What is classical conditioning?

Learning to behave in a certain way in response to a neutral stimulus in the environment. (Remember Pavlov's dogs who salivated at the sound of a bell even in the absence of food after a period of hearing the bell with each meal.)

! What is operant conditioning?

Learning to behave in such a way that will result in a reward or will avoid a punishment.

MISCELLANEOUS THEORIES

According to Bowlby, what role does a primary caregiver play in infant attachment?

Infants are predisposed to form attachments with their caregivers; however, it is the reception of the attachment and response of the caregiver that ultimately will determine its quality. If the caregiver responds to the infant and provides for him or her in a comforting way, a secure attachment will develop. If the caregiver neglects

What is the difference between gender identity, gender role, and sexual identity?

the infant an insecure attachment will develop, resulting in lack of confidence in the caregiver. Behaviors such as whining, disobedience, anger, and avoidance may emerge.

- *Gender identity*: somewhat permanent sense of being male or female as determined by upbringing; established by age 3 and resistant to change
- *Gender role*: sometimes temporary or transitory affiliation of behaviors, attitudes, or dress with being male or female
- *Sexual identity*: preference in gender for sexual relations

What is Melanie Klein best known for?

Object relations psychoanalysis and theories on infant development as laid out in stages of mother-infant interaction

! According to Margaret Mahler, what is separation-individuation?

The third phase of infant development occurring between 6 and 36 months when infants begin to see themselves as a separate entity from their mother. This realization leads to the development of self-identity as well as a stable picture of the mother that includes both her good and bad aspects.

What does Mahler describe with the term “rapprochement”?

The sense that infants must continually check in with their mother and confirm her whereabouts to ensure their safety as they continue to develop their sense of identity through independence. Mahler describes this as the third of four stages within separation-individuation.

! What does Mahler describe with the term “object constancy”?

The result of an active process by 3-year-old children to fuse their sense of the good and bad aspects of their mother with those of themselves. Mahler claimed that the formation of object constancy was necessary for an individual to develop mature relationships later in life.

What is Piaget best known for?

Theories on cognitive development

! What are the four stages of Piaget's cognitive development of children?

1. Sensorimotor (18–24 months)
2. Preoperational (2–5 to 7 years):
"egocentrism," "object permanence"
3. Concrete operational (6–11 years)
4. Formal operational (11 years to adulthood)

What is "object permanence" as defined by Piaget?

The ability to understand that an object continues to exist even when its location is obscured. For example, a blanket is thrown over a toy bear removing it from sight but not from existence.

! What is the difference between "object constancy" and "object permanence"?

Object constancy refers to Mahler's psychoanalytic theory of an infant's sense of self. Object permanence refers to Piaget's cognitive developmental milestone in children who realize that objects continue to exist even when they can no longer see them in plain view.

In psychoanalysis, what does "anaclitic" refer to?

The dependence of the infant on the mother or mother substitute

! What relationship did Renée Spitz describe with his term "anaclitic depression"?

Parallel correlation between emotional support and ability to thrive. This is best exemplified by an infant separated from its mother and as a result of that separation is functionally and socially impaired.

What is "temperament"?

The idea that infants are born with an inherited set of traits governing how they react to the environment and what they require for care. These traits are stable for the first few years of life but outside forces may modulate them.

What are the three types of temperament?

Easy, difficult, and slow to warm up. These types describe how children respond to change, their sleeping and eating habits, mood, and emotional reactions.

What is the importance of Winnicott's "transitional object"?

Transfers feelings for a primary caregiver to an object so that in a caregiver's absence the child remains comforted as opposed to distressed that the caregiver is gone. Examples include a stuffed animal or blanket.

TYPES OF PSYCHOTHERAPY

! What is behavioral psychotherapy?

Attempting to reshape an individual's behavior and extinguish maladaptive behaviors without addressing his or her inner conflicts

What is brief individual psychotherapy?

A short course of therapy spread over a predetermined number of meetings focused on a troubling aspect in a person's life and not his or her overall psychiatric makeup

In cognitive therapy, how does "cognitive restructuring" work?

The therapist helps the patient to find ways of correcting negative schemas by creating healthier, more adaptive ways of thinking. Together they will identify the patient's erroneous beliefs and prove their irrationality by citing contradictory objective evidence from other aspects of the patient's life.

! What is cognitive-behavioral psychotherapy?

Use of cognitive and behavioral theories to change the way patients think about themselves, others, or the world and subsequently change the patterns of behavior they learned from these schemas. This is usually a short-term therapy.

What is family therapy?

Identification of problems in the dynamics of how a family functions and modifying interactions within this unit to promote change and improve functioning

! What is group therapy?

An individual finds therapeutic gain both through hearing the experiences and coping strategies shared by other members of a group and by contributing to the group.

What are humanistic psychotherapies?

Therapies that examine how an individual relates to others and to society in general. By identifying and correcting faulty relationships, a patient's emotional distress may be alleviated.

What methods are used in Maslow's transpersonal psychotherapy?

Meditation and induction of trance states are used to help individuals

What technique is used in Gestalt therapy?

reach their full potential through the augmentation of consciousness. This is a type of humanistic psychotherapy.

Role playing is used to help patients experience their relationship with the environment in the moment. This also is a type of humanistic psychotherapy.

! What is psychodynamic psychotherapy?

The use of psychodynamic theory to facilitate a patient's understanding of how previous experiences as early as childhood, some even relegated to the unconscious, contribute to a current state of psychopathology. Techniques used by the therapist include listening, asking questions, encouraging free associations, recollection of emotionally significant events, and discussion of transference and defenses.

! What is transference?

The projection of feelings, thoughts, and wishes onto the psychoanalyst who comes to represent someone from the patient's past

What is countertransference?

The analyst's projection of his or her own emotional needs and desires onto the patient

What is dialectical behavior therapy?

Psychosocial therapy designed by Marsha M. Linehan consisting of behavioral and cognitive elements involving an individual and group component. The individual component involves the therapist and patient, and discussion centers on recorded behaviors since the last session with emphasis on self-injurious or suicidal behavior. The group component involves practicing the use of certain skills learned in the individual component to relate to other members of the group.

! What is the goal of dialectical behavior therapy?

To reduce suicidal gestures in patients suffering from borderline personality disorder

What is somatic psychotherapy?

The use of physical, mechanical, or biologic therapies to affect

psychological processes. These therapies include body manipulation, electroconvulsive therapy, psychotropic medication, and surgical procedures.

What is supportive psychotherapy?

The essential component of supportive therapy is to “support” the individual’s defenses using validation, empathy, education, and reality testing. A therapeutic relationship is formed with the patient by encouraging him or her to express the emotions without being judgmental. Several psychotherapies incorporate an aspect of supportive psychotherapy.

How does supportive psychotherapy differ from psychodynamic psychotherapy?

- The meaning or source of the bond between therapist and patient is not analyzed.
- The therapist will give the patient appropriate guidance or advice.
- The therapeutic value of supportive psychotherapy is derived directly from interpersonal interaction between the therapist and the patient or group of patients.

This page intentionally left blank

Mood Disorders

INTRODUCTION

What is mood?	A description of one's internal emotional state
What constitutes a mood disorder?	An abnormal range of moods associated with a loss of control over them
What is affect?	An assessment of how the patient's mood appears to the examiner
What dimensions are used to describe affect?	<ul style="list-style-type: none">• <i>Quality</i>—depth/range of feeling. Flat (none) < blunted (shallow) < constricted (limited) < full (average) < intense (more than normal). A person with flat affect remains expressionless and monotone even when discussing happy or sad events.• <i>Motility</i>—speed at which person shifts emotional states. Sluggish < supple < labile. A patient with labile affect might laugh one minute and cry the next.• <i>Appropriateness</i>—whether affect is congruent with circumstances. Appropriate or inappropriate. A person with inappropriate affect might giggle when describing a loved one's death.

MAJOR DEPRESSIVE DISORDER

Epidemiology and Etiology

What gender and age group are most at risk for developing major depressive disorder (MDD)?	Female to male ratio is 2:1. Highest risk from age 20 to 40
What is the lifetime prevalence of MDD?	15%

What ethnicity and socioeconomic groups are most at risk for depression?	None. All are equally affected.
What is the concordance rate of depression in monozygotic and dizygotic twins?	50–70% in monozygotic and 20% in dizygotic
! What is the risk of completed suicide in major depression?	15% over the course of a patient's lifetime
Abnormal levels of what neurotransmitter(s) are believed to contribute to depression?	Serotonin and norepinephrine
Dysfunction of what neuroendocrine axis is thought to be involved in depression?	Hypothalamic-pituitary-adrenal axis
How does behavioral theory explain depression?	"Learned helplessness": Depression results from repeated life experiences that lead to the belief that one can do little to improve his or her state of suffering or place in life.
How does cognitive theory explain depression?	"Faulty cognitive frameworks": Individuals learn to habitually interpret their environment in a way that perpetually leads to the creation of unhappiness. By viewing the environment in this way, individuals develop depression due to unsettling ideas about the self, the world, and the future.
How do humanistic theories explain depression?	Depression is associated with a sense of separation from others.
How does psychodynamic theory explain depression?	The inability to adequately recover from the loss of relationships or attachment to something valuable
What medications are thought to trigger depressive symptoms?	Beta-blockers, corticosteroids, benzodiazepines, and interferon
What are some common medical causes of depressive symptoms?	Endocrine (hypothyroidism , adrenal dysfunction), neurologic (Parkinson's disease, strokes, dementia), metabolic disorders (vitamin B ₁₂ deficiency), cancer (pancreatic), and infections (human immunodeficiency virus [HIV], hepatitis)

Diagnosis

! What are the DSM-IV (<i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition</i>) criteria for diagnosing MDD?	Criteria for a major depressive episode requires five or more of the following symptoms to be present for at least 2 weeks: SIGECAPS
---	---

- Sleep changes
- Decreased Interest
- Guilt
- Low Energy
- Decreased Concentration
- Appetite changes
- Psychomotor agitation or retardation
- Suicidality

Symptoms cannot be due to substance use or medical condition. They must cause social/occupational impairment.

What is anhedonia?

Loss of interest in normally pleasurable activities

How can depression present differently in the elderly population?

Elderly patients may complain of anxiety, irritability, weakness, or multiple somatic complaints such as headache, backache, gastrointestinal complaints, dizziness, numbness, fatigue, or lethargy.

What is the differential diagnosis of major depression?

Mood disorder due to general medical condition, substance-induced mood disorder, dysthymic disorder, bipolar disorder (BD), dementia, adjustment disorder with depressed mood, schizoaffective disorder and other psychotic disorders, and bereavement

What are some predisposing factors to major depression?

Chronic physical illness, alcohol and drug dependence, psychosocial stressors, female gender, family history of depression, prior depressive episodes, and childbirth

! What sleep disturbances are seen in depression?

Deep sleep (delta sleep, stages 3 and 4) is decreased in depression. Time spent in rapid eye movement (REM) sleep is increased and the onset of REM in the sleep cycle is earlier (decreased latency to REM). Some people report intermittent and early morning awakenings.

! What is the typical course of a depressive episode?

Depressive episodes last about 6–9 months if left untreated. Fifty percent of individuals who develop a single depressive episode will have additional episodes.

What subtypes of depression exist?

- *Melancholic*: anhedonia, early morning awakenings, psychomotor disturbance, excessive guilt, and anorexia; 40–60% of hospitalized patients with depression
- *Atypical*: hypersomnia, hyperphagia, reactive mood, leaden paralysis, and hypersensitivity to interpersonal rejection
- *Catatonic*: purposeless motor activity, extreme negativism or mutism, bizarre postures, and echolalia. Can also be applied to BD
- *Psychotic*: presence of hallucinations or delusions; 10–25% of hospitalized patients with depression

These subtypes can be used to describe a patient's diagnosis, for example, "MDD with psychotic features."

What is seasonal affective disorder?

Subtype of depression that only occurs during winter months. Patients respond to treatment with light therapy.

Treatment

What are the classes of antidepressants used to treat depression?

Selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), monoamine oxidase inhibitors (MAOIs), selective noradrenaline reuptake inhibitors (SNRIs), and dopamine reuptake inhibitors

What are the different types of psychotherapy used to treat depression?

Cognitive-behavioral, supportive, and brief interpersonal therapies have the most data to support their efficacy in treating depression. Psychodynamic psychotherapy is also used, although it has not been empirically well studied.

What are indications for using electroconvulsive therapy (ECT)?

- Depression refractory to antidepressants
- Contraindication to antidepressant medications
- Immediate risk for suicide
- History of good response to ECT
- Depression with psychotic features

How is ECT performed?

ECT is performed under general anesthesia with the aid of muscle relaxants. A seizure is induced by passing an electric current through the brain. The seizure lasts <1 minute. Approximately eight treatments are administered over a 2- to 3-week period, with significant improvement typically seen after the first week.

What are the major side effects associated with ECT?

- Retrograde amnesia, which usually disappears after 6 months
- Anterograde amnesia occurring during the course of ECT, disappearing days to weeks after completion of treatment

How effective are the various treatment modalities for depression?

- Antidepressants alone achieve remission in 30–50% of patients with up to 70% showing improvement.
- Combined treatment with psychotherapy and antidepressants achieves remission in 60–70% of patients.
- ECT achieves remission in >75% of patients.

! What is the pharmacologic treatment regimen for a major depressive episode?

Antidepressants should be continued for an average of 9–12 months before a taper is initiated, during which time patients must be observed for signs of relapse. Patients may need to remain on antidepressants indefinitely if they have experienced several depressive episodes in the past or if they have a strong family history of depression.

BIPOLAR I DISORDER

Epidemiology and Etiology

What is the lifetime prevalence of bipolar I disorder (BD I)?

1%

Are there any gender disparities in the incidence of BD I?

No. Men and women are equally affected.

What is the typical age of onset of BD?

15–30 years

What are the proposed causes of BD?

Biologic, environmental, psychosocial, and genetic factors have been implicated. However, the exact pathophysiology of BD is unclear.

! What is the mortality rate in BD?

10–15% mortality by suicide

! What are some risk factors for suicide completion?

SAD PERSONS

Sex (male)

Age (elderly or adolescent)

Depression

Previous suicide attempts

Ethanol abuse

Rational thinking loss (psychosis)

Social support lacking

Organized plan to commit suicide

No spouse (divorced > widowed > single)

Sickness (physical illness)

Diagnosis

! What are the diagnostic features of BD I?

The occurrence of one manic or mixed episode. Between manic episodes, there may be euthymia, MDD, or hypomania, but none of these are required for the diagnosis.

What is a bipolar mixed episode?

Criteria are met for both mania and major depression nearly every day during at least a 1-week period.

! What are the characteristics of a manic episode as defined by the DSM-IV?

A period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week and including at least three of the following: **DIG FAST**

Distractibility

Insomnia—decreased need for sleep

Grandiosity—inflated self-esteem

Flight of ideas or racing thoughts

Agitation or increase in goal-directed activity socially, at work, or sexually

Speech—pressured

What distinguishes mania from hypomania?

Thoughtlessness—excessive involvement in pleasurable activities that are risky, for example, sexual indiscretions

Symptoms cannot be due to substance use or medical conditions.

Symptoms must cause social/occupational impairment.

Duration and severity

- *Mania*—abnormal mood for at least 1 week unless hospitalization is required; symptoms severe enough to impair social/occupational functioning or presence of psychotic symptoms
- *Hypomania*—abnormal mood for at least 4 days; symptoms do not significantly impair ability to function

What is the differential diagnosis of BD?

Other mood disorders, psychotic disorders with mood symptoms, mood disorder due to a general medical condition, and substance-induced mood disorder

What are some common medical causes of manic symptoms?

Endocrine (hyperthyroidism), neurologic (seizures, stroke), and systemic disorders (HIV, vitamin B₁₂ deficiency)

! What medications/drugs tend to produce manic symptoms?

Stimulants (methylphenidate, dextroamphetamine), steroids, sympathomimetics, and antidepressants. Recreational drugs including cocaine, amphetamines, and alcohol. Withdrawal from alcohol or other central nervous system (CNS) depressants such as barbiturates and benzodiazepines can produce manic symptoms.

What is the typical course of a manic episode?

Mania develops over days and lasts about 3 months if untreated. More than 90% of patients will have a recurrence of their manic symptoms. Episodes may occur more frequently as the disease progresses.

What is meant by “rapid-cycling” BD?

Four or more mood disturbances (MDD, mania, or mixed) in 1 year

! What are some known precipitants of manic episodes?

Changes in sleep-wake cycle, antidepressant treatment, stressful life-events, and the postpartum period

Treatment

What are the medications used to treat BD I?

Lithium, anticonvulsants (e.g., **valproate [Depacon]** or **carbamazepine [Tegretol]**), and antipsychotics (e.g., olanzapine [Zyprexa]). In addition to these drugs, benzodiazepines can be used in acute mania for sedation.

What are the medications commonly used to treat the depressive phase of BD I?

Lithium and lamotrigine (Lamictal). Given their potential to induce mania, antidepressants should be used with caution.

What medications are most effective in treating rapid-cycling BD?

Anticonvulsants (e.g., valproate [Depacon] or carbamazepine [Tegretol])

What adjunct therapies can be useful for patients with BD?

Supportive psychotherapy, family therapy, and group therapy

What nonpharmacologic treatment can be used for acute mania?

ECT

BIPOLAR II DISORDER

What is the lifetime prevalence of bipolar II disorder (BD II)?

0.5%

Are there any gender disparities in the incidence of BD II?

More common in women

! What are the diagnostic features of BD II?

History of one or more major depressive episodes and at least one hypomanic episode

In relation to depressive episodes, when do hypomanic episodes tend to occur?

Just prior to or following a depressive episode

What is the course of BD II?

Similar to BD I: tends to be chronic, requiring long-term treatment

What is the diagnosis if someone with BD II has a full manic episode?

BD I

What are the treatment goals and methods for BD II?

Same as BD I

OTHER MOOD DISORDERS

Epidemiology and Etiology

What is dysthymic disorder?	A mild, chronic form of major depression
What is the lifetime prevalence of dysthymia?	6%
What is the point prevalence of dysthymia?	3%
What age group is most at risk for developing dysthymia?	Patients younger than 25, although women aged 65 or younger are also at increased risk.
Is dysthymia more common in women than men?	Yes, it is two to three times more common in women.
What percentage of patients with dysthymia will develop BD or major depression?	Less than 5% will develop BD I, and 20% will develop MDD
What is the endocrine disorder most commonly associated with depressive symptoms?	Hypothyroidism
What type of cancers can manifest with depressive symptoms?	Pancreatic and oropharyngeal carcinomas
What is cyclothymic disorder?	Chronic fluctuating episodes of mild depression and hypomania
Cyclothymia can be diagnosed concurrently with what personality disorder in many cases?	Borderline personality disorder
What is the lifetime prevalence of cyclothymia?	Less than 1%
Cyclothymia is more common in women than men. True or false?	False, the disorder affects men and women equally.
What age group is most at risk for cyclothymia?	Young adults (aged 15–25)

Diagnosis

- !** What are the DSM-IV criteria for diagnosing dysthymia?
- Chronically depressed mood most of the time for a minimum of **2 years**
 - At least two of the following:
 - Poor concentration
 - Hopelessness

What is meant by the term “double depression”?

What is the differential diagnosis for dysthymia?

! What are the DSM-IV diagnostic criteria for cyclothymic disorder?

What diagnostic criteria differentiate cyclothymic disorder from BD II?

A mood disorder with marked motor immobility, excessive movement, or mutism is generally classified as what type of depression?

! What is postpartum depression?

What is melancholic depression?

! Do all depressive episodes feature lack of sleep and weight loss?

! How long after the onset of substance use do mood disorder symptoms appear in a substance-induced mood disorder?

- Change in appetite
- Change in sleep
- Fatigue
- Low self-esteem
- During the 2-year period
 - No symptom-free period > 2 months
 - No major depressive episode

Major depressive episodes occurring in conjunction with dysthymia

Major depression, mood disorder due to a general medical condition, and substance-induced mood disorder

- Numerous periods with hypomanic symptoms and periods with depressive symptoms for at least 2 years
- No symptom-free period >2 months during those 2 years
- No history of major depressive episode or manic episode

Chronic course and lack of a major depressive episode

Catatonic depression

Depression occurring within 4 weeks of delivery

Depression with severe vegetative features and profound feelings of guilt or remorse

No. Patients with atypical depression may be hypersomnic, gain weight, and have excessive mood lability.

1 month

Treatment

What is the most effective treatment for dysthymia?

Therapy (psychotherapy or cognitive therapy) in conjunction with antidepressant medications

How is cyclothymia usually treated?

Antimanic medications (e.g., lithium, anticonvulsants, and antipsychotics) are generally used. But it must be noted that patients diagnosed with this disorder are less likely to seek medical attention than patients with traditional mania or MDD.

What is the treatment for patients with substance-induced mood disorders?

Cessation of use of the drug or substance

If symptoms of a substance-induced mood disorder do not resolve within a few weeks after cessation of the causative substance, what is the best approach to treatment?

At this point, patients may benefit from an appropriately prescribed medication.

This page intentionally left blank

Anxiety Disorders

INTRODUCTION

What is “anxiety”?	A subjective feeling of fear accompanied by physical symptoms
Is anxiety a normal human response?	Yes, and physicians must be careful when diagnosing patients with one of the anxiety disorders that the patient is not experiencing a normal, physiologic response to a possible threat.
What is the lifetime prevalence of anxiety disorders in men?	19%
What is the lifetime prevalence of anxiety disorders in women?	30%
What socioeconomic class is most predisposed to anxiety disorders?	Higher socioeconomic class
List some medical causes of anxiety.	<ul style="list-style-type: none">• Hyperthyroidism• Neurologic diseases including brain tumors and multiple sclerosis• Vitamin B₁₂ deficiency• Anemia• Pheochromocytoma• Hypoglycemia• Hypoxia
List some medications or substances that can induce anxiety.	<ul style="list-style-type: none">• Caffeine• Amphetamines• Nicotine• Cocaine• Alcohol or sedative withdrawal• Mercury or arsenic toxicity• Antidepressants• Organophosphate toxicity• Penicillin or sulfonamides

PANIC DISORDER

What are the two major subtypes of panic disorder?

1. Panic disorder with agoraphobia
2. Panic disorder without agoraphobia

These are important distinctions, and attempts should be made to differentiate between the subtypes when diagnosing patients.

Is there a gender disparity in the diagnoses of panic disorder and agoraphobia?

Yes. They are more commonly diagnosed in women.

What is the typical age of onset?

Common in late teens to early thirties. Rarely, onset will be after 40.

! What do the majority of patients describe as the trigger for their first panic attack?

Nothing. Approximately 80% of patients cannot pinpoint a trigger for their first attack. A panic attack is typically the presenting feature of panic disorder.

What is a common childhood disorder that may predispose to the diagnosis of panic disorder as an adult?

A history of separation anxiety disorder is seen in 20–50% of patients with an eventual diagnosis of panic disorder.

What causes panic disorder?

The etiology is unclear but it is likely a combination of genetic, physiologic, and psychosocial factors.

What are commonly observed neurochemical abnormalities in patients with panic disorder?

Increased norepinephrine and decreased serotonin and gamma-aminobutyric acid (GABA) activity

What are major comorbid psychiatric conditions seen in patients with panic disorder?

Major depression, substance abuse, social phobias, specific phobias, and obsessive-compulsive disorder (OCD)

! What is a panic attack defined by DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition) criteria?

A discrete period of intense fear or discomfort in which four of the following symptoms developed acutely and peaked in intensity within 10 minutes of onset:

- Palpitations or tachycardia
- Diaphoresis
- Sensation of shortness of breath
- Shaking or trembling
- Subjective feeling of choking
- Chest pain or discomfort
- Nausea or abdominal pain

	<ul style="list-style-type: none"> • Lightheadedness or fainting • Derealization (feelings of unreality) or depersonalization (being detached from oneself) • Fear of losing control or going crazy • Fear of dying • Paresthesias • Chills or warm sensations
What is the course of a typical panic attack?	They usually last between 20 and 30 minutes.
! Which is more important in establishing the diagnosis of a panic attack: time to peak of symptoms or total length of symptoms?	Time to peak
How often do panic attacks typically occur?	There is no typical frequency. They may occur many times per day or only a few times per year.
How is panic disorder diagnosed?	Panic disorder is characterized by multiple unexpected panic attacks accompanied by anticipatory anxiety about having attacks.
What commonly used substances can exacerbate anxiety in patients both with and without panic disorder?	Caffeine and nicotine. When interviewing patients with suspected anxiety disorders, the physician should inquire into the patient's usage of coffee, colas, teas, and so forth, as well as cigarettes.
What is panic disorder with agoraphobia?	Anxiety about being in public or a large space in which escape may be difficult or embarrassing, or in which help may not be readily available if one were to have an unexpected or situationally predisposed attack.
What is the differential diagnosis of panic disorder?	<ul style="list-style-type: none"> • <i>Medical</i>: myocardial infarction, angina, chronic obstructive pulmonary disease (COPD), congestive heart failure, pheochromocytoma; other cardiac, pulmonary, or endocrine disorders • <i>Psychiatric</i>: depressive disorder, phobic disorders, OCD, posttraumatic stress disorder (PTSD) • <i>Substance</i>: cocaine, nicotine, caffeine; alcohol or opiate withdrawal

How is panic disorder treated in the acute setting?	Symptomatically with anxiolytics, typically benzodiazepines such as alprazolam (Xanax)
What risk is associated with initial pharmacologic treatment of panic disorder?	Benzodiazepine dependence
! How is panic disorder treated chronically?	Tapered benzodiazepine dose (to avoid dependence) after initiation of long-term selective serotonin reuptake inhibitor (SSRI) therapy
What SSRIs are most commonly used in the treatment of panic disorder?	Paroxetine (Paxil) and sertraline (Zoloft)
For how long is treatment of panic disorder with SSRIs extended?	These medications should be taken for 8–12 months as relapse of panic disorder is common.
! What is an important side effect of SSRIs that should be explained to patients beginning to take them for panic disorder?	A stimulant-like reaction can be experienced. Patients may report jitteriness, insomnia, and increased frequency of panic attacks upon initiation of SSRI therapy.
What are the nonpharmacologic treatments for panic disorder?	Cognitive therapy, assertiveness training, psychoeducation, and psychodynamically oriented psychotherapy

SOCIAL PHOBIA

What is a phobia?	An irrational fear that leads to avoidance
What is the most common mental disorder is the United States?	Specific phobias. They are observed in 5–10% of people.
What is a common activity during which social phobia becomes apparent?	Public speaking
! How is social phobia defined by DSM-IV criteria?	<ul style="list-style-type: none"> • Persistent and excessive fear of social or performance situations • Exposure to the situation results in immediate anxiety • The patient recognizes that the fear is excessive or unreasonable • The avoidance or anticipation of the precipitating situation significantly interferes with the patient's routine

	<ul style="list-style-type: none">• The fear is not due to a general medical condition, substance induced, or due to another psychiatric disorder including panic attacks
What is the gender disparity for social phobia?	There is none: men and women are affected equally.
What is the etiology of social phobia?	Multifactorial: genetic, psychosocial, and physiologic
How is social phobia treated?	Paroxetine (Paxil) or other SSRIs are the preferred treatment for social phobia. Behavioral and psychodynamic therapies have also been shown to have some benefit.

SPECIFIC PHOBIA

! How is specific phobia defined by DSM-IV criteria?	<ul style="list-style-type: none">• Persistent and excessive fear of a specific situation or thing.• Exposure to the situation or thing results in immediate anxiety.• The patient recognizes that the fear is excessive or unreasonable.• The avoidance or anticipation of the precipitating situation or thing significantly interferes with the patient's routine.• The fear is not due to a general medical condition, substance induced, or due to another psychiatric disorder including panic attacks.
What are some common specific phobias?	Fear of flying, fear of blood, fear of snakes, fear of heights
What is the gender disparity for diagnosed specific phobia?	Estimated to be twice as common in women as in men
What is the etiology of specific phobia?	Also multifactorial, see above for social phobia
How are specific phobias treated?	Achieve habituation or elimination of the fear response through systemic desensitization and supportive psychotherapy. Pharmacologic treatments have yet to show benefit.
What is systemic desensitization?	Gradually exposing patient to the feared situation while teaching relaxation techniques

How do some patients “self-treat”?

As with many other anxiety disorders, some patients will choose to drink alcohol to “lessen” their anxiety. Many patients feel that the alcohol relaxes them. However, the consistent use of alcohol for this purpose may lead to abuse and dependence. In addition, there are many deleterious side effects of chronic alcohol use (see Chapter 10).

OBSESSIVE-COMPULSIVE DISORDER

What is OCD?

The presence of obsessions and/or compulsions that produce discomfort or impairment

What is the lifetime prevalence of OCD?

2–3%

When is the most common age of onset?

Early adulthood

Are women affected more than men?

No. Both genders are equally affected.

The occurrence of what other mental disorder in a first-degree relative predisposes a person to OCD?

Tourette’s disorder

What is the etiology of OCD?

- *Genetic*: more common in patients who have first-degree relatives with OCD
- *Physiologic*: abnormal regulation of serotonin
- *Psychosocial*: the onset of OCD can be triggered by stressful events in up to 60% of patients

Define and differentiate obsessions and compulsions.

Obsessions: Recurrent, repeated intrusive thoughts, ideas, or images. The patient attempts to suppress these thoughts and recognizes that they may be irrational.

Compulsions: Repetitive conscious mental acts or ritual behaviors that a person feels driven to perform in response to an obsession. The patient recognizes that the behaviors are excessive and irrational. These rituals are generally disruptive and interfere in a person’s daily activities.

How is OCD diagnosed?	Patients exhibit either obsessions or compulsions as defined above.
What percentage of OCD patients exhibit both obsessions and compulsions?	75%
! Do patients with OCD have insight into their disorder?	Yes, patients usually recognize that they have irrational fears that they wish to get rid of.
What is an example of an obsession with a resultant compulsion?	Fear of germs followed by repeated hand washing, up to hundreds of times per day
! How is OCD different from obsessive-compulsive personality disorder (OCPD)?	OCPD is an Axis II diagnosis that pertains to patients who are overly obsessed with details and orderliness and generally do not perceive themselves to have a problem (poor insight).
What is the typical course of OCD?	Generally chronic with only about one-third of patients showing significant improvement
How is OCD treated?	Pharmacologic treatment combined with behavioral psychotherapy
What is the pharmacologic treatment of OCD?	SSRIs at higher doses than those used for the treatment of depression and other disorders. Tricyclic antidepressants (TCAs), specifically clomipramine (Anafranil), have also shown some efficacy.
How is the behavioral therapy conducted?	Exposure to ritual-eliciting situations and prevention of the resulting compulsions
What surgical procedure has been used in the treatment of intractable OCD?	Anterior cingulotomy

POSTTRAUMATIC STRESS DISORDER

What is PTSD?	The response to a traumatic or stressful life event in which the patient re-experiences the event, avoids similar situations or reminders, and may experience hyperarousal or emotional blunting
---------------	--

! Is the response immediate or delayed (in relation to the inciting event)?

What is the etiology of PTSD?

What are examples of people who may have PTSD?

! What are the DSM-IV criteria for PTSD?

What are common comorbid conditions in patients with PTSD?

How is PTSD generally treated?

What drugs are used in the treatment of PTSD?

What are some behavioral therapies that have shown efficacy?

It can be either immediate or delayed (i.e., up to years after the initial traumatic event).

It is unique among the anxiety disorders because a definite event can be identified as the trigger. However, the reason that some people who experience a trauma exhibit features of the disorder while others exposed to the same trauma do not has yet to be elucidated.

War veterans, rape victims, mugging victims

- The person experiences an event that involved death, serious threat to life, or bodily harm that was experienced with intense fear, horror, or hopelessness.
- The traumatic event is persistently re-experienced in dreams or flashbacks.
- There is repeated avoidance of the stimuli associated with the trauma.
- Persistent symptoms of increased arousal including hypervigilance, insomnia, irritability, and so on.
- Symptoms persist for at least 1 month and cause distress or impairment in functioning.

Substance abuse and depression

A combination of pharmacologic and behavioral therapy

SSRIs, MAOIs (monoamine oxidase inhibitors), TCAs, and anticonvulsants (for flashbacks)

Relaxation therapy, hypnosis, and psychodynamic therapy

ACUTE STRESS DISORDER

What is acute stress disorder?

A disorder similar to PTSD where the patient has exhibited symptoms for only a short duration

How would acute stress disorder be diagnosed?

Symptoms are identical to those in PTSD but the inciting event must have occurred less than 1 month ago, and symptoms must have been present for less than 1 month. As in PTSD, the response to the traumatic event must cause impairment in functioning.

What happens if the symptoms of acute stress disorder persist for more than 1 month?

The diagnosis of PTSD is usually made.

How is acute stress disorder treated?

Same as for PTSD

GENERALIZED ANXIETY DISORDER

What is generalized anxiety disorder (GAD)?

GAD is characterized by excessive and uncontrollable worry about life circumstances accompanied by hyperarousal.

What percentage of patients with GAD are diagnosed with another anxiety disorder during their lifetime?

80%

What gender, age, ethnicity, and socioeconomic group are most predisposed to GAD?

Young to middle aged, nonwhite females in lower socioeconomic classes

How much more commonly is GAD observed in women as compared to men?

Approximately twice as common in women

! What are the diagnostic features of GAD according to the DSM-IV?

- Excessive worry or anxiety about several life events or activities for at least 6 months
- Difficulty controlling the worry
- At least three of the following symptoms are present when anxious:
 - Muscle tension
 - Easy fatigability
 - Restlessness
 - Irritability
 - Difficulty falling or staying asleep
 - Difficulty concentrating
- The worry must be out of proportion to the likelihood or impact of feared events

! Upon interviewing patients with suspected GAD, what do they generally report regarding their life?

What is the most effective therapeutic approach to GAD?

What medications are shown to be beneficial?

! If a history of alcohol abuse exists, what medications should be avoided?

- Symptoms are not attributable to other medical or psychiatric conditions

Many patients report being anxious for as long as they can remember.

A combination of pharmacologic therapy with psychotherapy

Buspirone (BuSpar, a nonbenzodiazepine anxiolytic), benzodiazepines, SSRIs, and extended release venlafaxine (Effexor XR)

Benzodiazepines

ADJUSTMENT DISORDERS

Are adjustment disorders considered anxiety disorders?

! What are the diagnostic features of adjustment disorders according to the DSM-IV?

How is the course of an adjustment disorder useful in differentiating it from other anxiety disorders?

What are the different subtypes of adjustment disorders and how are they classified?

What is the gender predominance?

Technically they are not. Adjustment disorders describe maladaptive responses to stressful life events.

- The development of emotional or behavioral symptoms within 3 months of a life stressor and the cessation of these symptoms within 6 months after the stressor has passed.
- The symptoms produce distress out of proportion to the stressor and cause social impairment.

Symptoms of adjustment disorder resolve within 6 months after termination of the stressors. If symptoms persist, think of an anxiety disorder or PTSD.

Classification is based on the predominant symptom: depressed mood, aggressive conduct, anxiety, and so on.

Females are affected twice as often as males, but it should be noted that the

overall prevalence of adjustment disorders in the population is quite low.

How are adjustment disorders treated?

Supportive psychotherapy.
Pharmacotherapy for the associated symptoms is also effective.

This page intentionally left blank

Psychotic Disorders

INTRODUCTION

What is psychosis?

A break from reality involving delusions, perceptual disturbances, and/or disordered thinking and behavior

What types of thought disorders exist?

- Thought content—reflect patients' beliefs, ideas, and interpretations
- Thought process—reflect manner in which patients link ideas and words together

What are examples of disorders of thought content?

- Delusions—fixed, false beliefs that are not shared by the person's culture and cannot be changed by reasoning
- Suicidal and homicidal thoughts
- Phobias—persistent, irrational fears
- Obsessions—repetitive, intrusive thoughts
- Compulsions—repetitive behaviors
- Poverty of thought versus overabundance—too few versus too many ideas expressed

What are examples of disorders of thought process?

- Loose associations—no logical relationship between thoughts
- Flight of ideas—a stream of very tangential thoughts
- Tangentiality—lack of goal-directed associations between ideas; point of conversation never reached
- Circumstantiality—point of conversation is reached after roundabout path
- Thought blocking—abrupt termination of communication before the idea is finished

What are the types of delusions?

- Clang associations—word associations due to sounds instead of actual meaning. (You are tall. I hope I don't fall. Let's go to the mall.)
- Neologisms—fabricated words
- Word salad—unintelligible collection of words
- Paranoid—false belief that one is being targeted unfairly ("The government is recording my conversations.")
- Delusions of reference—false belief that events have special personal significance ("President Bush speaks to me through the TV.")
- Thought broadcasting—false belief that one's thoughts are transmitted to everyone
- Delusions of grandeur—false belief that the individual is much greater and more powerful and influential than he or she really is ("I am the son of God.")
- Delusions of guilt—false belief that one is guilty or responsible for something ("I am responsible for the tsunami.")
- Somatic delusions—false belief that a part of one's body has been injured or altered in some manner ("My body is rotting away.")
- Erotomaniac delusions—false belief that one is the love interest of someone of higher status, for example, a celebrity

What are examples of perceptual disturbances?

- Hallucinations—sensory experiences that arise in the absence of a direct external stimulus (visual, auditory, tactile, gustatory, olfactory)
- Illusions—misinterpretation of existing sensory stimuli (e.g., an inanimate object appears to move)

SCHIZOPHRENIA

Epidemiology and Etiology

What is the lifetime prevalence of schizophrenia?	1%
Are there any gender disparities in the incidence of schizophrenia?	No
What is the typical age of onset?	~20 years for men, ~30 years for women
Is there a genetic predisposition for schizophrenia?	Yes: 50% concordance among monozygotic twins, 10% risk if one first-degree relative is affected.
! What socioeconomic groups are most at risk for schizophrenia?	Lower socioeconomic groups
What neurotransmitter abnormalities are implicated in schizophrenia?	Elevated dopamine, elevated serotonin, and decreased N-methyl-D-aspartic acid; glutamate (NMDA) receptor function
What evidence supports the dopamine hypothesis of schizophrenia?	Increased dopaminergic activity from drugs such as amphetamines and levodopa causes psychosis. Postsynaptic dopamine blockade improves psychotic symptoms.
What dopamine pathways are thought to be affected in schizophrenia?	Prefrontal (negative symptoms) and mesolimbic (positive symptoms) pathways
What structural imaging findings are characteristic of schizophrenia?	Ventricular enlargement, reduced temporal lobe volume, and diffuse cortical atrophy
! What is the most consistent functional neuroimaging finding in schizophrenia?	Decreased activity in the frontal lobes, that is, hypofrontality

Diagnosis

- | | |
|---|---|
| ! What are the DSM-IV (<i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition</i>) criteria for diagnosing schizophrenia? | <ul style="list-style-type: none">• Two or more of the following must be present for at least 1 month:<ul style="list-style-type: none">◦ Delusions◦ Hallucinations◦ Disorganized speech◦ Grossly disorganized or catatonic behavior◦ Negative symptoms |
|---|---|

What are the positive symptoms of schizophrenia?

! What are the negative symptoms of schizophrenia?

What is the differential diagnosis of schizophrenia?

What recreational drugs can cause symptoms that mimic acute schizophrenia?

What are the three phases of schizophrenia?

What are the subtypes of schizophrenia?

- Must cause significant social or occupational functional deterioration
- Duration of illness for at least 6 months (including prodromal or residual symptoms in which above criteria may not be met)
- Symptoms not due to medical, neurologic, or substance-induced disorder

Hallucinations, delusions, bizarre behavior, and thought disorder

5 As

- Anhedonia
- Affect (flat)
- Alogia (poverty of speech)
- Avolition (apathy)
- Attention (poor)

Brief psychotic disorder, psychotic disorder due to general medical conditions, substance-induced psychotic disorders, **mood disorders with psychotic features**, schizoaffective disorders, schizophreniform disorder, delusional disorder, autism, and obsessive-compulsive disorder

Cocaine, methamphetamine, phencyclidine (PCP), and ketamine

1. *Prodromal*—decline in functioning that precedes first psychotic episode
2. *Psychotic*—positive symptoms
3. *Residual*—exists between psychotic episodes and marked by negative symptoms, although hallucinations may persist

- *Disorganized*—disorganized speech/behavior, flat/inappropriate affect. Low functioning, worse prognosis than other subtypes
- *Catatonic*—motor immobility/excessive purposeless motor activity, extreme mutism, echolalia (repeats words), echopraxia (repeats movements); rare

! What is the typical course of schizophrenia?

- *Paranoid*—delusions/hallucinations present, but no predominance of disorganized or catatonic behavior. High functioning, better prognosis than other subtypes
- *Undifferentiated*—characteristics of more than one subtype or none of the subtypes
- *Residual*—prominent negative symptoms with minimal positive symptoms

Prominent deterioration in first 5–10 years of illness, often followed by a long plateau. Schizophrenia is usually chronic and debilitating. Forty to fifty percent of patients remain significantly impaired, while 20–30% function fairly well with medication.

! What features of the disease are associated with a better prognosis?

Later onset, good social support, positive symptoms, mood symptoms, acute onset, female sex, few relapses, and good premorbid functioning

! What features of the disease are associated with a worse prognosis?

Early onset, poor social support, negative symptoms, family history, gradual onset, male sex, many relapses, ventricular enlargement, and poor premorbid functioning

What are some of the typical findings in schizophrenic patients on examination?

Disheveled appearance, flattened affect, disorganized thought process, intact memory and orientation, auditory hallucinations, paranoid delusions, ideas of reference, concrete understanding of similarities/proverbs, and lack of insight into their disease

Treatment and Pharmacology

What classes of medications are used to treat schizophrenia?

Typical and atypical antipsychotics

List some typical antipsychotics.

Chlorpromazine (Thorazine), thioridazine (Mellaril), trifluoperazine (Stelazine), haloperidol (Haldol)

List some atypical antipsychotics.

Risperidone (Risperdal), clozapine (Clozaril), olanzapine (Zyprexa),

What distinguishes high and low potency typical antipsychotics?

! How do typical and atypical antipsychotics differ in their side effect profile?

! What are EPS, what drugs are they associated with, and how are they treated?

! Describe the other side effects of antipsychotics.

quetiapine (Seroquel), aripiprazole (Abilify), ziprasidone (Geodon)

- Low potency drugs—dosed in hundreds of milligram, tend to be sedating, have strong anticholinergic properties, and are somewhat less likely to cause extrapyramidal symptoms (EPS) (e.g., thioridazine [Mellaril] and mesoridazine [Serentil]).
- High potency drugs—dosed in milligram and tens of milligram, are less sedating, less anticholinergic, and more likely to cause EPS (e.g., haloperidol [Haldol] and fluphenazine [Prolixin]).

Atypical antipsychotics are associated with fewer side effects; they rarely cause EPS, or tardive dyskinesia.

- **Dystonia:** spasms of face, neck, and tongue. Occurs within hours to days and can be life threatening (e.g., dystonia of diaphragm causing asphyxiation).
- **Parkinsonism:** resting tremor, rigidity, bradykinesia. Occurs within days to weeks.
- **Akathisia:** feeling of restlessness. Occurs after weeks.

EPS are associated with high potency typical antipsychotics. Treat with antiparkinsonian agents (benztropine [Cogentin], amantadine [Symmetrel], and so on) and Benadryl.

Benzodiazepines are used to treat akathisia.

- Anticholinergic symptoms: flushing, dry mouth, blurred vision, altered mental status, fever. **Think: “Red as a beet, dry as a bone, blind as a bat, mad as a hatter, and hot as a hare.”** Associated with low potency typical antipsychotics and atypical antipsychotics. Treat symptoms individually.

- Antihistaminic effects: sedation
- Anti-alpha-adrenergic effects: orthostatic hypotension, cardiac abnormalities, and sexual dysfunction. Associated with low potency typical antipsychotics and clozapine (Clozaril).
- Weight gain
- Elevated liver enzymes
- Lowered seizure threshold. Low potency typical antipsychotics are more likely to cause seizures than high potency.
- **Tardive dyskinesia:** darting or writhing movements of face, tongue, and head; appears 6 months after beginning treatment. Associated with typical antipsychotics and more often seen in women. Treat by discontinuing offending agent and substituting atypical antipsychotic; untreated cases may become permanent.
- **Neuroleptic malignant syndrome:** confusion, high fever, elevated blood pressure (BP), tachycardia, "lead pipe" rigidity, sweating, and greatly elevated creatine phosphokinase (CPK) levels. **Twenty percent mortality rate.** Associated with all antipsychotics, but most often seen with typical high potency antipsychotics. Treat immediately by discontinuing offending agent and providing supportive care.
- **Metabolic syndrome:** hypertension, insulin resistance, abdominal obesity, and dyslipidemia. Associated with atypical antipsychotics, especially clozapine (Clozaril). Consider switching to different antipsychotics, such as aripiprazole (Abilify) or ziprasidone (Geodon), in patients with significant weight gain.

! How do atypical and typical antipsychotics differ in their mechanism of action?

Atypical antipsychotics are selective in binding to mesolimbic dopamine sites, as opposed to typical antipsychotics, which bind to mesolimbic and nigrostriatal

What is thought to be an adequate trial period of an antipsychotic medication?

dopamine receptors equally. Atypical antipsychotics also bind to serotonin (5-HT₂) receptors.

Taking the minimum dosage for 4–6 weeks

Which antipsychotics are most effective in treating psychosis?

All typical and atypical antipsychotics are equally effective, with the exception of clozapine, which is more effective in refractory schizophrenia.

What are the neuroendocrine side effects of antipsychotics?

Prolactinemia, secondary to dopamine blockade. This can lead to gynecomastia in men, and amenorrhea and galactorrhea in women. Treat with amantadine (Symmetrel) or bromocriptine (Parlodel). Prolactinemia is most often associated with risperidone (Risperdal).

Which antipsychotic drugs are available in depot injection form?

Haloperidol decanoate (every 2–4 weeks), fluphenazine decanoate (every 1–2 weeks), and risperidone depot (every 2 weeks)

What adjunct treatments can be useful for patients with schizophrenia?

Behavioral therapy helps patients improve their social skills and become self-sufficient in order to improve their ability to function in society. Family and group therapy are also useful.

What are the indications for electroconvulsive therapy (ECT) in schizophrenia?

Catatonia, prominent mood symptoms, medication-refractory symptoms, and acute-severe psychosis

SCHIZOPHRENIFORM DISORDER

What are the criteria for diagnosing schizophreniform disorder?

Same as schizophrenia, but **symptoms have lasted for only 1–6 months**

What is the diagnosis when symptoms last for more than 6 months?

Schizophrenia

What is the diagnosis when symptoms last for less than 1 month?

Brief psychotic disorder

What is the typical course of schizophreniform disorder?

One-third of patients recover completely; two-thirds progress to schizoaffective disorder or schizophrenia

What are the prognostic factors for schizophreniform disorder?

Same as schizophrenia

What treatment options are available for a person with schizophreniform disorder?

Hospitalization, 3- to 6-month course of antipsychotics, and supportive psychotherapy

SCHIZOAFFECTIVE DISORDER

! What are the DSM-IV criteria for diagnosing schizoaffective disorder?

- Both a mood episode and the psychotic features of schizophrenia are present simultaneously during any uninterrupted period of mental illness.
- Delusions or hallucinations are present for 2 weeks in the absence of mood disorder symptoms during same uninterrupted period.
- Mood symptoms are present for substantial portion of psychotic illness.

! What is the minimum duration of time for diagnosing schizoaffective disorder?

1 month

What are the two types of schizoaffective disorder?

Bipolar and depressive types, depending on which type of mood episode predominates

What is the prognosis of schizoaffective disorder?

Better than schizophrenia but worse than mood disorders

What are the treatment options for schizoaffective disorder?

- Antipsychotics for short-term control of psychosis; mood stabilizers, antidepressants, or ECT as needed for mania or depression
- Hospitalization and supportive psychotherapy

BRIEF PSYCHOTIC DISORDER

What are the criteria for diagnosing brief psychotic disorder?

Same as defined for schizophrenia, but **duration of symptoms is 1 day to 1 month.**

What is the typical course of brief psychotic disorder?

50–80% recover; remainder may eventually be diagnosed with schizophrenia or mood disorder

What is the treatment for brief psychotic disorder?

Brief hospitalization, a course of antipsychotics or benzodiazepines, and supportive psychotherapy

What is the prognosis of brief psychotic disorder as compared to other psychiatric disorders?

From best to worst prognosis: mood disorder > brief psychotic disorder > schizoaffective disorder > schizophreniform disorder > schizophrenia

! Use duration of illness to distinguish between brief psychotic disorder, schizophreniform disorder, and schizophrenia.

- | | |
|-----------------------|---------------------------|
| • <1 month symptoms | Brief psychotic disorder |
| • 1–6 months symptoms | Schizophreniform disorder |
| • >6 months symptoms | Schizophrenia |

DELUSIONAL DISORDER

! What are the DSM-IV criteria for diagnosing delusional disorder?

- Nonbizarre, fixed delusions for at least 1 month
- Does not meet criteria for schizophrenia
- Auditory or visual hallucinations are not prominent
- Daily functioning is not significantly impaired

What are the subtypes of delusional disorder?

- Erotomanic type: romantic preoccupation with a stranger
- Grandiose type: inflated self-worth
- Somatic type: physical delusions
- Persecutory type: delusions of being persecuted
- Jealous type: delusions of infidelity
- Mixed type: more than one of the above

What is the typical course of delusional disorder?

50% recovery, 20% decreased symptoms, and 30% no change

What is the treatment for delusional disorder?

Psychotherapy and antipsychotic medications

! What features differentiate schizophrenia from delusional disorder?

Delusions in delusional disorder are nonbizarre and do not occur in the presence of other psychotic symptoms.

What distinguishes bizarre from nonbizarre delusions?

- In delusional disorder, daily functioning is not impaired.
- *Nonbizarre delusions*—beliefs that might occur in real life but are not currently true (e.g., having an unfaithful spouse)
- *Bizarre delusions*—beliefs that have no basis in reality (e.g., believing that aliens are controlling the world)

SHARED PSYCHOTIC DISORDER

! What are the DSM-IV criteria for diagnosing shared psychotic disorder?

What is the prognosis for shared psychotic disorder?

What is the treatment of shared psychotic disorder?

A patient develops the same delusional symptoms as someone he or she is in a close relationship with. This typically occurs among family members.

20–40% will recover upon separation from the inducing person

- Separate the patient from the person who is the source of the shared delusions.
- Psychotherapy.
- Prescribe antipsychotic medications if symptoms have not improved 1–2 weeks after separation.

OTHER PSYCHOTIC DISORDERS

! What are the DSM-IV criteria for diagnosing psychotic disorder not otherwise specified (NOS)?

What are the criteria for diagnosing postpartum psychosis?

What symptoms characterize postpartum psychosis?

Psychotic symptoms that do not meet full criteria for a specific disorder, or psychotic symptoms without enough information to make a specific diagnosis

Psychosis in close temporal association with childbirth

Depression, delusions, thoughts by the mother of harming the infant or herself, cognitive deficits, and occasional hallucinations. **This is a psychiatric emergency, usually requiring hospitalization of the mother to prevent harm to herself or the infant.**

This page intentionally left blank

Personality Disorders

OVERVIEW

What is meant by personality?

A person's set of stable, predictable emotional and behavioral traits

What is meant by personality disorder?

Long-term, stable pattern of maladaptive and **inflexible** personality traits that leads to **impairment or distress**

What is the prevalence of personality disorders?

10–20% of the general population. It is higher in psychiatric patients (30–50%).

What is the typical age of onset of personality disorders?

DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*) definition requires an onset no later than early adulthood. However, some individuals' personality disorders may not come to clinical attention until later in life.

What is the etiology of personality disorders?

Biologic, genetic, and psychosocial factors have been implicated. The prevalence of personality disorders in monozygotic twins is several times higher than in dizygotic twins, supporting a genetic component to its etiology.

What was Sigmund Freud's opinion as to the etiology of personality?

Freud believed that personality traits/disorders were related to fixation at various psychosexual stages of development

! What are the DSM-IV diagnostic criteria for personality disorders?

- Pattern of behavior/inner experience that deviates from the person's culture and is manifested in two or more of the following ways:

! What are two ways in which the assessment of patients with personality disorders is unique?

- Cognition
- Affect
- Personal relations
- Impulse control
- Pattern:
 - Is pervasive and inflexible in a broad range of situations
 - Is stable and has an onset no later than adolescence or early adulthood
 - Is not accounted for by another mental/medical illness or by use of a substance
- It is often necessary to conduct more than one interview with patients and to space these over time, since a personality disorder is defined as a stable, inflexible way of interacting with others.
- Assessment can also be complicated by the fact that the characteristics defining a personality disorder may not be considered problematic by the individual (i.e., the traits are often ego-syntonic).

What are some clues to the diagnosis of personality disorder?

- Impaired interpersonal relations.
- Externalization of blame, that is, "It's not my fault."
- Failure to learn from past mistakes.
- Physician countertransference: conscious or unconscious emotional response of the therapist to the individual, including feelings of irritation, frustration, anger, or being manipulated.

! What are the three clusters of personality disorders?

3 Ws

Cluster A ("**Weird**"): paranoid, schizoid, and schizotypal

- Eccentric, peculiar, or withdrawn
- Familial association with psychotic disorders

Cluster B ("**Wild**"): antisocial, borderline, histrionic, and narcissistic

- Emotional, dramatic, or erratic
- Familial association with mood disorders

	Cluster C (“ Worried ”): avoidant, dependent, and obsessive-compulsive <ul style="list-style-type: none">• Anxious or fearful• Familial association with anxiety disorders
How does stress affect an individual’s personality?	Personality traits are often exacerbated by stress, but they typically revert to baseline after the stressor has passed. Stress can result in both adaptive and maladaptive personality changes.
How are personality disorders generally treated?	Personality disorders can be difficult to treat, as few patients are aware that they need help and these disorders tend to be chronic. Group and individual psychotherapy are the mainstays of treatment. Pharmacologic treatment is used mostly for comorbid conditions (e.g., depression and anxiety).

CLUSTER A (“WEIRD”)

Paranoid Personality Disorder

What is the prevalence of paranoid personality disorder (PPD)?	0.5–2.5%
Are there any gender disparities in the incidence of PPD?	Yes. Men are more likely to have PPD.
What other psychiatric diseases are more commonly seen among relatives of individuals with PPD?	Schizophrenia and delusional disorder
 What are the DSM-IV diagnostic criteria for PPD?	General distrust of others, beginning by early adulthood and present in a variety of contexts. At least four of the following must also be present: <ul style="list-style-type: none">• Suspicion (without evidence) that others are exploiting or deceiving him or her• Preoccupation with doubts of loyalty or trustworthiness of acquaintances• Reluctance to confide in others• Interpretation of benign remarks as threatening or demeaning

- Persistence of grudges
- Perception of attacks on his or her character that are not apparent to others; quick to counterattack
- Recurrence of suspicions regarding fidelity of spouse or lover

What is the differential diagnosis of PPD?

Psychotic disorders with persecutory delusions (especially paranoid schizophrenia), delusional disorder, personality changes due to general medical conditions, substance-induced personality changes, and other personality disorders

! What is the difference between paranoid schizophrenia and PPD?

*People with PPD do not have fixed delusions and are not frankly psychotic, although they may have transient psychosis under stressful situations.

What is the typical course of PPD?

PPD tends to have a chronic course; symptoms may intensify later in life with social/sensory isolation. Some patients may eventually be diagnosed with schizophrenia or delusional disorder.

How is PPD treated?

Psychotherapy is the mainstay of treatment. Antipsychotic or antianxiety medications can be useful for transient psychosis.

Schizoid Personality Disorder

What is the prevalence of schizoid PD?

7%

Are there any gender disparities in the incidence of schizoid PD?

Yes. Men are twice as likely to have schizoid PD.

! What are the DSM-IV diagnostic criteria for schizoid PD?

A pattern of **voluntary social withdrawal** and restricted range of emotional expression, beginning by early adulthood and present in a variety of contexts. Four or more of the following must also be present:

- Neither enjoying nor desiring close relationships (including family)
- Generally choosing solitary activities

	<ul style="list-style-type: none">• Little (if any) interest in sexual activity with another person• Taking pleasure in few activities (if any)• Few close friends or confidants (if any)• Indifference to praise or criticism• Emotional coldness, detachment, or flattened affect
What is the differential diagnosis of schizoid PD?	Residual symptoms in schizophrenia, autistic disorder, Asperger disorder, and other personality disorders
What is the typical course of schizoid PD?	Chronic: typically lifelong
How is schizoid PD treated?	Psychotherapy is the treatment of choice. Short-term antipsychotic or antidepressant medications can be used for transient psychosis or comorbid depression.

Schizotypal Personality Disorder

What is the prevalence of schizotypal PD?	3%
Are there any gender disparities in the incidence of schizotypal PD?	Yes. More common in males.
What psychiatric diseases are more commonly seen among relatives of individuals with schizotypal PD?	Schizotypal PD and schizophrenia
! What are the DSM-IV diagnostic criteria for schizotypal PD?	<p>A pattern of social deficits marked by eccentric behavior, cognitive or perceptual distortions, and discomfort with close relationships, beginning by early adulthood and present in a variety of contexts. Five or more of the following must be present:</p> <ul style="list-style-type: none">• Ideas of reference (excluding delusions of reference)• Odd beliefs or magical thinking, inconsistent with cultural norms• Unusual perceptual experiences (such as bodily illusions)• Suspiciousness• Inappropriate or restricted affect• Odd or eccentric appearance or behavior• Few close friends or confidants

	<ul style="list-style-type: none">• Odd thinking or speech (e.g., vague, stereotyped)• Excessive social anxiety Magical thinking may include: <ul style="list-style-type: none">• Belief in clairvoyance or telepathy• Bizarre fantasies or preoccupations• Belief in superstitions Odd behaviors may include involvement in cults or strange religious practices
What is the differential diagnosis of schizotypal PD?	Psychotic symptoms in schizophrenia, autistic disorder, Asperger disorder, and other personality disorders
What is a good way to distinguish between schizotypal and schizoid PD?	<ul style="list-style-type: none">• For schizoid PD, think of “Batman”: withdrawn, no desire to interact with other people.• For schizotypal PD, think of “The Joker”: outwardly strange behavior, odd beliefs.
What is the difference between schizotypal PD and schizophrenia?	Patients with schizotypal PD are not frankly psychotic , although they can be transiently.
What is the typical course of schizotypal PD?	Chronic course; eventually, patients may develop schizophrenia.
What is the treatment for schizotypal PD?	Psychotherapy is the treatment of choice. Short-term antipsychotic medication can be used for transient psychosis.

CLUSTER B (“WILD”)

Antisocial Personality Disorder

What is the prevalence of antisocial PD?	3% is men, 1% in women
What populations and areas contain a higher incidence of antisocial PD?	More common in lower socioeconomic areas and prisons
What is the risk of antisocial PD in relatives of those afflicted with this disorder?	Five times increased risk among first-degree relatives
What other psychiatric diseases are more commonly seen among relatives of individuals with antisocial PD?	Somatization disorder and substance-related disorders

What family characteristics have been associated with the development of antisocial behavior?

Physical abuse, family discord, and a parental history of alcoholism

! What are the DSM-IV diagnostic criteria for antisocial PD?

Pattern of disregard for others and violation of the rights of others since age of 15. Patients must be **at least 18 years old** for this diagnosis; history of behavior as a child/adolescent must be consistent with **conduct disorder** (see Chapter 6). Three or more of the following should be present:

- Failure to conform to social norms by committing unlawful acts
- Deceitfulness/repeated lying/manipulating others for personal gain
- Impulsivity/failure to plan ahead
- Irritability and aggressiveness/repeated fights or assaults
- Recklessness and disregard for safety of self or others
- Irresponsibility/failure to sustain work or honor financial obligations
- Lack of remorse for actions

What is the differential diagnosis of antisocial PD?

Intermittent explosive disorder, substance-related disorders, manic episodes in bipolar disorder or schizoaffective disorder, and other personality disorders

! How does one distinguish antisocial PD from intermittent explosive disorder?

Individuals with intermittent explosive disorder exhibit discrete episodes of loss of control. They show little or no signs of general impulsiveness or aggressiveness between these episodes. Also, they tend to be remorseful and worried about the consequences of their actions.

What neurologic disorder must be distinguished from antisocial PD?

Temporal lobe epilepsy. Although the actual prevalence of violence among patients with epilepsy is low, there have been reports of violent behavior associated with temporal lobe epilepsy.

! What is the difference between antisocial behavior associated with antisocial PD versus that seen with substance-related

Antisocial behavior associated with substance-related disorders occurs only in the context of disinhibition

disorders?

from substance intoxication or emotional lability from substance withdrawal. The behavior is not present during periods of sobriety. Patients with antisocial PD will display antisocial behaviors whether they are intoxicated or not.

What is the typical course of antisocial PD?

Onset of symptoms during childhood. Early adulthood is often complicated by drug abuse, poor academic and occupational performance, and criminal behavior. Symptoms may improve as patient ages.

How is antisocial PD treated?

Goals of treatment are to decrease impulsivity and increase the individual's conformity with societal values.

- Group and individual psychotherapies are the treatment of choice.
- "Limit-setting" (i.e., refusal of acquaintances to tolerate abuse) for antisocial behaviors is often necessary.
- Pharmacotherapy can be used for symptoms of anxiety or depression.

Borderline Personality Disorder

What is the prevalence of borderline personality disorder (BPD)?

1–2%

Are there any gender disparities in the incidence of BPD?

Yes. Women are **twice as likely** to have borderline PD.

What psychiatric comorbidities are often seen in patients with BPD?

Mood disorders (especially depression), substance-related disorders, eating disorders, and posttraumatic stress disorder

BPD, antisocial PD, substance-related disorders, and mood disorders

What psychiatric diseases are more commonly seen among relatives of individuals with BPD?

- ! What percentage of patients with BPD commit suicide?
- ! What are the DSM-IV diagnostic criteria for BPD?

10–15%

Pervasive pattern of impulsivity and **unstable relationships**, affects self-image and behaviors, present by early

adulthood and in a variety of contexts. At least five of the following must be present:

- Desperate efforts to avoid real or imagined abandonment
- Unstable, intense interpersonal relationships
- Unstable self-image
- Impulsivity in at least two potentially harmful ways (e.g., spending, sexual activity, substance use)
- Recurrent suicidal threats or attempts or **self-mutilation**
- Unstable mood/affect
- General feeling of emptiness
- Difficulty controlling anger
- Transient, stress-related paranoid ideation or dissociative symptoms

What is the differential diagnosis of BPD?

Mood disorders, other personality disorders, and adolescent angst

What is often seen in the social history of patients with BPD?

Higher rates of childhood sexual, emotional, and physical abuse

What are some defense mechanisms used by people with BPD?

Splitting, denial, projection, projective identification, acting out, and idealization. (For definitions of common defense mechanisms, see Chapter 1.)

! What is splitting?

The tendency to view people or events as either all good or all bad

What is projective identification?

Refers to the projection of an idea onto another person followed by an internalization of this new perception

What is acting out?

Performing an action to express (often unconscious) emotional conflicts. Examples are throwing a temper tantrum or behaving promiscuously.

What is the typical course of BPD?

Usually chronic; some improvement in symptoms is seen with age

How is BPD treated?

Goals of treatment are to improve emotional stability, sense of identity, and interpersonal relationships, and to decrease self-destructive behavior.

- Psychotherapy is the treatment of choice.

	<ul style="list-style-type: none">• Selective serotonin reuptake inhibitors (SSRIs) have been shown to help with mood/affect lability, anger control, and depressive symptoms.
Where does the term “borderline” come from?	Historically, it was used to describe individuals who were considered to be on the “borderline” between neurosis and psychosis.

Histrionic Personality Disorder

What is the prevalence of histrionic personality disorder (HPD)?	2%
Are there any gender disparities in the incidence of HPD?	Yes. It is more common in women.
! What are the DSM-IV diagnostic criteria for HPD?	<p>Pattern of excessive emotionality and attention seeking, present by early adulthood and in a variety of contexts. At least five of the following must be present:</p> <ul style="list-style-type: none">• Uncomfortable when not the center of attention• Inappropriately seductive or provocative behavior• Uses physical appearance to draw attention to self• Has speech that is impressionistic and lacking in detail• Theatrical and exaggerated expression of emotion• Easily influenced by others or situation• Perceives relationships as more intimate than they actually are
What is the differential diagnosis of HPD?	Other personality disorders, particularly BPD and narcissistic personality disorder (NPD)
! How does one distinguish between BPD and HPD?	Patients with BPD are generally more depressed and suicidal than those with HPD; also, patients with HPD are generally more functional.
What are some common defense mechanisms used by people with HPD?	Repression, sexualization, regression, and somatization

What is the typical course of HPD?

Chronic course; symptoms most severe in adulthood and improve with age

How is HPD treated?

Psychotherapy is the treatment of choice. Pharmacotherapy can be used for depressive or anxious symptoms as necessary.

Narcissistic Personality Disorder

What is the prevalence of NPD?

Less than 1%

Are there any gender disparities in the incidence of NPD?

Yes. It is 1.5 times more common in men.

! What are the DSM-IV diagnostic criteria for NPD?

Pattern of **grandiosity**, need for admiration, and lack of empathy beginning in early adulthood and present in a variety of contexts. Five or more of the following must be present:

- Exaggerated sense of self-importance
- Preoccupied with fantasies of unlimited money, success, brilliance, and so on.
- Believes that he or she is “special” or unique and can associate only with other high-status individuals
- Needs excessive admiration
- Has sense of **entitlement**
- Takes advantage of others for self-gain
- Lacks empathy
- Envious of others or believes others are envious of him or her
- Arrogant or haughty

What is the differential diagnosis of NPD?

Other personality disorders, particularly antisocial and BPDs, and manic or hypomanic episodes

How does one distinguish between antisocial PD and NPD?

Both types of patients exploit others, but the goal of NPD patients is status and recognition, while antisocial PD patients desire material gain or simply the subjugation of others.

What is “entitlement”?

Entitlement is a stable and pervasive sense that one deserves more than others.

What are some common defense mechanisms used by people with NPD?

Idealization (of themselves) and devaluation (of other people)

What is the typical course of NPD?

Chronic course; higher incidence of depression and midlife crises since these patients put such a high value on youth and power

How is NPD treated?

Psychotherapy is the treatment of choice. Antidepressants or lithium can be used as needed for comorbid mood disorders.

CLUSTER C (“WORRIED”)

Avoidant Personality Disorder

What is the prevalence of avoidant PD?

1–10%

Are there any gender disparities in the incidence of avoidant PD?

No. Men and women appear to be equally affected.

! What are the DSM-IV diagnostic criteria for avoidant PD?

Pattern of **social inhibition**, hypersensitivity, and feelings of inadequacy since early adulthood, with at least four of the following:

- Avoids occupation that involves interpersonal contact due to a **fear of criticism or rejection**
- Unwilling to interact unless certain of being liked
- Cautious of interpersonal relationships
- Preoccupied with being criticized or rejected in social situations
- Inhibited in new social situations because he or she feels inadequate
- Believes he or she is socially inept and inferior
- Reluctant to engage in new activities for fear of embarrassment

What is the differential diagnosis of avoidant PD?

Social anxiety disorder, schizoid PD, dependent PD, and other personality disorders

How does one distinguish between social anxiety disorder and avoidant PD?

Although both disorders involve fear and avoidance of social situations, avoidant PD is an overall fear of **rejection** and affects many areas of life, while social anxiety disorder is a

! How does one distinguish between schizoid PD and avoidant PD?

fear of **embarrassment** in a particular setting. See Chapter 2 for details.

Patients with avoidant PD desire companionship but fear being rejected, whereas patients with schizoid PD have no desire for companionship.

What is the typical course of avoidant PD?

Chronic course; symptoms can worsen during adolescence, when approval of peers is important. Increased incidence of associated anxiety and depressive disorders; occasionally, social phobia may supervene.

How is avoidant PD treated?

- Psychotherapy, including assertiveness training, is the treatment of choice.
- Anxiolytics (e.g., beta-blockers) can be used for the autonomic symptoms of anxiety.
- Antidepressants can be used for depressive symptoms.

Dependent Personality Disorder

What is the prevalence of dependent personality disorder (DPD)?

~1%

Are there any gender disparities in the incidence of DPD?

Yes. Women are more likely to have DPD.

! What are the DSM-IV diagnostic criteria for DPD?

Pattern of **submissive and clinging** behavior due to excessive need to be taken care of. At least five of the following must be present:

- Difficulty making everyday decisions without reassurance from others
- Needs others to assume responsibilities for most areas of his or her life
- Cannot express disagreement because of fear of loss of approval
- Difficulty initiating projects because of lack of self-confidence
- Goes to excessive lengths to obtain support from others
- Feels helpless when alone

What is the differential diagnosis of DPD?

- Urgently seeks another relationship when one ends
- Preoccupied with fears of being left to take care of self

Disability resulting from another medical or psychiatric disorder, and other personality disorders, especially avoidant, borderline, and histrionic PD

How does one distinguish between disabled persons and DPD patients?

Many people with debilitating illnesses can develop dependent traits. However, to be diagnosed with DPD, the features described above must manifest before early adulthood.

! How does one distinguish between dependent PD and avoidant PD?

Avoidant PD patients are slow to get involved in relationships, whereas dependent PD patients actively and aggressively seek out relationships.

! How are the relationships of patients with DPD different from those with BPD and HPD?

DPD patients generally have a long-lasting relationship with the person on whom they are dependent. BPD and HPD patients are often unable to maintain long-lasting relationships.

What is the typical course of DPD?

Chronic course; symptoms may decrease with age and/or therapy. Patients are prone to depression, especially after loss of the person on whom they are dependent.

How is DPD treated?

- Psychotherapy and cognitive-behavioral therapy are effective. The therapist must be careful not to allow the patient to become too dependent on the doctor-patient relationship.
- Pharmacotherapy can be used for symptoms of depression or anxiety.

Obsessive-Compulsive Personality Disorder

What is the prevalence of obsessive-compulsive personality disorder (OCPD)?

~1%

Are there any gender disparities in the incidence of OCPD?

Men are nearly twice as likely to have OCPD.

What is the risk of OCPD in relatives of those afflicted with this disorder?

Increased incidence in first-degree relatives

! What are the DSM-IV diagnostic criteria for OCPD?

Pattern of **preoccupation with orderliness, control, and perfectionism** at the expense of efficiency, present by early adulthood and in a variety of contexts. At least four of the following must be present:

- Preoccupation with details, rules, lists, and organization such that the major point of the activity is lost
- Perfectionism that is detrimental to completion of task
- Excessive devotion to work
- Excessive conscientiousness and scrupulousness about morals and ethics
- Will not delegate tasks
- Unable to discard worthless objects
- Miserly
- Rigid and stubborn

What is the differential diagnosis of OCPD?

Obsessive-compulsive disorder and other personality disorders, especially NPD and PPD

How does one distinguish between obsessive-compulsive disorder and OCPD?

Patients with OCPD do not have the recurrent obsessions and compulsions that are present in obsessive-compulsive disorder, and their symptoms are **ego-syntonic**, meaning that they may not be aware that they have a problem. Symptoms in obsessive-compulsive disorder are **ego-dystonic**, meaning that they cause the patient distress.

What are some common defense mechanisms used by people with OCPD?

Intellectualization, rationalization, isolation of affect, reaction formation, displacement, and undoing. OCPD patients often have difficulty recognizing or expressing their own anger, and they fear losing control of it; thus, they use defense mechanisms such as reaction formation and displacement of anger.

What is the prime issue for OCPD patients in their interpersonal relationships?

Control. OCPD patients seek to remain in control of themselves and to control those around them.

What is the typical course of OCPD?

Chronic course; severity of symptoms may wax and wane in association with stressors. Obsessive-compulsive

How is OCPD treated?

disorder or depression may supervene.

- Psychotherapy is the treatment of choice. Group therapy and behavioral therapy can also be useful.
- Pharmacotherapy can be used for associated symptoms as necessary.

Personality Disorder Not Otherwise Specified

! What are the DSM-IV diagnostic criteria of personality disorder not otherwise specified (PD NOS)?

This category is for disorders of personality functioning that do not meet criteria for any specific personality disorder. An example is the presence of features of more than one specific personality disorder that do not meet the full criteria for any one personality disorder ("mixed personality"), but that together cause clinically significant distress or impairment in one or more important areas of functioning (e.g., social or occupational).

What are some examples of PD NOS?

Depressive personality disorder and passive-aggressive personality disorder

Childhood Disorders

What are the three components of the psychiatric assessment of a child?

1. Consideration of child's stage of development
2. Attention to and observation of family structure and dynamics
3. Evaluation for normative age-appropriate behavior

How do children express emotion differently than adults?

Children tend to express emotion more concretely, whereas adults tend to express emotion abstractly.

How does the different manner in which children express emotion change the approach to their psychiatric evaluation?

Questions are asked about the absence or presence of manifestations of emotion rather than of the emotion itself. For example, "Do you feel like screaming?" rather than "Are you angry?"

Besides questioning, what other methods are employed by child psychiatrists in evaluation?

Roleplaying with games, toys, or dolls

What psychological test is most widely used to assess children of school age?

Wechsler Intelligence Scale for Children-Revised (WISC-R)

What score is derived from the WISC-R?

IQ or intelligence quotient representing a verbal score and a performance score

What psychological test is most widely used to assess very young children?

Stanford-Binet

How is IQ defined?

Mental age divided by chronologic age and multiplied by 100

MENTAL RETARDATION

What is the primary disturbance in mental retardation?

Intelligence is subnormal, leading to difficulties in adaptive functioning.

! What IQ score is required for the diagnosis of mental retardation?	Less than 70
What IQ score defines “mild” mental retardation?	50–70
What IQ score defines “moderate” mental retardation?	35–50
What IQ score defines “severe” mental retardation?	20–35
What IQ score defines “profound” mental retardation?	Less than 20

Epidemiology and Etiology

What is the prevalence of mental retardation in the population?	1–2%
What gender presents with mental retardation more frequently?	2:1 male to female ratio
Does the incidence of mental retardation show any relationship to socioeconomic status?	Milder forms can be associated with low socioeconomic status, whereas more severe forms show no association.
In the mentally retarded population, what degree of mental retardation is most prevalent?	85% of mental retardation is graded as “mild.”
What degree of mental retardation is associated with general medical conditions?	Severe retardation
! What is the most common cause of mental retardation?	Down syndrome (trisomy 21)
! What is the most common cause of inherited mental retardation?	Fragile X syndrome
What risk factors exist for the development of mental retardation?	Intrauterine exposure to toxins and infection, poor prenatal care, postnatal exposure to heavy metals
What are other causes of mental retardation?	Inborn errors of metabolism, maternal diabetes, early childhood head injuries, rubella, substance abuse, toxemia, social deprivation

Diagnosis

How may children present with mental retardation?	Failure or delay in meeting developmental milestones, poor intellectual functioning
---	---

What abnormality may be apparent on physical examination in a patient with mental retardation?

! What physical examination findings are associated with Down syndrome?

What three characteristics must be present to make the diagnosis of mental retardation?

What tests are indicated in patients suspected of having mental retardation?

What does the differential diagnosis for mental retardation include?

What percentage of mentally retarded children has comorbid ADHD?

Multiple physical anomalies specific to the underlying cause of mental retardation

Single horizontal palmar crease, almond-shaped eyes, flat hypoplastic face with short nose, prominent epicanthic skin folds, small, low-set ears, protruding tongue

1. Onset before age 18
2. IQ less than or equal to 70
3. Impaired adaptation to environments such as home, work, social

IQ tests, electroencephalogram, computed tomography (CT), or magnetic resonance imaging (MRI) in addition to metabolic or genetic testing specific for suspected underlying disorders

Attention deficit hyperactivity disorder (ADHD), depression, learning disorders, schizophrenia, seizure disorder, pervasive developmental disorder (PDD)

10–20%

Treatment

How does the attainment of developmental milestones differ between children with and without mental retardation?

Pattern is similar but rate is slower

How can mental retardation be prevented?

Genetic counseling, good prenatal care, safe environments

What are goals for managing mild mental retardation?

- Special education focused on reading, writing, and simple math skills
- Fostering a supportive and nurturing environment at caretaker's home
- Providing a suitable job in the community to engage the patient
- Help to overcome problems conforming to social norms

What are goals for managing moderate mental retardation?

- Training the child to recognize his or her own name
- Reinforcing and teaching the limited vocabulary and command set of which the child is capable
- Helping the child develop activities of daily living so functioning in a supervised group home is possible

What are goals for managing severe to profound mental retardation?

- Institutionalized care
- Providing comfort and care targeted at comorbid conditions in the setting of inevitable premature death

LEARNING DISORDERS

What defines learning disorders?

Academic achievement in specific areas below the level expected by a child's chronologic age, measured intelligence, and age-appropriate education

Name the three learning disorders identified by the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*).

1. Mathematics disorder
2. Reading disorder
3. Disorder of written expression

Epidemiology and Etiology

What is the prevalence of learning disorders in school-age children?

Ranges from 2% to 10%

What percentage of children in public schools is identified with learning disorders?

About 5%

What is the prevalence of reading disorder in school-age children?

4%

What is the prevalence of mathematics disorder in school-age children?

Unknown, but felt to be at least that of reading disorder (4%)

What gender presents with learning disorders more frequently?

Up to 4:1 male to female ratio

Can learning disorders be familial?

Yes

What are other postulated causes of learning disorders?

- Focal cerebral injury
- Neurodevelopmental defect

What is the prevalence of dyslexia in the population?

Same as reading disorder (4%)

! What are some substance-induced conditions that are associated with learning disorders?

Lead poisoning and fetal alcohol syndrome

Diagnosis

How can learning disorders be diagnosed?

Specific intelligence and achievement testing

When are most learning disorders diagnosed?

Between first and fifth grade of elementary school

What is the differential diagnosis for learning disorders?

- External factors such as socioeconomic disadvantages, poor schooling, or language barriers
- Medical factors such as hearing or vision impairment
- Global functioning factors such as communication disorders, mental retardation, PDDs

How does dyslexia present?

Difficulty in reading especially in comprehension, word order, and letter sequence in children of normal IQ

What difficulties result from dyslexia?

Problems with spelling and verbal language

Treatment

How can learning disorders be treated?

Special individualized education to teach material in the most effective manner in addition to remediation for the specific learning disorder

How can poor self-esteem, social behavior, and family functioning associated with learning disorders be treated?

Counseling of patients and families

Is dyslexia self-limited in children?

No, difficulties persist into adulthood

DEVELOPMENTAL COORDINATION DISORDER

What is developmental coordination disorder?

Impairment in the development of motor skills that cannot be attributed to a general medical condition or autism

What is the prevalence of developmental coordination disorder in school-age children?	5%
How does developmental coordination disorder manifest in children?	<ul style="list-style-type: none"> • Clumsiness • Poor athletic skills • Poor fine motor skills
What disorders are frequently found in developmental coordination disorder?	Learning and communication disorders
How does developmental coordination disorder progress in adulthood?	Variably; deficits often improve over time

COMMUNICATION DISORDERS

What characterizes communication disorders?	Problems arising in childhood with speech comprehension, impairments in expressive language, poor articulation, or stuttering
---	---

Etiology and Epidemiology

What is the prevalence of communication disorders in school-age children?	5%
Is there a familial pattern in communication disorders?	Yes
What are two postulated causes of communication disorders?	<ol style="list-style-type: none"> 1. Genetic or environmental insults to the central nervous system (CNS) resulting in dysfunction 2. Emotional stress

Diagnosis

What is necessary for the diagnosis of communication disorders?	Impairments in age-appropriate communication skills not better explained by mental retardation, motor or sensory problems, or environmental deprivation
What characterizes the subtype of expressive language disorder?	<ul style="list-style-type: none"> • Difficulty constructing sentences • Use of mismatched tense • Difficulty using age-appropriate vocabulary
What characterizes the subtype of mixed receptive-expressive language disorder?	<ul style="list-style-type: none"> • Impairments found in expressive language disorder • Poor language comprehension

What characterizes the subtype of phonologic disorder?

Difficulty making age-appropriate sounds necessary for language production

What characterizes the subtype of stuttering?

Disruption in fluency and timing of speech producing characteristic repetitive pieces of words before finishing the entire word

What is the differential diagnosis of communication disorders?

Autistic disorder, environmental deprivation, hearing impairment, mental retardation, motor deficits affecting speech, selective mutism

When do most communication disorders first become evident?

3 years of age

Treatment

What interventions are successful in the treatment of communication disorders?

- Special education
- Speech therapy
- Stress reduction

In what percentage of children with communication disorders is complete recovery seen?

50%

AUTISTIC DISORDER

To what spectrum of disorders does autistic disorder belong?

PDDs. Other examples of PDD are Asperger disorder, Rett disorder, and childhood disintegrative disorder.

What is the triad of findings in autistic disorder?

1. Impaired social interactions
2. Impaired communication skills
3. Highly limited set of activities and interests

Epidemiology and Etiology

What is the incidence of autistic disorder?

2–5 children per 10,000 live births

! What gender presents with autistic disorder more frequently?

Up to 5:1 male to female ratio

Is autistic disorder familial?

Yes, it can be.

Can autistic disorder result from poor or conflicting parenting styles?

No. Original psychodynamic theory offered this idea; however, it was later disproved.

What is the specific genetic defect implicated in autistic disorder?

It has not yet been discovered; however, incomplete penetrance is implicated by genetic studies.

What other disorders have been associated with autistic disorder?

Tuberous sclerosis, fragile X, phenylketonuria (PKU), maternal rubella, perinatal anoxia, encephalitis

Diagnosis

! What is the most frequent initial disturbance noted in patients with autistic disorder?

Impairment in social interactions resulting in lack of peer relationships and poor recognition or response to social cues

! What are examples of social impairment that satisfy DSM-IV criteria for autistic disorder?

- Poor eye contact
- Failure to develop a social smile
- Lack of facial expression
- Unwillingness to make friends
- Not sharing or pointing out objects of enjoyment

! What are examples of impairment in communication that satisfy DSM-IV criteria for autistic disorder?

- Markedly slowed language development
- Difficulty initiating or maintaining conversation
- Limited or repetitive use of vocabulary
- Abnormal alterations in pitch, intonation, rate, rhythm, or stress

! What are examples of behaviors and interests that satisfy DSM-IV criteria for autistic disorder?

- *Restrictive*: Knowledge is narrow and limited to one or few topics or attention is focused on parts of objects.
- *Repetitive*: Specific motor activity is repeated and becomes a preoccupation.
- *Inflexible*: Certain activities must be conducted at the same time or in the same manner each day and become ritualistic.

! What time course of delays satisfies DSM-IV criteria for autistic disorder?

Delays in social interaction, communication, or symbolic or imaginative play must begin before the age of 3.

What percentage of children with autistic disorder has comorbid seizures?

25%

What percentage of children with autistic disorder has mental retardation?

75%

What does the differential diagnosis of autistic disorder include?

Childhood psychosis, congenital deafness or blindness, language disorders, mental retardation

At what age does autistic disorder usually become evident?

2 or 3 years of age

Treatment

What is the prognosis for autistic disorder?

The disorder is chronic and lifelong with no cure presently.

What is the primary goal in managing autistic disorder?

Developing behavioral management techniques

What are the goals of behavioral management techniques?

Reducing repetitive and inflexible behaviors while improving social and communicative functioning

What pharmacologic treatment is indicated for autistic disorder?

- Anticonvulsants for comorbid seizures
- Neuroleptics in low doses to decrease aggression
- Mood stabilizers and antidepressants have also been used

ASPERGER DISORDER

What is Asperger disorder?

A PDD characterized by impaired social interaction and restricted interests and activities

How is Asperger disorder similar to autism?

Both disorders share qualitative impairments in social interaction and a restricted range of interests and activities.

How do the DSM-IV criteria for Asperger disorder differ from autism?

Asperger disorder is always characterized by normal language and cognitive development.

RETT'S DISORDER

What is Rett's disorder?

A PDD in which multiple deficits arise following a relatively normal birth and initial period of development

! What is the major difference between autistic disorder and Rett's disorder?

Rett's disorder is always characterized by an initial period of normal development.

In which gender does Rett's disorder almost exclusively occur?

Female

What is thought to be the etiology of Rett's disorder?

Genetic

! What are the DSM-IV criteria for diagnosis of Rett's disorder?

1. Normal prenatal and perinatal development
2. Normal psychomotor development for at least **5 months** after birth
3. Normal head circumference at birth
4. Onset of deficits following the initially normal period of development that must include:
 - a. Deceleration of head growth between 5 and 48 months
 - b. **Loss of hand coordination between 5 and 30 months**
 - c. **Onset of unusual, repetitive hand movements (such as hand wringing)**
 - d. Loss of social engagement
 - e. Impairments in coordination of gait or trunk movements
 - f. Severe retardation

CHILDHOOD DISINTEGRATIVE DISORDER

! What DSM-IV criteria characterize childhood disintegrative disorder?

Loss of previously acquired skills and onset of autistic symptoms following a 2-year period of normal development

In what gender is childhood disintegrative disorder more common?

Four to eight times more common in males

! What are the two major differences between childhood disintegrative disorder and Rett's disorder?

1. *Gender*: Rett's disorder has been described in females, whereas childhood disintegrative disorder is more common in males
2. *Duration of preceding normal period of development*: Rett's disorder—5 months versus childhood disintegrative disorder—2 years

ATTENTION DEFICIT HYPERACTIVITY DISORDER

What behaviors are implicated in ADHD?

- Overactivity, cannot sit still
- Poor impulse control
- Inattention
- Distractibility
- Disruptive in class

How is the pattern of such behaviors characterized and differentiated from individuals without ADHD?

- Persistent
- Dysfunctional

Epidemiology and Etiology

What is the prevalence of ADHD in school-age children?

3–5%

What gender presents with ADHD more frequently?

4:1 male to female ratio in the general population, 9:1 male to female ratio in clinical settings such as primary care or psychiatric outpatient visits

What accounts for the difference in gender presentation between general and clinical populations?

Males are more likely to be identified and referred to clinic.

Does ADHD show a familial pattern?

Yes

What disorders are more common in families who have a child diagnosed with ADHD?

Antisocial personality disorders, mood disorders, substance use disorders, and learning disorders

Diagnosis

! Name the DSM-IV criteria required for the diagnosis of ADHD.

- Onset of inattentive, hyperactive, or impulsive symptoms before age 7
- Symptoms must be present in two or more settings, usually school and home
- Duration of symptoms exceeds 6 months

! If ADHD symptoms are present in only one setting, what cause is suggested?

Environmental or psychodynamic

How may children present with ADHD?

- Stay up late
- Wake up early
- Most time is spent in a hyperactive or impulsive state
- May cause damage or be unmanageable around the house

What complications may result if this behavior is not correctly identified as ADHD?

- Exhibit difficulty following directions
- Forget assignments or school supplies
- Do not wait for their turn to be called on in class

Children may be viewed as troublemakers and receive negative treatment. Teachers may avoid giving them educational attention because of the effort required for discipline. As a result, these children may lag behind the others academically and socially.

What aspects of the history, physical examination, and diagnostic testing are important in making the diagnosis of ADHD?

- History obtained from parents and teachers
- Observation of behavior at school and at home
- Complete neurologic examination
- Tests of attention such as completing puzzles and sequential or ordered tasks
- Tests to rule out learning disorders, including IQ testing

What is the main differential diagnosis for the hyperactive symptoms of ADHD?

Age-appropriate behaviors in active children

What are the main differential diagnoses for the inattentive symptoms of ADHD?

- Mismatch between IQ and level of stimulation from the child's environment
- Outright refusal to perform a task in oppositional defiant disorder
- Mood disorders
- Medication side effects
- Psychotic disorders
- PDD

! How can the inattentiveness in children with mood disorders be differentiated from children with ADHD?

- **Inattentiveness after the age of 7 often implies mood disorders.**
- School adjustment in children with mood disorders is complicated by psychosocial factors in excess of inattention and disruptive behavior.

Treatment

What are the goals in treatment of ADHD?

Improve performance in the classroom
Improve self-esteem
Prevent behavioral complications

What pharmacologic class is used with greatest benefit in children with ADHD?

Psychostimulants

! What drug is considered first line to treat ADHD?

Methylphenidate (Ritalin)

What drug is considered second line to treat ADHD?

Dextroamphetamine (Dexedrine)

What dosing strategy is employed when using psychostimulants in children?

- Using the smallest effective dose
- Limiting use of medication to periods when it is needed most

Does the use of stimulants in children with ADHD lead to drug abuse or addiction in adulthood?

No

In what percentage of children with ADHD do symptoms persist into adulthood?

30%

How is the treatment of ADHD different in mentally retarded children?

It is not. Stimulants are equally effective in mentally retarded individuals.

In addition to pharmacologic treatment, what other modalities are used in managing ADHD?

Behavioral strategies such as positive reinforcement for appropriate behaviors and task completion, limit setting, and tailoring environmental stimulation to manageable levels

CONDUCT DISORDER

What is conduct disorder?

Persistent pattern of repeatedly violating societal norms, rules, or the rights of others

What are examples of behavior seen in conduct disorder?

Destroying property, aggression against people or animals, theft, running away

! What personality disorder in adults is equivalent to conduct disorder in children?

Antisocial personality disorder

What is the most common disorder seen in outpatient child/adolescent psychiatric clinics?

Conduct disorder

Etiology and Epidemiology

In what percentage of school-age children does conduct disorder occur?

3–7%

! What gender presents with conduct disorder more frequently?

9:1 male to female ratio

What is the cause of conduct disorder?

Genetic predisposition in addition to psychosocial factors with regards to parenting and peer groups

Diagnosis

! What are the DSM-IV diagnostic criteria for conduct disorder?

- Persistent pattern of behavior that violates societal norms or the basic rights of people or animals as manifest by three or more of the following:
 - Violence
 - Rape
 - Vandalism
 - Fire setting
 - Theft
 - Truancy
- Duration of such behavior for at least 1 year

What features or diagnoses are associated with conduct disorder?

Dysfunctional family, learning disorders, ADHD, physical injuries as a result of fighting, substance abuse, inability to keep a job, failing school

Treatment

What is the treatment for conduct disorder?

Individual and family therapy; behavioral techniques such as limit setting; occasionally removal of the child from home environment and placement in foster care; role modeling; moral instruction; structured living settings

What treatments for conduct disorder have proved to be ineffective?

Punishment and incarceration

! What percentage of children with conduct disorder progress to antisocial personality disorder as adults?

25–40%

What disorders are present in adulthood among children and adolescents with conduct disorder?

Antisocial personality disorder, somatoform disorders, depression, substance abuse

OPPOSITIONAL DEFIANT DISORDER

What is oppositional defiant disorder?

A disorder of childhood or adolescence characterized by a recurrent pattern of negativistic, hostile, and disobedient behavior toward authority figures

How does oppositional defiant disorder differ from conduct disorder?

- Less severe
- Annoying, disruptive, argumentative, and disobedient behavior toward authority
- Usually without destructive and aggressive behaviors
- Sense of empathy for others is preserved
- Maintain respect for other people's rights

In what gender does oppositional defiant disorder more frequently present?

Male

What are children with oppositional defiant disorder at risk for?

Developing conduct disorder

TOURETTE DISORDER

! What characterizes Tourette disorder?

Multiple, involuntary, and uncontrollable motor and vocal tics

What is a "tic"?

Sudden, swift, repetitive, arrhythmic, and stereotyped movement or vocalization

Epidemiology and Etiology

How prevalent is Tourette disorder in the general population?

Affects 0.4% of the population

What gender presents with Tourette disorder more frequently?

3:1 male to female ratio

Does Tourette disorder show any familial pattern?

Yes

What disorders are most frequently associated with Tourette disorder?

Obsessive-compulsive disorder and ADHD

What is PANDAS?

Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infection

What is the hypothetical relationship between PANDAS and Tourette disorder?

Some cases of Tourette disorder (as well as obsessive-compulsive disorder) may be caused by an autoimmune reaction following infection by group A beta-hemolytic streptococcal infection.

By what mechanism may an autoimmune reaction lead to PANDAS?

Molecular mimicry; antibodies produced in response to streptococcal antigens may cross-react with target areas in the brain leading to the development or exacerbation of a tic disorder, Tourette disorder, or obsessive-compulsive disorder.

Diagnosis

What is the typical age of onset of Tourette disorder?

Before age 18

! What are the DSM-IV criteria for diagnosis of Tourette disorder?

- 12 months minimum duration
- 3 months longest interval allowed without tics
- Tics during active phase can be motor only or vocal only
- Motor and vocal tics must occur together at some point

How can vocal tics in Tourette disorder be characterized?

Loud barking, grunting, or shouting words

What is coprolalia?

Involuntary utterances of obscene or vulgar words

How can motor tics in Tourette disorder be characterized?

Facial grimacing, tongue protrusion, snorting, blinking, extremity jerking

How do patients with Tourette disorder typically describe their control of vocal tics?

They are aware of their occurrence and admit to a sense of fleeting control over the tics that is overcome by an irresistible urge or compulsion to say them

What does the differential diagnosis of Tourette disorder include?

Wilson disease, Huntington disease, seizure disorder, extrapyramidal symptoms secondary to antipsychotic medication

What is a feature of Tourette disorder that distinguishes it from other hyperkinetic motor disorders?

Ability of patients to temporarily suppress their tics

Treatment

What is the pharmacologic treatment of Tourette disorder?

- Alpha-adrenergic agents (guanfacine, clonidine)
- Atypical antipsychotic agents (risperidone, olanzapine, ziprasidone)
- Typical antipsychotic agent (haloperidol)

! What medication is preferred to treat Tourette disorder?

Clonidine, because it has a more favorable side effect profile in comparison to the antipsychotics.

What factors limit the use of clonidine in the treatment of Tourette disorder?

1. Deleterious effects on blood pressure
2. May take longer to attain initial therapeutic effect over tics as compared to antipsychotic agents

What pharmacologic agent is no longer used to treat Tourette disorder due to QTc prolongation?

Pimozide

What other therapies have been suggested in the treatment of PANDAS with regards to Tourette disorder?

As a result of the proposed autoimmune and postinfectious model of PANDAS, studies have been designed to investigate the use of:

- Antistreptococcal agents such as penicillins or other antibiotics
- Immunologic agents such as intravenous immunoglobulin, corticosteroids, and plasmapheresis

What is the behavioral treatment of Tourette disorder?

Supportive psychotherapy targeted at minimizing the negative social consequences of multiple vocal and motor tics

NOCTURNAL ENURESIS

What is nocturnal enuresis?

Pattern of involuntary or intentional voiding of urine into bed or clothes after age 5, occurring at night

Etiology and Epidemiology

Is there a familial pattern to enuresis?

Yes, a history of enuresis in first-degree relatives is found in 75% of these children.

What conditions are associated with nocturnal enuresis in children?

Adjustment disorder, anxiety, oppositional defiant disorder, ADHD

What does nocturnal enuresis in adolescents imply?

Possibly, in some cases, a greater degree of underlying psychopathology

Diagnosis

! After what age can the diagnosis of nocturnal enuresis be made?

5 years old

When does enuresis occur in relation to onset of sleep?

In most cases 30 minutes to 3 hours after falling asleep

! What is the frequency of enuresis that satisfies DSM-IV diagnostic criteria?

At least twice a week for at least 3 consecutive months or it must cause marked impairment or distress

Treatment

! What is the treatment for nocturnal enuresis?

Behavior modification, psychotherapy for associated psychopathology, low doses of tricyclic antidepressants (e.g., imipramine), desmopressin (DDAVP)

Upon resolution of enuresis what other aspects of the child's life are improved?

- Improved self-esteem
- More confident social interactions

SELECTIVE MUTISM

What disturbance do children with selective mutism demonstrate?

Voluntary refusal to speak in a particular setting or to a particular person or group of people

How is this disorder differentiated from other pathologic speech deficits?

Children with selective mutism verbalize appropriately in at least one setting, usually their home.

How can selective mutism be differentiated from autism?

Normal nonverbal communicative skills, lack of social disturbances, and lack of repetitive, restricted behaviors

SEPARATION ANXIETY DISORDER

How does this disorder manifest in children?

Distress upon separating the child from his or her caregiver

Etiology and Epidemiology

What is the prevalence of separation anxiety disorder in school-age children?	4%
What gender more commonly presents with separation anxiety disorder?	Male
What environmental or psychosocial aspects of a child's life may predispose him or her to separation anxiety disorder?	<ul style="list-style-type: none">• Traumatic separation• Very close knit family dynamic at baseline• Mimicking of exaggerated anxiety about separation modeled by parent
What is the postulated underlying fear in the child that drives the distress in separation anxiety disorder?	Fear of harm to oneself or to loved ones

Diagnosis

 What are symptoms of distress in separation anxiety disorder?	<ul style="list-style-type: none">• Refusal to go to school or to sleep alone• Somatic symptoms such as belly ache, head ache• Crying or screaming when being physically separated• Can progress to full-blown panic attacks
 At what age is this behavior considered pathologic?	<ul style="list-style-type: none">• Age 1–3, normal behavior• After 3 years old, pathologic

Treatment

What type of therapy is most effective in the treatment of separation anxiety disorder?	Behavioral psychotherapy
What specific psychotherapeutic techniques are used to treat separation anxiety disorder?	Systematic desensitization and operant conditioning
When is pharmacotherapy considered in the treatment of separation anxiety disorder?	When panic is associated with separation and not entirely responsive to behavioral therapy, such as when the child is too anxious to tolerate separation or therapy
What pharmacologic agents are used in the treatment of separation anxiety disorder?	Selective serotonin reuptake inhibitors (SSRIs) or benzodiazepines

SOCIAL PHOBIA IN CHILDHOOD

What disorder did social phobia in childhood replace in DSM-IV?

Avoidant disorder of childhood

How does social phobia manifest in childhood?

Excessive shyness and avoidance of interactions with people unfamiliar to the child after 2.5 years of age

Prior to 2.5 years of age, what are these symptoms considered?

Stranger anxiety, normal developmental phenomenon

What are the complications of social phobia in childhood?

Disruption of normal psychosocial, psychosexual, self-confidence, and self-esteem development

What type of therapy is most effective in the treatment of social phobia in childhood?

Cognitive-behavioral psychotherapy with the goal of developing assertiveness

What may result from unsuccessful or ineffective treatment of social phobia in childhood?

Persistence into adulthood resulting in isolation, depression, and lack of normal social bonds

GENERALIZED ANXIETY DISORDER IN CHILDHOOD

How does generalized anxiety disorder present in children?

Excessive worry about past behavior, future events, or their own competence

What factors predispose children to generalized anxiety disorder?

- Birth order (oldest at most risk)
- Family dynamic of high performance expectations on the child
- Upper socioeconomic background
- Small family

How may children with generalized anxiety disorder behave when they are excessively anxious?

They may exhibit nervous habits, somatic complaints, seeking of reassurance or approval, and difficulty sleeping.

What is the treatment for generalized anxiety disorder in childhood?

Psychotherapy and occasionally SSRIs or benzodiazepines

Cognitive Disorders

What are the cognitive disorders?

Delirium, dementia, and amnesic disorders

DELIRIUM

! What is delirium?

An acute, fluctuating, and transient disturbance of consciousness accompanied by confusion or other changes in cognition

Epidemiology and Etiology

Are there any gender disparities in the incidence of delirium?

No. Males and females are affected equally.

What percentage of the general medical population develops delirium?

10–25% of patients over the age of 65. Delirium occurs more frequently in children and in the elderly.

In what two settings is delirium most frequently seen?

Postoperatively and in the intensive care unit

! What are the common causes of delirium?

Most commonly the cause is multifactorial, but often may be a result of a general medical condition or substance abuse.

STUPID In THe PM

Seizure

Toxins (carbon monoxide, organophosphates)

Uremia

Pills (anticholinergics, antibiotics, meperidine, anesthetics)

Infections (urinary tract infections, meningitis, sepsis)

Drug withdrawal (alcohol, benzodiazepines, barbiturates)

Intoxication (alcohol, hallucinogens, opioids, marijuana, stimulants, sedatives)

Thyroid (hyper or hypo)

Head trauma

Postoperative

Metabolic (hyponatremia, hepatic encephalopathy, hypoxia, hypercarbia, hypoglycemia, hypo-/hypervolemia, hypercalcemia)

Diagnosis

! What are the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*) criteria for the diagnosis of delirium?

1. Changes in attention or arousal
2. Changes in cognition
3. Changes come on acutely and fluctuate throughout the course of the day

! What is the time course of the development of delirium?

Acute (hours) or subacute (days).
Not chronic!

What is an essential part of the history in a patient suspected to have delirium?

Exhaustive search for any existing medical conditions or substances (illicit as well as prescribed) that could be precipitants of acute mental status change

How may a state of delirium manifest throughout the course of a day?

“Waxing and waning.” The patient may have periods of complete clarity mixed with confusion. Sleep-wake cycles may be disturbed. Symptoms may also become worse at night with increased agitation and confusion.

What are the most important parts of the physical examination in the evaluation for delirium?

- Assess mental status using questions about orientation or the mini-mental examination
- Take vital signs with respect to presence or absence of fever, tachycardia, or decreased oxygen saturation
- Observe the patient’s general appearance looking for psychomotor agitation or hallucinatory behavior

! Which laboratory or imaging tests are useful in the diagnosis of delirium?

- Examine the pupils, assess fluid status, and look for signs of infection or underlying systemic diseases

Finger stick for blood glucose, urinalysis, urine culture, urine toxicology screen, blood culture, complete blood count, electrolytes, blood urea nitrogen (BUN), creatinine, arterial blood gas. In some patients, chest x-ray, head computed tomography (CT), or magnetic resonance imaging (MRI) may also be useful.

! What finding on electroencephalography (EEG) is characteristic of delirium?

Nonspecific, diffuse general slowing

35–40%

What is the 1-year mortality rate associated with the presence of delirium?

What does the differential diagnosis of delirium include?

Dementia, psychotic disorder, mania, complex partial seizure

Can delirium exist at the same time as dementia?

Yes, but it is difficult to diagnose a dementia in the presence of delirium.

Treatment

! What is the primary goal in the initial treatment of delirium?

Identify and treat any life-threatening conditions that may be presenting with delirium. Also keep patients safe from harming themselves or falling.

What efforts with regards to a patient's environment can be made to treat and prevent delirium?

Make every attempt to reorient the patient to person, time, and place using verbal cues as well as visual reminders such as easy-to-read calendars and clocks in an appropriately lit room.

! What is the main treatment of delirium?

Identify and correct the underlying medical or substance-related condition. This may involve removing offending anticholinergic (or other) medications in the elderly, volume resuscitation, electrolyte correction, using a benzodiazepine to treat alcohol withdrawal, treating infections appropriately, or

What are the pharmacologic treatments available to treat agitation in delirium?

correcting acid/base disorders among others.

- In the appropriate patient, low dose benzodiazepines or oral, intramuscular, or intravenous haloperidol may be of benefit. Caution must be taken as these agents may worsen delirious states in the elderly.
- Benzodiazepines may disinhibit patients.
- Risperidone (Risperdal) is also used but is associated with increased mortality in older patients with underlying dementia.

DEMENTIA

What is dementia?

A general loss of cognitive abilities, including impairment of memory as well as one or more of the following: aphasia, apraxia, agnosia, or impaired executive functioning. These cognitive changes are progressive and chronic and are likely due to damage of the central nervous system (CNS).

What is aphasia?

A disorder of speech involving loss of expression, writing, or comprehension of spoken or written language. For example, a patient is unable to name an object held in front of him or her or unable to describe a picture.

What is apraxia?

Loss of ability to carry out familiar, purposeful movements in the absence of paralysis or other motor or sensory impairment. For example, a patient is unable to comb his or her hair or make a cup of tea even though he or she can move his or her extremities without any difficulty or impairment.

What is agnosia?

Loss of the power to recognize sensory stimuli: auditory, gustatory,

What is impaired executive functioning?

olfactory, tactile, or visual. For example, a patient is unable to recognize familiar faces.

Disturbed planning, organizing, or abstract thinking abilities. For example, a patient is unable to recall the steps necessary to pay a bill with a check, place correct postage on the envelope, and send it in the mail.

Epidemiology and Etiology

Are there any gender disparities in the incidence of dementia?

No. Males and females are affected equally.

How does the prevalence of dementia change with age?

Prevalence increases with age: 2–5% over age 65 and up to 20% over age 85.

What are some risk factors for developing dementia?

Factors differ according to specific type of dementia but in general include genetic predispositions, cerebrovascular and cardiovascular disease, head trauma, increasing age, and infectious processes.

What is the ultimate pathologic process responsible for dementia, regardless of specific etiology?

Cortical or subcortical neuron loss

! What is the most common cause of dementia?

Alzheimer disease accounts for greater than 50% of all dementia.

What are the risk factors for Alzheimer disease?

Familial, **Down syndrome**, past head trauma, **increasing age**

What is the link between Alzheimer disease and Down syndrome?

Chromosome 21: trisomy 21 and amyloid precursor protein (APP) on chromosome 21

What is the cleavage product of APP on chromosome 21?

A β amyloid results from the breakdown of the protein coded for by the APP gene and is deposited in neuritic plaques leading to excess cerebral amyloid.

Describe the course of Alzheimer disease.

Progressive with death occurring about 10 years after onset

What is Lewy body dementia?

Disease marked by dementia, parkinsonian features, and episodic delirium or psychosis

! What disease may Lewy body dementia resemble clinically?

! What is the second most common cause of dementia?

! Name the risk factors associated with vascular dementia.

Describe the course of vascular dementia.

What infectious process may be responsible for dementia in a patient with certain sexual or intravenous drug use risk factors?

! What type of dementia is most common in young males?

What is the course of dementia resulting from head trauma?

What percentage of patients with Parkinson disease develops dementia?

! What is the proposed etiology of Parkinson disease?

What form of dementia is associated with autosomal dominant inheritance on chromosome 4?

When is the typical age of onset of Huntington dementia?

When is the typical age of onset of Pick dementia?

Alzheimer's disease

Vascular (used to be called "multi-infarct")

Cerebrovascular or cardiovascular disease, hypertension

May be acutely or slowly progressive. Further progression may be prevented by appropriate treatment of underlying cerebrovascular or cardiovascular disease as the extent of dementia is determined by cumulative effects of multiple cortical and subcortical infarcts. **Classically demonstrates a stepwise deterioration.**

Human immunodeficiency virus (HIV) that directly attacks neurons in the white matter or cortex. Acquired immunodeficiency syndrome (AIDS-) associated illnesses such as toxoplasmosis or lymphoma may result in dementia; however, they are considered dementia secondary to a general medical condition.

Dementia secondary to head trauma

Dementia resulting from head trauma is determined by the extent of the injury. This form of dementia is not progressive unless further head trauma occurs.

20–60%

Progressive loss of dopaminergic neurons in the substantia nigra of the midbrain

Huntington dementia

In the middle of the third decade of life

Age 50–60

What form of dementia may be attributed to familial or infectious etiology?	Creutzfeldt-Jakob; 10% are considered familial.
What is the agent of transmission in Creutzfeldt-Jakob?	An infectious protein called a prion
What is the typical age of onset of Creutzfeldt-Jakob?	Onset usually occurs between 40 and 60 years of age.
! Describe the typical course of Creutzfeldt-Jakob.	Rapidly progressive and fatal within 1 year
What are examples of dementia due to metabolic disorders?	Diseases of myelin; Wilson disease (excess copper); diseases of carbohydrate, lipid, and protein metabolism; uremic encephalopathy
! What is an endocrinologic cause of dementia?	Hypothyroidism (Remember to measure thyroid-stimulating hormone [TSH]!)
What types of exogenous substances may result in dementias?	Alcohol, anticonvulsants, chemotherapeutics, inhalants, sedatives, heavy metals, solvents, pesticides
! What are examples of reversible or partially reversible dementias?	Normal pressure hydrocephalus (NPH), neurosyphilis, thiamine, folate, vitamin B ₁₂ , and niacin deficiencies

Diagnosis

! What are the DSM-IV criteria for diagnosis of dementia?	<ol style="list-style-type: none"> 1. Memory loss 2. Loss of one or more cognitive abilities including aphasia, apraxia, agnosia, or impaired executive functioning: <ul style="list-style-type: none"> • These disturbances must exist after any state of superimposed delirium has resolved. • These disturbances must impair social or occupational functioning. • These disturbances must represent a decline from previous level of functioning.
! How does the onset of dementia differ from that of delirium?	Delirium develops acutely or subacutely within hours to days. Dementia has more of a chronic onset of weeks to years.

! How does the course of dementia differ from that of delirium?

Delirium fluctuates within a day and may last hours to weeks with resolution. Dementia behaves in a more stable fashion with deficits that can be permanent, reversible, or progressive over weeks to years.

What does the term “sundowning” refer to?

The worsening of cognitive symptoms including memory deficits, agitation, and disturbances in attention at night. This may be characteristic of delirium as well as dementia.

What is the approach to the diagnosis of dementia?

- History of memory and cognitive impairment
- Mental status examination
- General medical examination with attention to signs of atherosclerosis (carotid bruits, abdominal aortic aneurysm [AAA]) and chronic encephalopathic states (liver disease, uremia)
- Complete neurologic examination
- Lab studies of electrolytes, vitamins (especially folate and B₁₂), toxins, infectious studies (Venereal Disease Research Laboratory [VDRL], fluorescent treponemal antibody [FTA] for syphilis or HIV testing)
- Note that EEG is **not** sensitive for dementia

What findings on mental status examination are characteristic of dementia?

- Memory impairment (especially short-term)
- Impaired recall of names
- Inability to recognize or name familiar objects
- Inability to describe sequential or multistep tasks as involved in executive functioning, planning, and organization
- Paranoia
- Hallucinations
- Delusions

What findings are characteristic of late stage dementia?

- Incontinence
- Abulia or complete mutism
- Inability to perform even simple activities of daily living

What is abulia?	Reduction in thought, speech, movement, and emotional reaction
What are the gross and microscopic pathologic findings in Alzheimer disease?	<ul style="list-style-type: none">• Cortical atrophy• Loss of forebrain cholinergic nuclei• Neurofibrillary tangles• Amyloid plaques composed of abnormal tau proteins• Granulovacuolar degeneration
Describe the clinical findings in Alzheimer disease.	Memory impairment is prominent. Emotional disturbances occur early. There are only minimal focal findings on examination.
What findings are characteristic of vascular dementia?	Motor deficits often accompanied by focal CNS lesions and atrophy on neuroimaging
! What are the typical MRI findings in vascular dementia?	Multiple lacunar white matter infarcts
What pathologic findings are associated with Lewy body dementia?	<ul style="list-style-type: none">• Lewy body inclusions affecting cortical neurons diffusely• Absence or inconspicuous number of neurofibrillary tangles and senile plaques
What histologic stains aid in the pathologic diagnosis of Lewy body dementia?	Immunostaining for ubiquitin and synuclein
What clinical feature may be associated with Parkinson dementia?	Bradyphrenia (slowed thinking)
What clinical finding is characteristic of Huntington disease?	Choreoathetosis, which is the presence of irregular spasmodic, involuntary movements of the limbs or facial muscles as well as slow, writhing, dance-like involuntary flexion, extension, pronation, and supination of the fingers and hands
What clinical feature is associated with Huntington dementia?	Emotional lability
! What pathologic finding is associated with Huntington dementia?	Atrophy of the caudate
! What neuroimaging finding is suggestive of Huntington disease?	“Boxcar” ventricles
How does dementia of Pick disease typically present?	Initially with changes in personality and language in the fifth decade

<p>! What is the characteristic neuroimaging finding in Pick’s dementia?</p>	<p>Frontal and temporal atrophy</p>
<p>What is the clinical triad suggestive of Creutzfeldt-Jakob?</p>	<ol style="list-style-type: none"> 1. Dementia 2. Myoclonus 3. Abnormal EEG—high-voltage synchronous sharp waves
<p>What are the gross and microscopic pathologic findings in Creutzfeldt-Jakob?</p>	<p>Spongiform changes</p>
<p>What is the triad of NPH?</p>	<ol style="list-style-type: none"> 1. “Wet”—urinary incontinence 2. “Wacky”—dementia and personality changes such as being withdrawn and apathetic 3. “Wobbly”—gait abnormality
<p>Which symptom of NPH is generally the first to appear?</p>	<p>In many cases of NPH, the presenting symptom is gait disturbance.</p>
<p>Which symptom of NPH is generally the last to appear?</p>	<p>Incontinence usually occurs in more advanced cases.</p>
<p>How is the dementia of NPH characterized?</p>	<p>Impairments in attention, visuospatial relations, and judgment</p>
<p>How is the diagnosis of NPH confirmed?</p>	<ul style="list-style-type: none"> • <i>Lumbar puncture</i>: normal cerebrospinal fluid pressure • <i>Imaging</i>: dilated ventricles in the absence of cortical atrophy
<p>What does the differential diagnosis of dementia include?</p>	<p>Delirium, developmental disorders with impaired cognition, mental retardation, psychotic disorder, major depression, age-related cognitive decline</p>
<p>How can the pseudodementia of depression be differentiated from dementia?</p>	<p>Specific neuropsychological tests designed to assess intellect, language, learning and memory, attention and concentration, visuospatial skills, mood and personality, motor and sensory skills, and higher executive functioning. Examples include the Luria-Nebraska and Halstead-Reitan test batteries.</p>

How can the mental status examination be used to differentiate pseudodementia from dementia?

	Pseudodementia	Dementia
Mood symptoms	Prominent	Variable
Memory impairment	Reports marked impairment	May be unaware
Response to questioning	"I don't know"	Nonsense or sometimes elaborate explanations without an answer
Memory testing	Intact with rehearsal	Not intact

Treatment

What are the treatment goals for dementia?

- Treat the underlying cause if one exists.
- Provide rehabilitation to manage deficits.
- Consider modified living situations or housing options to ensure optimal patient safety.
- Use pharmacologic therapies to treat symptoms of dementia while avoiding those that further impair cognition.
- Provide reassurance, support, and familiarity to the patient.

What pharmacologic therapy exists to treat memory loss in Alzheimer's dementia?

- Acetylcholinesterase inhibitors: donepezil (Aricept), tacrine (Cognex), rivastigmine (Exelon), galantamine (Razadyne)
- NMDA receptor antagonists (*N*-methyl-D-aspartate): may slow calcium influx and nerve damage, such as memantine (Namenda)

What pharmacologic therapy exists to treat the agitation, paranoia, and hallucinations of dementia?

Low doses of high-potency antipsychotics

What pharmacologic therapy exists to treat the anxiety, agitation, or insomnia of dementia?

Low-dose benzodiazepines and trazodone

How is the dementia of NPH treated?

Cerebrospinal fluid shunt

AMNESTIC DISORDERS

What are amnestic disorders?

Solitary disturbances in memory without any change in alertness or other neurologic or cognitive functions. General medical conditions, substance abuse, or trauma may be responsible for these disturbances.

Epidemiology and Etiology

What risk factors exist for the development of amnestic disorders?

Alcohol and substance abuse, general medical conditions

Name the general medical conditions that can be responsible for amnestic disorders.

Head trauma, hypoxia, herpes simplex encephalitis, posterior cerebral artery infarction

! What is the leading cause of substance-related amnestic disorder?

Alcohol abuse—"blackouts"

Damage to what three brain structures most commonly causes amnestic symptoms?

1. Fornix
2. Hippocampus
3. Mamillary bodies

Which of these brain structures is most susceptible to hypoxic damage?

Hippocampus

Which of these brain structures is characteristically damaged in Wernicke-Korsakoff syndrome?

Mamillary bodies

What is transient global amnesia?

Sudden loss of memory and recent events accompanied by the inability to recall new information

When does transient global amnesia typically present?

Middle or elderly age

! Describe the course of transient global amnesia.

Minutes to hours with episodic attacks usually remitting within 24 hours without any residual memory loss upon resolution

How does a patient usually present with transient global amnesia?

Patients are aware of their deficits, often inquiring about the details of their surroundings or recent events. Consciousness and personal identity are not disturbed. High-level intellectual functioning and language function are intact during the episode.

What are underlying pathologies or pathophysiologic mechanisms thought to be responsible for transient global amnesia?

Proposed physiology: transient vascular insufficiency of the temporal lobe

Cerebral causes: tumors, cerebral embolism, migraine headache

Medication: short-acting benzodiazepines

Cardiac related: cardiac arrhythmias, polycythemia vera, mitral valve disease

Diagnosis

What mental status examination features are characteristic of amnestic disorders?

Memory deficits in either previously learned or newly acquired information

Besides memory deficits what other factor must exist for the diagnosis of amnestic disorder?

An identifiable precipitant

What does the differential diagnosis of amnestic disorders include?

Delirium and dementia

How can amnestic disorders be differentiated from delirium or dementia?

The presence of cognitive deficits or disturbances in the level of alertness in addition to memory impairment implies that delirium or dementia may be a more accurate diagnosis.

Treatment

What are the primary treatment goals in amnestic disorders?

- Correct underlying medical conditions.
- Treat any existing substance abuse and dependency and avoid further use.
- Ensure a safe environment for the patient with appropriate structure and memory cues.

This page intentionally left blank

Somatoform Disorders, Factitious Disorders, and Malingering

What is somatization?

The process of using one's body or manifestations of illness in the absence of medical cause for psychological gain or personal benefit

What key factor allows one to differentiate between various forms of somatization?

Whether this process is employed consciously or unconsciously

What is the difference between somatoform disorders and factitious disorders?

- Somatoform = *unconscious* production of physical signs and symptoms of illness
- Factitious = *conscious* production of complaints to assume "sick role"

What is the difference between factitious disorders and malingering?

- Goal of factitious = primary gain
- Goal of malingering = secondary gain

What is primary gain?

Assuming the *sick role* to obtain the psychological benefit of being cared for and receiving attention from nurturing, authoritative figures

What is secondary gain?

Some benefit arising from being ill that is recognizable to the observer

What are examples of secondary gain?

- Financial benefit in the form of disability pay
- Medications such as pain pills
- Decisions made by healthcare workers to support pending legal cases
- Avoiding commitments such as military service or work obligations

In what health care setting do most patients with somatization present?

Primary care offices

What effect does somatization have on the health care system?

Increases utilization of care and health care expenditure

According to Brodsky, what are predisposing factors for somatization?

1. Being raised in a household of people with somatization disorder
2. Being raised by parents who reward the child with uncharacteristic care and love only when in states of illness
3. Growing up with a chronically ill parent
4. Growing up without appropriate skills to resolve psychosocial conflicts
5. Developing a set of behaviors used specifically to withdraw from activities of daily life or to negatively impact others
6. Having a history of consciously faking illness in order to achieve some result or avoid punishments or obligations

When a patient presents with somatization what potential underlying problems should be investigated?

- Underlying psychiatric syndrome
- Coexisting personality disorder
- Psychosocial stressor such as sexual abuse

Name the somatoform disorders.

- Somatization disorder
- Undifferentiated somatoform disorder
- Conversion disorder
- Pain disorder
- Hypochondriasis
- Body dysmorphic disorder

What elements of history are suggestive of somatoform disorders?

Several unconnected, exaggerated, often strange medical complaints that have been worked up by numerous physicians in the past without clear cause

What elements of examination and laboratory studies are suggestive of somatoform disorders?

Anxiety about these complaints, strange indifference to significant medical complaints, inconsistent physical examination or lab findings

SOMATIZATION DISORDER

Epidemiology and Etiology

What age group has the highest incidence of somatization disorder?

16–25 years of age

! What gender presents with somatization disorder more frequently?

20:1 female to male ratio

In what socioeconomic class is somatization disorder more common?

Lower socioeconomic group

Is there a familial pattern with somatization disorder?

Yes, incidence is increased in first-degree relatives.

Are physical signs and symptoms consciously produced by the patient?

No

Male relatives of patients with somatization disorder are more likely to manifest which disorders?

Antisocial personality disorder and substance abuse

According to psychoanalytic theorists, what is thought to be a cause of somatization disorder?

Repressed instincts

According to modern theorists, what is thought to be a cause of somatization disorder?

Faulty means of expression such that somatization symptoms occur as a result of nonverbal interpersonal communication

What environmental factors are prevalent among patients with somatization disorder?

History of illness in the family or history of abusive relationships

Diagnosis

! When should somatization disorder be suspected?

Multiple medical complaints (diffusely positive review of systems) without any medical cause

! What are the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*) criteria for diagnosis of somatization disorder?

- History of seeking treatment for several physical complaints beginning before age 30 and occurring over several years

What is the temporal relationship between the presenting symptoms and diagnosis?

What does the differential diagnosis for somatization disorder include?

- Functional impairment results from these complaints
- Presence of **each** of the following at any time during the course:
 - *Pain symptoms* (four or more) involving multiple sites or systems
 - *Gastrointestinal symptoms* other than pain (two or more)
 - *Sexual symptom* (one or more) other than pain
 - *Pseudoneurologic symptom* (one or more) other than pain
- None of these symptoms are intentionally produced or feigned

The symptoms must have begun before the age of 30 and have lasted for several years.

Mood and anxiety disorders with physical complaints, schizophrenia with somatic delusions, other somatoform disorders, factitious disorders, malingering, general medical condition

Treatment

What goals should guide treatment of somatization disorder?

- Recognition of the disorder so as to avoid further unnecessary workup
- Proper documentation of the disorder to enhance collaboration among other health care providers participating in diagnosis and management
- Involvement of psychiatric services to provide appropriate support and identify comorbid disorders or psychosocial stressors
- Recognition that morbidity may be somewhat alleviated with appropriate support but cure is rarely achieved

! How should physicians optimally interact with patients affected by somatization disorder?

Focus on psychological impact of symptoms instead of continuing medical workup or prescribing unnecessary analgesics or anxiolytics

What is the key to successful treatment of somatization disorder?

Formation of a therapeutic doctor-patient relationship with regular follow-up

What is the prognosis for somatization disorder?

Poor to fair with manifestations of the disorder recurring throughout one's life

UNDIFFERENTIATED SOMATOFORM DISORDER

In what two key ways does undifferentiated somatoform disorder differ from somatization disorder?

1. Medical complaints are fewer and do not exactly fit pattern of somatization disorder.
2. Duration of complaints is shorter but at least 6 months.

How does treatment differ between undifferentiated somatoform disorder and somatization disorder?

It is much the same once medical causes have been ruled out.

CONVERSION DISORDER

What is conversion disorder?

The presence of one or more motor or sensory symptoms that has a severe impact on activities of daily living or functionality

Epidemiology and Etiology

What age group presents with conversion disorder?

Early childhood to elderly populations

! What gender presents with conversion disorder more frequently?

5:1 female to male ratio

In what socioeconomic class is conversion disorder more common?

Lower socioeconomic groups with rural background and poor education

What comorbid conditions are associated with conversion disorder?

Drug and alcohol dependence, sociopathic personality, somatization disorder

Is there a familial pattern with conversion disorder?

Yes

! Are physical signs and symptoms consciously produced by the patient?

No

! What are the likely etiologies of the physical symptoms?

Stress, conflict, prior sexual abuse

What is the physiologic cause of conversion disorder?

There is no physiologic cause for the impairment in function brought on by conversion disorder.

In what settings do most conversion disorders present?

Ambulatory settings and emergency departments

How can Freudian theory be applied to conversion disorder?

Repressed thoughts or conflicts are “converted” to somatic manifestations of illness

How can operant conditioning theory be applied to conversion disorder?

Assumption of the sick role enables the patient to avoid stressful responsibilities or duties, which they are incapable of performing while demonstrating a functional deficit.

Diagnosis

! What are the DSM-IV criteria for the diagnosis of conversion disorder?

1. Symptoms: one or more involving voluntary motor or sensory system more than pain that resemble a neurologic or general medical condition
2. Psychological factors: temporal relationship exists between conflict and physical symptoms
3. Unintentional nature of the symptoms
4. Exclusion of general medical conditions, substance-related cause, or culturally sanctioned behavior
5. Functionality is impaired by existence of symptoms
6. Not better explained by pain or sexual dysfunction, another mental disorder, or occurring exclusively during the course of somatization disorder

! How do motor symptoms in conversion disorder typically present?

Paralysis of an extremity

! How do sensory symptoms in conversion disorder typically present?

Anesthesia or visual disturbances such as blindness

! Describe the onset of conversion disorder.

Acute and associated with psychological stress

What subtypes of conversion disorder exist?

Classified by type of symptoms: motor, sensory, seizure, or a mixture

! How do the symptoms of somatization disorder differ from conversion disorder?

Patients with somatization disorder have multiple medical complaints

	spread over several body systems, whereas conversion disorder patients typically have a single, prominent, pseudoneurologic symptom associated with a psychological stressor.
What features may be associated with conversion disorder?	<ul style="list-style-type: none">• Personality disorders such as antisocial, dependent, histrionic, borderline• Mood disorders or lack of appropriate concern• Dissociative disorders• General medical conditions
What is included in the differential diagnosis of conversion disorder?	General medical conditions, neurologic conditions such as multiple sclerosis or an underlying seizure disorder in patients with pseudoseizures, factitious disorders, malingering

Treatment

! What is the first step in treatment of conversion disorder?	Rule out general medical cause
What treatment modalities are commonly employed for conversion disorder?	<ul style="list-style-type: none">• Use of suggestion with hypnosis• Relaxation techniques• Psychotherapy• Reassurance that it will improve
What is the typical duration of symptoms in conversion disorder?	About 2 weeks or less
What is the prognosis for conversion disorder?	Very good with high response rate to most therapeutic options when presented in a way that is suggestive of a cure. This disorder is usually self-limiting, although it can often recur in the future under stress.

PAIN DISORDER

What is the major complaint in pain disorder?	Pain
---	------

Epidemiology and Etiology

What age group presents with pain disorder?	Fourth to fifth decade
What gender presents with pain disorder more frequently?	2:1 female to male ratio
What disorders are more common in relatives of individuals with pain disorder?	Depression, pain disorders, substance-related disorders
What is a theoretical benefit of having pain disorder?	Assumption of the sick role alleviates psychological conflicts.
! Can medical conditions exist in the setting of pain disorder?	Yes. However, psychological factors exaggerate the experience of pain in relation to the underlying medical condition.

Diagnosis

! What are the DSM-IV diagnostic characteristics of pain disorder?	<ul style="list-style-type: none"> • Severe pain in one or more anatomic sites • Pain impairs functioning • Psychological factors affect pain onset, severity, exacerbation, and maintenance • Symptoms are unintentional • Other psychiatric conditions do not better account for the pain
! How does pain disorder differ from pain presenting in factitious disorder or malingering?	Pain disorder symptoms are <i>not</i> intentionally produced.
What subtypes of pain disorder exist?	<ul style="list-style-type: none"> • Associated with psychological factors or psychological factors and medical conditions • Acute (less than 6 months) or chronic
What medical conditions are most common in "pain disorder associated with medical conditions"?	Malignancies, musculoskeletal conditions, neuropathies
What is the differential diagnosis for pain disorders?	Factitious disorder, general medical condition, somatization disorder, malingering

Treatment

! What pharmacologic interventions prove useful in treatment of pain disorder?	Detoxification from pain medications or other drugs
--	---

What pharmacologic options have shown some benefits for pain disorder in patients?

- Tricyclic antidepressants
- Monoamine oxidase inhibitors in combination with nonpharmacologic modalities
- Selective serotonin reuptake inhibitors

What lifestyle changes are recommended for patients with pain disorder?

Resume normal daily activities

What supportive measures exist for the treatment of pain disorder?

- Encouraging the patient to subscribe to a sense of personal commitment in allaying symptoms of pain
- Counseling on learning how to manage pain behaviorally
- Psychotherapy aimed at resolving underlying psychological conflicts
- Relaxation techniques
- Biofeedback

HYPOCHONDRIASIS

What is hypochondriasis?

Preoccupation with fear of disease and conviction that subtle bodily perceptions are manifestations of severe pathology

Epidemiology and Etiology

What age group presents with hypochondriasis?

Middle to late age

What gender presents with hypochondriasis more frequently?

Equal among males and females

What are predisposing factors for developing hypochondriasis?

- Parental attitudes toward disease
- Personal past history of disease
- Low socioeconomic class

What is a common psychodynamic explanation for hypochondriasis?

Displaced anxiety

Diagnosis

! What is the core manifestation of hypochondriasis?

Fear of having a disease stemming from misinterpreted bodily symptoms

How do hypochondriacs respond to medical evaluation of their complaints?

Resistant to believing that extensive medical workups show no true pathology

! How do hypochondriacs respond to reassurance provided by medical professionals?

Poorly, often questioning physicians' credentials or seeking another opinion

! How long must symptoms exist for the diagnosis of hypochondriasis to be made?

At least 6 months

! According to the DSM-IV, how must the symptoms be unique from other psychiatric disorders in the diagnosis of hypochondriasis?

- Must not be delusional in nature
- Must not be restricted to a concern about appearance as in body dysmorphic disorder
- Must not be better explained by depression, obsessive-compulsive disorder, anxiety, separation disorder, or another somatoform disorder

What subtype of hypochondriasis exists?

With poor insight

How is this subtype characterized?

Some delusional aspect is present in that patients are not able to recognize that their preoccupations with having a serious disease are excessive in some way.

What is the differential diagnosis of hypochondriasis?

General medical conditions, delusional disorder (somatic type), normal health concerns

What two psychiatric conditions most frequently accompany the diagnosis of hypochondriasis?

Major depressive disorder and generalized anxiety disorder

Treatment

! What complications may arise from hypochondriasis?

Inherent risks associated with repeated diagnostic testing

What is the clinical course of hypochondriasis?

Waxing and waning according to psychological stressors

What is the most important step in management of hypochondriasis?

Obtaining and clearly documenting a complete psychosocial history

What is the most effective long-term treatment strategy for hypochondriasis?

Providing psychiatric care in conjunction with regular appointments with a primary care physician who conducts complete physical examinations as normally recommended

BODY DYSMORPHIC DISORDER

! What is body dysmorphic disorder?	Preoccupation with a specific blemish of physical appearance in a normally appearing individual
--	---

Epidemiology and Etiology

What age group most commonly presents with body dysmorphic disorder?	Adolescents
What gender presents with body dysmorphic disorder more frequently?	Equal among males and females
What are predisposing factors for developing body dysmorphic disorder?	<ul style="list-style-type: none"> • Parental attitudes toward appearance • Cultural or societal attitudes toward appearance • Low self-esteem
To which fields of medicine do patients with body dysmorphic disorder typically present?	Primary care physicians, plastic surgeons, dermatologists

Diagnosis

! According to the DSM-IV, what is the core manifestation of body dysmorphic disorder?	Self-perception of ugliness or obsession with some imagined physical flaw
! Can a physical defect actually exist in a patient with body dysmorphic disorder?	Yes, but the defect is exaggerated in its contribution to deformity.
How may these compulsive thoughts be manifested in behaviors?	Repetitive activities such as picking at the skin, staring into a mirror, or seeking approval from others regarding appearance
! How must these preoccupying thoughts affect one's life in order to satisfy the DSM-IV criteria for body dysmorphic disorder?	Impairment of function in daily activity including avoidance of social situations due to fear of exposing the exaggerated physical flaw to others
What key psychiatric disorder must be differentiated from body dysmorphic disorder?	Preoccupation with body image due to bulimia or anorexia nervosa
What is the differential diagnosis of body dysmorphic disorder?	Anorexia nervosa, social phobia, gender identity disorder, avoidant personality disorder, normal

concerns about appearance (especially transient as in normal adolescent development), delusional disorder (somatic type), other somatization disorders

Treatment

! What is an important initial step in management of body dysmorphic disorder?

Evaluating the patient for comorbid psychiatric conditions such as depression and anxiety that may be especially amenable to pharmacologic or psychotherapeutic interventions

What specific treatment may be most beneficial for body dysmorphic disorder?

Individual or group cognitive-behavioral therapy aimed at psychosocial functioning and body image

What is the indication for use of antipsychotic medication in body dysmorphic disorder?

When the preoccupation becomes delusional in character

What is the indication for use of selective serotonin reuptake inhibitors in body dysmorphic disorder?

When mood disorders coexist

FACTITIOUS DISORDERS

! What are factitious disorders?

Disorders occurring when an individual willfully creates signs or symptoms of medical or psychiatric disease to assume the sick role.

Are factitious disorders a type of somatoform disorder?

No, these entities are distinct categories of disorders in the DSM-IV.

What is the most severe type of factitious disorder?

Munchausen syndrome variant

Epidemiology and Etiology

What gender presents with factitious disorders more frequently?

Male, often health care workers

What is the most common presentation of Munchausen syndrome variant?

Middle aged, unmarried, unemployed male feigning symptoms and signs of illness severe enough to be hospitalized several times while moving from one medical center to another to avoid discovery

What explanations for factitious disorders does psychodynamic theory offer?

- Anger against authority figures
- Issues of dependency

! What does a patient gain from creating signs or symptoms of disease in order to assume the sick role?

Benefits of the sick role may include receiving careful attention, nurturing, and support from health care professionals.

Diagnosis

What elements of history and examination are suggestive of factitious disorders?

- Vague or inconsistent medical history conveyed in a highly guarded manner
- Surprising familiarity for medical terminology or procedures in non-healthcare professionals due to involvement in health care
- History of repeatedly moving from one health care setting to another
- History in excess of physical findings
- Evidence of multiple surgical scars on examination

! What are the DSM-IV diagnostic criteria for factitious disorder?

- Physical or psychological signs or symptoms are intentionally produced or faked.
- The motivation for the behavior is to assume the sick role.
- Secondary gains or external incentives for the behavior are absent.

What may result as a by-product of feigning illness in factitious disorders?

Iatrogenic injury including drug intoxication or physical trauma

What subtypes of factitious disorders exist?

With psychological signs and symptoms, physical signs and symptoms, or a combination

! What is factitious disorder by proxy?

Producing signs and symptoms of illness in another individual

What is a common example of factitious disorder by proxy?

- ! How must factitious disorder by proxy be treated by health care workers?

What is the most common personality disorder associated with factitious disorder?

What is the differential diagnosis of factitious disorder?

- ! How can factitious disorder be differentiated from other somatoform disorders?

- ! How can factitious disorder be differentiated from malingering?

When is the onset of factitious disorder?

How can the course of factitious disorder be characterized?

A young mother deliberately causing markers of illness in her child

The previous example of a parent deliberately causing markers of illness in her child is a form of child abuse and *must* be reported.

Borderline

Malingering, actual general medical conditions, somatoform disorders

Signs and symptoms are consciously produced by the patient.

Signs and symptoms are consciously produced to assume the sick role, not to obtain external incentives.

Adulthood, often following a hospitalization or health care experience

Chronic, often switching between health care systems separated by geography

Treatment

- ! How does a patient with factitious disorder respond to confrontation about the possibility that they are simulating illness?

How can further iatrogenic complications be avoided?

Patients are extremely resistant when confronted and may express anger and denial even in the face of overwhelming evidence that their signs and symptoms are intentionally produced. Often these patients will leave the health care setting by signing out AMA (against medical advice) or eloping from the emergency room.

Explicit documentation and communication between health care providers as to the fake nature of illness

How should factitious disorders be managed?	Evaluation and appropriate treatment of other comorbid conditions
Confrontation in appropriate patients once rapport has been established in the doctor-patient relationship	Psychotherapy

MALINGERING

 What is malingering?	Purposeful creation of signs and symptoms of illness in order to gain external incentives such as money, medications, successful litigation, or excuse from responsibilities
--	--

Etiology and Epidemiology

Is malingering a mental illness?	No. Malingering is listed in the DSM-IV as “Other Conditions That May Be a Focus of Clinical Attention”
What gender presents with malingering more frequently?	Male
In what four circumstances should malingering be suspected?	<ol style="list-style-type: none">1. Litigation is involved.2. Clinical presentation is out of proportion to physical examination or testing.3. Patient exhibits difficulty in adhering to a medical regimen or participating in diagnostic testing.4. Underlying antisocial personality disorder.
How can the onset of malingering be characterized?	Onset is directly related to the availability of environmental incentives.

Diagnosis

What are the two essential components of malingering?	<ol style="list-style-type: none">1. Signs and symptoms of illness are consciously created by the patient in the absence of true pathology.2. Ultimate goal of such behavior is to obtain some external incentive.
---	---

Treatment

! How can malingering behavior be terminated?

What concepts are important in dealing with malingering?

Remove the external incentive

- Maintaining confidentiality
- Using a nonjudgmental approach to confronting the patient
- Demonstrating willingness to explore possible underlying psychosocial issues that may be contributing to malingering through psychotherapy that may be contributing to malingering

Sleep Disorders

EPIDEMIOLOGY AND ETIOLOGY

Define primary sleep disorders.

Disorders that occur as a result of disturbances in one's sleep-wake cycle

Define secondary sleep disorders.

Disorders that occur as a result of other medical or mental conditions (e.g., bipolar disorder, substance dependence)

! Differentiate parasomnias from dyssomnias.

- Dyssomnias refer to perturbations in the amount or quality of sleep
- Parasomnias refer to abnormal physiology or behavior in sleep
- Both terms fall under the broader category of primary sleep disorders.

What are the subtypes of dyssomnias?

- Primary insomnia
- Primary hypersomnia
- Narcolepsy
- Breathing-related disorders
- Circadian rhythm sleep disorder
- Dyssomnia not otherwise specified

What are the subtypes of parasomnias?

- Nightmare disorder
- Sleep terror disorder
- Sleepwalking disorder
- Parasomnia not otherwise specified

What is the normal sleep cycle, and what are the associated electroencephalogram (EEG) wave forms?

- Non-rapid eye movement (REM) sleep (75% of sleep cycle)
 - Eyes closed—awake (**alpha waves**)
 - Stage 1—very light sleep (**loss of alpha waves**)
 - Stage 2—light sleep (**sleep spindles and k-complexes**)
 - Stage 3–4—Slow wave sleep (**delta waves**)
- REM sleep (25% of sleep cycle)

	<ul style="list-style-type: none">◦ Cycles occur approximately every 90 minutes and last around 30 minutes◦ Dreaming◦ Erections, REM, and lack of motor tone◦ EEG shows “saw tooth” waves
What stage of sleep, if decreased, will make a person feel the most “tired”?	Slow wave sleep (stage 3–4)
Does amount of REM sleep increase, decrease, or stay the same with age?	Decrease
What part of the hypothalamus is thought to play a major role in the sleep-wake cycle or circadian rhythm?	Suprachiasmatic nucleus (SCN)
What psychiatric disorders are associated with sleep disorders?	<ul style="list-style-type: none">• Depression• Anxiety disorders• Posttraumatic stress disorder (PTSD)• Schizophrenia• Substance abuse (especially alcohol)

DIAGNOSIS AND TREATMENT

Primary Insomnia

What is primary insomnia?	Difficulty initiating or maintaining sleep for at least 1 month. This results in excessive daytime sleepiness (EDS), which can impair daily functioning.
What is the risk of being affected by a primary insomnia?	Up to 30% over the course of one’s lifetime
How is primary insomnia diagnosed?	It is generally a diagnosis of exclusion that is made once other medical, substance-related, and psychiatric etiologies have been ruled out.
What concurrent conditions will exacerbate primary insomnia?	Anxiety, especially related to the insomnia itself
How is primary insomnia treated?	<ul style="list-style-type: none">• Improve sleep hygiene (first line)• Pharmacotherapy (for short-term usage)
What is sleep hygiene?	Sleep hygiene refers to good sleep habits or rituals that are conducive to

List some examples of good sleep hygiene.

helping one initiate and maintain sleep throughout the night.

- Maintain a regular sleep cycle (same time to get in bed to sleep and wake up in the morning)
- Keep the room quiet
- Limit caffeine, nicotine, and alcohol intake, especially before bedtime
- Use the bed and bedroom primarily for sleep only
- Eating a light snack before bedtime
- Avoid daytime naps

What drugs may be useful in the short-term treatment of this condition?

Benadryl, zolpidem (Ambien), zaleplon (Sonata), trazodone (Desyrel)

Primary Hypersomnia

Define primary hypersomnia.

Excessive sleepiness for at least 1 month, not attributable to other medical, psychiatric, substance-related, or preexisting sleep conditions. This disorder usually results in a decline in daily functioning.

What are the common complaints of patients with primary hypersomnia?

Excessive, nonrefreshing sleep, and/or difficult awakenings

How is primary hypersomnia diagnosed?

Polysomnographic testing (not by patient reports)

What is the differential diagnosis of primary hypersomnia?

Klein-Levine syndrome

What is Klein-Levine syndrome?

Affected patients experience hypersomnia for the majority of the day accompanied by episodes of inappropriate behavior (sexual or otherwise) and compulsive eating.

Klein-Levin syndrome typically presents in what patient demographic?

Adolescent boys

How is Klein-Levin syndrome treated?

It is treated with amphetamines, selective serotonin reuptake inhibitors (SSRIs), or monoamine oxidase inhibitors (MAOIs).

What is the treatment for primary hypersomnia?

Amphetamines are first line, but SSRIs and MAOIs may be effective as well.

Narcolepsy

What is narcolepsy?

A dyssomnia characterized by repeated episodes of sudden REM sleep during wakefulness for at least 3 months.

What is the classic tetrad of narcolepsy?

1. *Cataplexy*: episodes of loss of skeletal muscle tone leading to collapse, sometimes brought on by laughter or strong emotion
2. *Sleep paralysis*: brief paralysis upon wakening
3. *Short REM latency*: short period of time from initiation of sleep to first REM cycle
4. *Sleep hallucinations*: hypnagogic and/or hypnopompic

Differentiate the two major types of sleep hallucinations.

Hypnagogic hallucinations occur as the patient is falling asleep.

• **Think: g = going to sleep**

Hypnopompic occur as the patient is waking.

• **Think: p = perking up**

Which gender is predisposed to narcolepsy?

It affects men and women equally.

In what age group is the onset of narcolepsy most common?

Young adulthood

What is the most definitive test used to diagnose narcolepsy?

Sleep latency test

In narcoleptics, what is the quality of their "regular" nighttime sleep?

Poor

How is narcolepsy treated?

Stimulants are used along with timed naps to treat the sleep attacks. SSRIs or tricyclic antidepressants (TCAs) are used for cataplexy.

Breathing-related Sleep Disorders

What are breathing-related sleep disorders (BRSDs)?

EDS or recurrent disruption of normal sleep secondary to sleep apnea or hypoventilation

What percentage of the adult population is affected by BRSDs?

~10%

What are predisposing factors for this condition?

Male gender and obesity

What other conditions or symptoms are associated with BRSDs?

Headaches, depression, and pulmonary hypertension

What are the two major types of sleep apnea?

Obstructive and central

Which type of sleep apnea is associated with snoring?

Obstructive sleep apnea (OSA)

Describe OSA.

Apnea resulting from collapse of the upper airway resulting in disrupted sleep. It also results in hypoxemia, hypercapnia, and hypertension.

What are risk factors for OSA?

- Obesity
- Male gender
- Large neck circumference
- History of airway surgery
- Deviated nasal septum
- Large tongue
- Retrognathia (mandible is posterior to its normal position in relation to the maxillae)

How is OSA treated?

- Weight loss
- Continuous positive airway pressure (CPAP)
- Surgery (second-line treatment)

What is central sleep apnea (CSA)?

Apnea during sleep that results from failure of the central nervous system to activate the muscles of respiration

How is CSA diagnosed?

Documenting cessation of breathing for 10–120 seconds, with at least 5 such episodes of apnea per hour. This can be done during a sleep study.

What is the treatment for CSA?

Mechanical ventilation, commonly with BiPAP (bilevel positive airway pressure)

How does CPAP differ from BiPAP?

CPAP delivers a constant pressure. BiPAP's pressure varies with the patient's breathing.

Circadian Rhythm Sleep Disorder

What is a circadian rhythm sleep disorder?

Sleep disorder resulting from a mismatch between the hypothalamic sleep-wake cycle and the environmental demands on one's sleep-wake cycle

What are the common symptoms of a circadian rhythm sleep disorder?

What are some subtypes of circadian rhythm sleep disorder?

How is jet lag usually treated?

What treatments can be effective in lessening the severity of symptoms associated with jet lag?

Does traveling east advance your sleep cycle or delay the cycle?

What symptoms other than sleepiness or insomnia can result from jet lag?

Who is most prone to shift work sleep disorder?

What are delayed sleep phase disorders?

What is a treatment for delayed sleep phase disorder?

Hypersomnia, insomnia, and fatigue

- Jet lag
- Shift work
- Advanced or delayed sleep phase

Jet lag usually resolves without treatment after 2–7 days.

- Attempt to synchronize one's clock to the new time zone with naps or staying awake longer than usual
- Short course of benzodiazepines as sleep aids
- Melatonin is thought to help the body "adjust" to the new time zone (although the long-term effects of using this drug are unclear).

Traveling east will advance the sleep cycle, whereas traveling west will delay it.

Gastrointestinal (GI) upset and mood changes

People who alternate between working day shifts and night shifts (such as residents!)

The patient's sleep-wake cycle is shifted relative to conventional rest-activity periods, for example, "night owls."

Light therapy

Nightmare Disorder

In what phase of the sleep cycle do nightmares occur?

When in a patient's lifetime is the onset of this disorder most common?

Is the patient usually oriented after awakening from a nightmare?

REM sleep. More often than not, the nightmares occur in the second half of the sleep period.

During childhood

Yes

How is nightmare disorder treated?

Usually, this disorder does not require treatment, but TCAs have been effective in shortening REM sleep and hence lessening the frequency of nightmares.

Sleep Terror Disorder

Describe sleep terror disorder.

Patients will awaken suddenly and be in a state of intense fear and anxiety. They may experience tachycardia and diaphoresis. They are unable to be comforted or consoled during these episodes and they remain amnesic throughout. They are generally unable to recall the event when awakened in the morning.

What demographic is most susceptible to sleep terrors?

Children

What phase of sleep do these sleep terrors occur?

Stage 3 and 4 (NREM) sleep

While sleep terrors are usually self-limited, how can they be treated?

Benzodiazepines at bedtime may be effective by decreasing delta sleep (stage 3–4).

Sleepwalking Disorder

Describe sleepwalking disorder.

Episodes of getting out of bed and walking, generally occurring during the first third of a night's sleep. **Patients have a blank stare, can be difficult to awaken, and may be unresponsive to others.** Most episodes end with patients safely returning to their bed and falling back asleep. **If the patient is awakened during an episode, they are generally disoriented.**

What age is the peak prevalence for sleepwalking?

12

What is the best treatment for sleepwalking?

Maintaining a safe environment so as to minimize injury during a sleep walking episode

This page intentionally left blank

Substance-Related Disorders

INTRODUCTION

! How is substance abuse defined by the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*)?

A pattern of substance use that causes clinically significant impairment for at least 12 months with at least one of the following:

- Failure to fulfill social or professional obligations
- The use of substances in physically hazardous situations (e.g., driving while under the influence of alcohol)
- Recurrent legal problems stemming from substance use
- Continued use despite surrounding personal problems related to the use

Think of the 3 Cs: **compulsive** use, loss of **control**, and **continued** use despite adverse consequences

! How is substance dependence defined by the DSM-IV?

A pattern of substance use leading to at least three of the following over a 12-month period:

- Tolerance: the need for increased amounts of a substance in order to achieve the desired effect or a markedly decreased effect with the same amount of substance
- Withdrawal: the development of characteristic symptoms due to cessation of use after prolonged usage of a substance

- Use of a substance in greater amounts or over a longer period of time than originally intended
- Persistent desire or wish to cut down or control substance use
- Spending significant time obtaining, using, or recovering from the substance
- Decreased social or professional activities due to substance use
- Continued use despite knowledge of significant physical, social, or psychological problems stemming from the substance use

ALCOHOL

Epidemiology and Etiology

Is alcohol an activating or inhibiting substance?	Alcohol activates gamma-aminobutyric acid (GABA) receptors (which are inhibitory ion channels) and hence results in central nervous system (CNS) inhibition or sedation.
What are the two major enzymes involved in alcohol (ethanol) metabolism?	Alcohol dehydrogenase and aldehyde dehydrogenase
Aldehyde dehydrogenase is commonly lacking or deficient in what ethnic group?	Asians
Deficiency in this enzyme leads to a buildup of what metabolite?	Acetylaldehyde
What are the physical manifestations of this enzyme deficiency after alcohol ingestion?	Flushing and nausea
What percentage of Americans can be classified as “alcoholics”?	7–10%
What is the ratio of male:female prevalence of alcohol dependence?	4:1

Diagnosis

What is the CAGE Questionnaire?	A screening tool for alcoholism consisting of the following four questions. Two or more responses of “yes” are a positive result.
---------------------------------	---

	<ol style="list-style-type: none"> 1. Have you ever wanted to Cut down on your drinking? 2. Have you ever felt Annoyed by criticism of your drinking? 3. Have you ever felt Guilty about drinking? 4. Have you ever needed a drink as an Eye-opener?
What range of blood alcohol level (BAL) is considered the legal limit for intoxication in most states?	80–100 mg/dL
What BAL will lead to respiratory depression in most “nonalcoholic” drinkers?	400 mg/dL
! In unresponsive or semiconscious patients who are suspected to have used alcohol, what intervention should be considered first?	Intubation for airway protection
What are common reasons for presenting with alcohol intoxication?	Falls, blackouts, altercations, and accidents
What is the differential diagnosis of alcohol intoxication?	Hypoxia, hypoglycemia, other drug overdose/intoxication, ethylene glycol or methanol poisoning, hepatic encephalopathy, psychosis
! What are some early physical signs of alcoholism?	Palmar erythema, acne rosacea, hepatomegaly
! What are some signs of advanced alcoholism?	Jaundice, cirrhosis, ascites, testicular atrophy, gynecomastia, Dupuytren’s contractures
What are Dupuytren’s contractures?	Thickening and tightening of the palmar fascia leading to contracture of the digits, most commonly the 4th and 5th digits
What are feared complications from alcoholic cirrhosis?	Variceal bleeding and hepatic encephalopathy
What is a feared complication from drinking “moonshine”?	Blindness resulting from methanol ingestion. Improper distilling can result in moonshine with excessive levels of methanol.
! What is Wernicke-Korsakoff syndrome?	A neuropsychiatric complication of chronic alcohol abuse. It results from thiamine (vitamin B ₁) deficiency in

! What is the classic triad of Wernicke encephalopathy?

Is Wernicke encephalopathy reversible?

! What *must* be given to patients *before* standard fluid replacement therapy?

What other supplement should be given to suspected alcoholics along with thiamine?

! If Wernicke encephalopathy goes untreated and progresses to Korsakoff syndrome, what are the classic symptoms?

What is confabulation?

Is Korsakoff syndrome reversible?

Damage to what thiamine-dependent cerebral structures are thought to lead to the memory deficits of Korsakoff syndrome?

What are some abnormal labs that may be observed in alcoholics?

Which transaminase is preferentially elevated in alcoholics?

What is the pathophysiology of alcohol withdrawal?

alcoholics owing to their poor diet as opposed to a direct result of alcohol ingestion. Wernicke encephalopathy is the early manifestation, and Korsakoff syndrome is the later manifestation.

1. Nystagmus
2. Ataxia
3. Confusion

Yes, with the administration of thiamine. Standard dose is 100 mg IV.

Thiamine must be given prior to any IV fluids containing glucose. Since glucose depletes thiamine stores, it cannot be given in any form (including D5 $\frac{1}{2}$ NS) before thiamine as it would exacerbate the patient's condition.

Folate

1. Anterograde amnesia
2. Confabulation

To fill in gaps in one's memory with fabrications that one believes to be facts

No. It is chronic and irreversible in two-thirds of patients.

The mammillary bodies of the hypothalamus and the dorsal medial nucleus of the thalamus

Elevated high-density lipoprotein (HDL), mean corpuscular volume (MCV), and transaminases. Decreased low-density lipoprotein (LDL).

Aspartate aminotransferase (AST).
Think: "A Scotch and Tonic."

Although not fully understood, it is believed that when long-term ethyl alcohol (EtOH) ingestion stops there is a surge of neuronal activity. The loss of GABA excitation leads to

What are the signs and symptoms of alcohol withdrawal?

release of inhibition on glutamate and hence a subsequent surge of activity.

- *Minor:* tremor, irritability, insomnia, nausea, vomiting, hypertension, tachycardia
- *Mild:* diaphoresis, disorientation, fever
- *Severe:* delirium tremens (DTs), seizures

How long after a patient's last drink will withdrawal symptoms usually begin and how long will they last?

6–24 hours after last drink, lasting 5–7 days

Is alcohol withdrawal life threatening?

Yes

! What are DTs?

DTs are a severe form of alcohol withdrawal consisting of delirium, hallucinations, and autonomic hyperarousal in addition to other withdrawal symptoms.

What percentage of patients hospitalized with alcohol withdrawal will develop DTs?

Approximately 5%

What percentage of patients with DTs will die if they are not treated?

15–20% mortality. Therefore, DTs should be considered a medical emergency.

! When is the peak incidence of DTs in withdrawal patients?

48 hours after last drink

Treatment

How is alcohol withdrawal treated?

Benzodiazepines such as lorazepam (Ativan) along with supportive treatment with thiamine/folate and IV fluids.

Should benzodiazepine therapy be started prior to signs of DTs?

Yes. They are used to prevent DTs as well as treat the withdrawal.

What are treatments of alcohol dependence (in the nonacute setting)?

Self-help groups such as Alcoholics Anonymous (AA) or psychotherapy. Also pharmacologic therapy with disulfiram and naltrexone

What is the mechanism of action of disulfiram (Antabuse)?

Inhibition of aldehyde dehydrogenase leading to violent vomiting if ethanol is ingested. Usual dose is 250 mg daily.

What is the mechanism of action of naltrexone (Revia)?

Antagonism at opioid receptors resulting in reduced cravings

What percentage of treated alcohol-dependent patients will relapse within 6 months?

50%

SEDATIVES AND HYPNOTICS

What two major classes of prescription medications are considered to be sedatives/hypnotics?

Benzodiazepines and barbiturates

What is the mechanism of action of benzodiazepines?

They activate GABA receptors and increase the frequency of opening of the chloride ion channel.

What is the mechanism of action of barbiturates?

They enhance activation of GABA-ergic chloride channels by increasing the duration of opening. **Think:** “barbiturate” = **increased duration**.

! Which class of sedatives are considered safer: benzodiazepines or barbiturates?

Benzodiazepines are considered relatively safer as they are less likely to cause respiratory depression.

What are signs and symptoms of sedative/hypnotic intoxication?

Drowsiness, slurred speech, mood lability, confusion, ataxia, respiratory depression, and coma or death in extreme cases of overdose

How can sedative intoxication be differentiated from alcohol intoxication?

Since signs and symptoms are similar, if alcohol cannot be detected on the breath, then serum or urine drug screens can be performed.

What substance is cross-tolerant with benzodiazepines and barbiturates (i.e., patients with physiologic tolerance to one substance have tolerance to the others)?

Alcohol

! What is the treatment for sedative overdose?

- Airway maintenance
- Activated charcoal to prevent further gastrointestinal (GI) absorption
- Benzodiazepines: Flumazenil
- Barbiturates: alkalinize urine with sodium bicarbonate to increase renal excretion

What is Flumazenil?

A short-acting benzodiazepine antagonist

What is a side effect of Flumazenil?

Seizures

Is withdrawal from short-acting or long-acting sedatives more dangerous?

Abrupt cessation of short-acting sedatives is more likely to cause severe withdrawal symptoms.

What are symptoms of sedative withdrawal?

Tremors, nausea, vomiting, tachycardia, weakness, anxiety, irritability, diaphoresis, hyperreflexia, orthostatic hypotension, seizures (can be life threatening)

What is the treatment for sedative withdrawal?

Scheduled, tapered dosing of a long-acting benzodiazepine or barbiturate such as diazepam (Valium) or phenobarbital. Anticonvulsants can be used for seizure control.

OPIATES

Epidemiology and Etiology

Give some examples of opiates.

Heroin, morphine, codeine, methadone, meperidine, dextromethorphan, and hydromorphone

What is the most common reason for prescription opiate use?

Pain control

What over-the-counter (OTC) medication containing an opiate is commonly used to “get high”?

Dextromethorphan, a lower potency opiate, is used in many cold remedies for its cough suppressant qualities.

What are common comorbid conditions in opiate addicts?

Other substance abuse, antisocial personality disorder, borderline personality disorder

What is the most common route of administration of opiates in addicts?

Intravenous

! What diseases are heroin addicts more prone to?

Endocarditis, pneumonia, human immunodeficiency virus (HIV), hepatitis, and cellulitis

Diagnosis

How is a heroin “high” described?

An intensely pleasurable feeling throughout the body

What are signs and symptoms of opiate intoxication?

Constricted pupils (miosis), drowsiness, nausea, vomiting, constipation, slurred speech, hypotension, bradycardia, and **respiratory depression**

Which opiate when taken with monoamine oxidase inhibitors (MAOIs) can lead to serotonin syndrome?

Meperidine (Demerol) along with an MAOI may lead to **serotonin syndrome**: hyperthermia, rigidity, and labile blood pressure.

How long after use will opiates remain detectable in the urine and blood?

12–36 hours

What can lead to a false positive result in a urine screen for opiates?

Recent ingestion of large quantities of poppy seeds (bagels, muffins, etc.)

! What are the three most common signs of an opiate overdose?

Miosis, altered mental status, and respiratory depression

! How can opiate use be determined empirically?

If a patient with suspected opiate overdose recovers consciousness rapidly after the administration of IV naloxone (Narcan), then opiates are almost definitely the offending drug.

How is an opiate overdose treated?

With IV naloxone (Narcan)

What are common signs and symptoms of opiate withdrawal?

Pupillary dilatation, lacrimation or rhinorrhea, piloerection (“goose bumps”), diarrhea, dysphoria, **yawning**, myalgias, nausea, vomiting, anxiety

Is opiate withdrawal life threatening?

No. Unlike alcohol withdrawal, **opiate withdrawal is not life threatening**, but it is extremely uncomfortable.

Withdrawal from which opiate can lead to seizures?

Meperidine (Demerol)

Treatment

What is the treatment for acute opiate withdrawal symptoms?

Clonidine, a centrally acting alpha-2 receptor antagonist, decreases noradrenergic and hence sympathetic output.

Does clonidine decrease drug cravings?

No. Although it is very effective in treating the symptoms, it will not curb opiate cravings.

! What is the optimal treatment for opiate dependence?

Psychotherapy and group therapy along with scheduled, tapered doses of methadone.

Why is methadone effective in treating opiate (usually heroin) dependence?

It is a low-potency, long-acting opiate receptor agonist and therefore

causes minimal intoxication and withdrawal symptoms. In addition, it minimizes the risks of using and obtaining heroin.

COCAINE AND AMPHETAMINES

Epidemiology and Etiology

What is the mechanism of action of cocaine?	It blocks dopamine, norepinephrine, and serotonin reuptake into the presynaptic terminal, thereby potentiating the sympathomimetic effects of these catecholamines.
Give examples of some amphetamines.	Dextroamphetamine (Dexedrine), methamphetamine (a.k.a. “crystal meth”), methylphenidate (Ritalin), 3,4-methylenedioxymethamphetamine, also known as ecstasy (MDMA)
What is the mechanism of action of most amphetamines?	They release endogenous catecholamines from nerve endings and are catecholamine receptor agonists in the central and peripheral nervous system.
What are Food and Drug Administration (FDA) approved uses of amphetamines?	Narcolepsy, extremely low energy symptoms in select patients with depression, and attention deficit hyperactivity disorder (ADHD)

Diagnosis

What are the effects of cocaine and amphetamines?	They are CNS stimulants producing euphoria, labile blood pressure, tachycardia or bradycardia, pupillary dilatation , psychomotor agitation or retardation, nausea, weight loss, chills, diaphoresis, confusion, seizures, cardiac arrhythmias, hallucinations, fever, respiratory depression, and transient psychosis .
! What type of hallucination is most common after cocaine use?	Tactile hallucinations (“cocaine bugs”)
High doses of cocaine or amphetamines can lead to a psychosis that may be difficult to differentiate from the psychosis in what psychiatric disorder?	Schizophrenia

! In patients presenting with chest pain and a history of substance abuse, what must be included in the differential diagnosis?

Cocaine-induced myocardial infarction (MI). Cocaine is a potent vasoconstrictor and can also cause vasospasm. Excessive amounts may lead to MIs and ischemic strokes.

Urine drug tests screen for what cocaine metabolite?

Benzoylecgonine

How long after the last use of cocaine will a urine sample remain positive?

Up to 3 days, but often longer in chronic users (even up to 1 week)

Treatment

What is the treatment for cocaine addiction?

Benzodiazepines and antipsychotics can be used in the acute setting to treat agitation, but the long-term treatment should include group therapy.

What are the signs and symptoms of cocaine or amphetamine withdrawal?

Depression, fatigue, headache, diaphoresis, myalgias, hunger, **constricted pupils**

What is the treatment for withdrawal?

Since the withdrawal is self-limited and not life threatening, the only treatment is supportive care.

PHENCYCLIDINE (PCP)

What is a common street name for PCP?

"Angel Dust"

What is PCP's mechanism of action?

It is an antagonist at the N-methyl-D-aspartate (NMDA) glutamate receptor and activates dopaminergic neurons.

! What are the signs and symptoms of PCP intoxication?

Rotatory nystagmus, ataxia, agitation, hypertension, tachycardia, hallucinations, recklessness, seizures, and coma

What sort of behavior is specifically associated with PCP intoxication?

Violent behavior is a common effect of PCP use, and patients who are suspected to have used PCP should be carefully observed as they may be a danger to themselves and to others.

How long after last use will a urine screen for PCP remain positive?

1 week

What lab abnormalities may be observed in patients who have recently used PCP?

Elevated creatinine phosphokinase (CPK) and AST

What is the treatment for PCP intoxication?

- Blood pressure normalization
- Benzodiazepines or antipsychotics for agitation and psychosis
- Diazepam for seizure treatment/prevention
- Acidification of urine with ammonium chloride and ascorbic acid to enhance renal excretion

What are the signs and symptoms of PCP withdrawal?

There generally are none.

HALLUCINOGENS

What are some examples of hallucinogens?

lysergic acid diethylamide (LSD), mushrooms, mescaline

What are the effects of LSD?

The drug produces euphoric or dysphoric “trips” (**hallucinations and perceptual changes**), **pupillary dilation**, tremors, tachycardia, palpitations, and diaphoresis.

Are hallucinogens physically addicting?

No, they are not physically addicting, but they can produce psychological dependence.

What are long-term complications of LSD use?

Psychosis and recurrent visual hallucinations

What is the treatment for hallucinogen intoxication?

Reassurance and antipsychotic medications in severe cases

“CLUB DRUGS”

What is “Ecstasy”?

Ecstasy is MDMA, a drug with mixed stimulant and hallucinogenic properties that produces a euphoric effect.

Long-term use of ecstasy can lead to loss of what type of neurons?

Fine diameter serotonergic neurons, although recent data are challenging this theory. (For more information, see: Gouzoulis-Mayfrank E, Daumann J. Neurotoxicity of MDMA in humans: how strong is the evidence for persistent brain damage? *Addiction*. 2006;101(3):348–361.)

What is “Special K”?

Ketamine; a dissociative anesthetic that has hallucinogenic effects

What are other signs of Special K intoxication?

Tachycardia and tachypnea

What is "GHB"?

GHB is gamma-hydroxybutyrate and is also known as the date rape drug due to its depressant and memory loss effects.

What are complications from high doses of GHB?

Respiratory depression, coma, and death

MARIJUANA

What is the active ingredient in marijuana?

The cannabis plant produces THC or tetrahydro-cannabinol.

What are the effects of marijuana?

Euphoria, tachycardia, **paranoia**, poor concentration, **poor memory**, avolition, impaired coordination and judgment, increased appetite, and **conjunctival injection**

What properties of marijuana have been used for treatment of patients?

Its antiemetic property is useful in the treatment of nausea secondary to chemotherapy in cancer patients. Also, marijuana may decrease intraocular pressure, which is helpful in the treatment of some glaucoma patients.

What are serious complications from marijuana use?

Psychosis and delirium

How long do urine screens for marijuana remain positive?

For up to 4 weeks after last use; but the longer one has been using marijuana, the longer it will stay in one's system.

What are the symptoms of marijuana withdrawal?

Sometimes there can be mild irritability and insomnia

What is the treatment for marijuana withdrawal?

Supportive

CAFFEINE

What is the mechanism of action of caffeine?

It increases cyclic adenosine monophosphate (cAMP) and acts via the dopaminergic system to exert a stimulant effect.

How much caffeine is in an average cup of coffee and tea?	<ul style="list-style-type: none"> • Coffee: 100–150 mg per cup • Tea: 40–60 mg per cup
What are the signs and symptoms of caffeine intoxication?	Anxiety, tachycardia, insomnia, diaphoresis, GI distress, and restlessness
Ingestion of >1 and >10 g of caffeine may lead to what complications?	<ul style="list-style-type: none"> • >1 g: tinnitus and arrhythmias • >10 g: seizures, respiratory failure, and death
What is the treatment for caffeine intoxication?	Supportive
What are the signs and symptoms of caffeine withdrawal?	Headache, nausea, anxiety, drowsiness, and mood lability
What is the treatment for caffeine withdrawal?	Taper caffeine intake and treatment of symptoms

NICOTINE

What is the mechanism of action of nicotine?	It stimulates nicotinic acetylcholine (ACh) receptors of both divisions of the autonomic nervous system (sympathetic and parasympathetic).
What are the signs and symptoms of nicotine intoxication?	Insomnia, restlessness, increased GI motility, decreased appetite, and anxiety
<p>! What are the effects of cigarette smoking in pregnancy?</p>	Low birth weight and persistent pulmonary hypertension of the newborn (PPHN)
What are the signs and symptoms of nicotine withdrawal?	Anxiety, increased appetite, irritability, insomnia, and cigarette (nicotine) craving
What are the different therapeutic approaches to smoking cessation?	<ul style="list-style-type: none"> • Counseling • Nicotine replacement with gum, inhaler, or skin patch • Bupropion (Zyban)—an antidepressant that is FDA approved for smoking cessation • Varenicline (Chantix)—agonizes and blocks certain nicotinic ACh receptors • Clonidine
How does Zyban differ from Wellbutrin?	They are identical: simply different trade names for bupropion based on their different uses.

This page intentionally left blank

Eating Disorders

INTRODUCTION

What constitutes an eating disorder?

Illnesses that cause a person to adopt harmful eating habits

What are examples of harmful eating habits?

- Abnormal regulation of food intake—restricted food intake or episodes of binge eating
- Abnormal diet—restricted range of foods
- Purging—evacuation of food through vomiting or taking laxatives, diuretics, or enemas

Are “weight concerns” common in contemporary U.S. society?

Yes. According to the 2003 Youth Risk Behavior Survey, 36% of adolescent girls believed that they were overweight, and 59% were attempting to lose weight.

What are examples of abnormal thinking seen in patients with eating disorders?

Dichotomous (all-or-none) thinking, decreased concentration, disturbed body image, disturbed perception (e.g., denial of fatigue, weakness, or hunger), and a sense of ineffectiveness

ANOREXIA NERVOSA

Epidemiology and Etiology

What is the lifetime prevalence of anorexia nervosa?

0.3–1%

What is the prevalence of anorexia nervosa among young adults?

Up to 4%

How has the incidence of anorexia nervosa changed over the past 10 years?

Incidence has increased 10-fold.

Are men and women equally affected?	No. It is 10–20 times more common in women than men.
What is the typical age of onset of anorexia nervosa?	Mean age of 17, with a range from 10 to 30
Where is anorexia nervosa most common?	In developing countries and professions requiring a thin physique (e.g., ballet)
! What is the mortality rate for anorexia nervosa?	10–20% over 10–30 years
What are the most common causes of death in anorexia nervosa?	Severe and chronic starvation, sudden death due to cardiac failure, and suicide
! What other psychiatric disorders have a high rate of concurrence with anorexia nervosa?	Major depression and obsessive-compulsive disorder
What is the etiology of anorexia nervosa?	Although the exact cause has yet to be fully elucidated, the following factors have been implicated: <ul style="list-style-type: none"> • Biologic—abnormalities of hypothalamic-pituitary-adrenal (HPA) axis (e.g., amenorrhea) • Genetic—monozygotic twins have a higher concordance rate • Psychological—conflicts regarding family control and sexuality • Cultural—emphasis on being thin

Diagnosis

! What are the DSM-IV (<i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition</i>) diagnostic criteria for anorexia nervosa?	<ul style="list-style-type: none"> • Refusal to maintain at least 85% of ideal body weight • Intense fear of gaining weight or becoming fat • Disturbed body image • Amenorrhea in postmenarchal women
What are the subtypes of anorexia nervosa?	<ul style="list-style-type: none"> • Restrictive—controls weight through food restriction and exercise; associated with obsessive-compulsive traits such as inflexibility, limited spontaneity, and concern with control • Binge eating/purging type—controls weight through bingeing and purging; associated with depression and substance abuse

What is the differential diagnosis of anorexia nervosa?

Medical condition causing weight loss (e.g., cancer), major depression, bulimia, and other psychiatric disorders (e.g., obsessive-compulsive disorder and body dysmorphic disorder)

What physical findings are associated with eating disorders?

- Signs of malnutrition
 - Emaciation
 - Hypotension
 - Bradycardia
 - **Lanugo (i.e., fine hair on trunk)**
 - Peripheral edema
- Signs of purging
 - **Eroded dental enamel (caused by emesis)**
 - **Scarred/scratched hands (or “Russell’s sign,” from inducing emesis with fingers)**
 - Parotid gland hypertrophy
 - Esophageal/gastric tears (from vomiting)

What laboratory findings are associated with eating disorders?

- Signs of malnutrition
 - Normochromic, normocytic anemia
 - Elevated liver enzymes
 - Abnormal electrolytes
 - Hypercholesterolemia
 - Low estrogen and testosterone
 - Abnormal neuroendocrine responses
 - Bradycardia
 - Reduced brain mass
 - Cardiac arrhythmias (e.g., prolonged QT interval and ventricular tachycardia)
- Signs of purging
 - Emesis: metabolic alkalosis, hypochloremia, hypokalemia
 - Laxative abuse: metabolic acidosis

What neurotransmitter and peptide abnormalities are seen in anorexia nervosa?

Decreased norepinephrine; increased serotonin, corticotrophin-releasing factor (CRF), neuropeptide Y, and cholecystokinin (CCK)

What is the effect of serotonin on eating behaviors?

It is thought to promote satiety.

What skeletal disease can occur as a complication of anorexia nervosa?

Osteoporosis

What gastrointestinal abnormalities are seen in anorexic patients?

Diminished motility, delayed gastric emptying, bloating, constipation, acute gastric dilation or gastric rupture, and abdominal pain

What is the typical course of anorexia nervosa?

Variable—patients can completely recover, have fluctuating symptoms with relapses, or progressively deteriorate.

! What factors are associated with poor outcome?

Longer duration of illness, older age of onset, prior psychiatric admission, poor childhood social adjustment, premorbid personality difficulties, and disturbed familial relationships

How are the mothers of individuals with anorexia classically described?

Overprotective, intrusive, perfectionistic, and fearful of separation

How are the fathers of individuals with anorexia nervosa classically described?

Withdrawn, passive, emotionally constricted, obsessional, moody, and ineffectual

Treatment

What is the first step in the treatment of anorexic patients?

Obtain their cooperation in the treatment program

What are the goals in treating anorexia nervosa?

Correct metabolic disturbances, restore a safe weight and normal eating behaviors, and improve the accuracy of individual's body image.

! What are the indications for hospitalization in a patient with an eating disorder?

Substantial weight loss (i.e., person is more than 20% below ideal body weight), inability to gain weight during outpatient treatment, metabolic crises, and suicidal crises

What modalities are used to treat anorexia nervosa?

Psychotherapy (e.g., behavioral and family therapy), supervised weight gain programs, and medications

What is the most effective form of behavioral therapy for anorexia nervosa?

Operant conditioning—positive reinforcement for healthy behaviors; negative reinforcement for unhealthy behaviors

Describe the medications used in the treatment of anorexia nervosa.

- Cyproheptadine—5-HT antagonist that facilitates weight gain
- Tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs)—treat comorbid depression

What is the role of fluoxetine (Prozac) in the treatment of anorexia nervosa?	Fluoxetine (Prozac) can reduce the relapse rate of patients who have gained weight and it helps with comorbid depression.
At what rate should weight gain occur for anorexic patients during a refeeding treatment?	1–2 kg/week or 0.25 lb/day
What complications can result from refeeding a patient too quickly?	Acute gastric dilation, congestive heart failure, and pancreatitis
What is a good way to assess anorexic patients' risk for fractures secondary to osteoporosis?	Bone mineral densitometry

BULIMIA NERVOSA

Epidemiology and Etiology

What is the prevalence of bulimia nervosa among adolescent females?	1–3%
Are men and women equally affected by bulimia nervosa?	No. It is nine times more common in women.
What percentage of patients with anorexia nervosa develop bulimic symptoms?	Up to 50%
What is the typical age of onset of bulimia nervosa?	Mean age of 18, with a range of 12–35
What psychiatric disorders have a high rate of concurrence with bulimia nervosa?	Mood disorders, substance abuse, impulse control disorders, and anxiety disorders
What is the etiology of bulimia nervosa?	<p>The following factors have been implicated:</p> <ul style="list-style-type: none">• Psychological—issues about guilt, helplessness, self-control, and body image• Biologic—based on frequent association with mood disorders

Diagnosis

- | | |
|---|---|
| ! What are the DSM-IV diagnostic criteria for bulimia nervosa? | <ul style="list-style-type: none">• Recurrent episodes of binge eating• Recurrent, inappropriate compensatory behavior—self-induced vomiting; misuse of laxatives, |
|---|---|

	<p>diuretics, enemas, or other medications; fasting; or excessive exercise</p> <ul style="list-style-type: none"> • Binge eating and compensatory behaviors occur at least twice a week for 3 months • Perception of self-worth is unduly influenced by body shape and weight
What compensatory behavior is most often used by individuals with bulimia nervosa?	80–90% of bulimic patients engage in self-induced vomiting .
What are the subtypes of bulimia nervosa?	<ul style="list-style-type: none"> • <i>Purging</i>—involves vomiting, laxatives, diuretics, enemas, or other medications • <i>Nonpurging</i>—involves excessive exercise or fasting
What distinguishes patients with bulimia from those with anorexia?	<ul style="list-style-type: none"> • Bulimic patients typically maintain a normal weight and may even be overweight. • Bulimic patients tend to be more embarrassed by and secretive about their symptoms. • Bulimic patients' symptoms are "ego-dystonic," or distressing, so they may be more likely to seek help.
What is the differential diagnosis of bulimia nervosa?	Anorexia nervosa, binge eating/purging type; major depressive disorder with atypical features and borderline personality disorder
What personality type may be associated with bulimia nervosa?	Borderline personality type is seen in up to 50% of patients with bulimia.
What physical findings are associated with bulimia nervosa?	See above signs of purging
What laboratory findings are associated with bulimia nervosa?	See above signs of purging
! What changes occur in amylase levels with bulimia nervosa?	Elevation in salivary subtype of amylase
What is "Russell's sign"?	Presence of scarring on the knuckles secondary to repeated self-induction of emesis
! Ipecac is sometimes ingested by patients with eating disorders to induce vomiting.	Precordial pain, dyspnea, and generalized muscle weakness

What are the signs and symptoms of ipecac toxicity?

associated with hypotension, tachycardia, abnormalities in the electroencephalography (EEG), elevated liver enzymes, and elevated erythrocyte sedimentation rate

What medical complications can develop from ipecac ingestion?

Cardiomyopathy and toxic myopathy

What is the typical course of bulimia nervosa?

50% recover fully with treatment; 50% have a chronic course with fluctuating symptoms.

How does the prognosis for bulimia compare to anorexia nervosa?

Bulimia has a better prognosis.

Treatment

What are the treatment goals of bulimia nervosa?

Restore healthy eating behaviors, improve the individual's self-image, and reduce the associated mood and personality symptoms

! Describe the treatment modalities used in bulimia nervosa.

- Cognitive-behavioral therapy—focuses on altering distorted body image and rigid rules regarding food consumption and dieting, and recognition of events that trigger episodes of binge eating
- Antidepressant medications—SSRIs (first-line), TCAs, monoamine oxidase inhibitors (MAOIs)
- Psychodynamic psychotherapy—useful for those patients with comorbid borderline personality disorder

What is a good way to assess reduction of vomiting in patients who deny purging episodes?

Serum amylase level. It will be elevated in patients who binge and vomit.

What is the response-prevention technique?

Binging and purging patients are required to stay in an observed area for 2–3 hours after every meal to prevent purging.

BINGE EATING DISORDER

What factors contribute to the current obesity epidemic in the United States?

Genetic factors, overeating, and lack of activity have all been implicated.

What is the prevalence of binge eating disorder?

0.7–4%

What is the usual age of onset of binge eating?

Late adolescence or early 20s, often coming soon after significant weight loss from dieting

What percentage of obese individuals seeking weight-loss treatment have binge eating disorder?

A mean of 30%; ranges from 15% to 50%

Are men and women equally affected by binge eating disorder?

No. It is 1.5 times more common in women.

! What are the DSM-IV diagnostic criteria for binge eating disorder?

- Recurrent episodes of binge eating
- Severe distress over binge eating
- Bingeing occurs at least 2 days a week for 6 months and is not associated with compensatory behaviors
- Three or more of the following are present:
 - Eating very rapidly
 - Eating until uncomfortably full
 - Eating large amounts when not hungry
 - Eating alone due to embarrassment over eating habits
 - Feeling disgusted, depressed, or guilty after overeating

Binge eating disorder is listed in the DSM-IV category of Eating Disorder NOS (not otherwise specified).

What is the treatment for binge eating disorder?

- Individual psychotherapy and behavioral therapy
- Strict diet and exercise program
- Comorbid psychiatric disorders treated as necessary

Miscellaneous Disorders

SEXUAL DISORDERS

Sexual Dysfunction

What are sexual dysfunctions?

Disorders in the normal sexual response cycle not caused by medications or a medical condition

What are the five stages in a normal male or female sexual response cycle?

1. *Desire*: interest in sexual activities including fantasies
2. *Excitement*: physiologic arousal (e.g., erections in men and vaginal lubrication in women) and the beginning of pleasurable sexual feelings
3. *Plateau*: further physiologic arousal (e.g., tightening of scrotum and leakage of seminal fluid in men and contraction of the outer one-third of the vagina in women)
4. *Orgasm*: peak of sexual pleasure accompanied by ejaculation in men and uterine and vaginal contraction in women
5. *Resolution*: return to physiologic baseline (blood pressure, heart rate, respiratory rate); in men, there is a refractory period during which they cannot be brought to excitement or orgasm

! Describe sexual changes associated with aging in men.

No change in desire; however, achievement of orgasm requires more genital contact and time,

Describe sexual changes associated with aging in women.

What are the disorders of sexual desire?

What is a possible treatment for sexual desire disorder in men?

What are the sexual arousal disorders?

What are treatments for male erectile disorder?

! In men who are able to masturbate and who achieve erections during sleep but are unable to achieve an erection for sex, what is the likely etiology of the erectile dysfunction?

What are the disorders of orgasm?

What are the different treatment strategies for premature ejaculation?

orgasm is less intense, and refractory period is increased.

Vaginal dryness and thinning after menopause secondary to decreased estrogen

- *Hypoactive sexual desire disorder*: absence or decrease in desire to participate in sexual activities
- *Sexual aversion disorder*: aversion to genital sexual contact

Testosterone supplements if the patient's baseline levels are low

- *Female sexual arousal disorder*: inability to maintain sufficient vaginal lubrication
- *Male erectile disorder*: inability to attain an erection

Medications such as yohimbine (Yocon) and sildenafil (Viagra), vacuum pumps, constrictive rings, self-injections of alprostadil (Caverject), and prosthetic implantation

Psychological

- *Female orgasmic disorder*: delayed or absent orgasm after a normal excitement phase
- *Male orgasmic disorder*: same as above
- *Premature ejaculation*: orgasm and ejaculation occur earlier than desired
- *Squeeze technique*: Man or partner squeezes the glans of his penis just prior to ejaculation in order to delay it.
- *Start-and-stop technique*: Cessation of penile contact when man is near ejaculation and resuming contact once he has become more relaxed.

What are the sexual pain disorders?

- *Pharmacotherapy*: Selective serotonin reuptake inhibitors (SSRIs) may have some benefit.
- *Dyspareunia*: genital pain with sexual intercourse
- *Vaginismus*: involuntary muscular contraction of the outer one-third of the vagina during penetration

Paraphilias

! Define paraphilia.

Paraphilias are sexual activities that are culturally unusual. According to the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*), to be diagnosed with a paraphilia one must engage in one of these activities for at least 6 months and it must cause impairment in daily activities.

Is there a gender predominance in patients diagnosed with paraphilias?

Yes, there is a large male predominance.

What is pedophilia?

Sexual excitement derived from fantasy or engagement in sexual behavior with prepubescent children

What is exhibitionism?

Sexual excitement from exposing one's genitals to strangers

What is voyeurism?

Sexual excitement from observation of unsuspecting naked individuals

What is frotteurism?

Sexual excitement from rubbing one's genitals on unsuspecting people, usually in a crowded place

What is fetishism?

Nonliving objects are the centerpiece of sexual fantasies or behavior (e.g., shoes)

What is sexual masochism?

Sexual excitement from being the recipient of pain, embarrassment, or bondage

What is sexual sadism?

Sexual excitement from harming or inflicting pain on another

What is transvestic-fetishism?

Sexual gratification or excitement in heterosexual men wearing women's clothing

What is paraphilia not otherwise specified (NOS)?

Paraphilias not listed above, including necrophilia

What are poor prognostic factors in paraphilias?

Early age at onset, substance abuse, high frequency of paraphiliac behavior, and more than one paraphilia

What are favorable prognostic factors?

Self-referral for treatment, sense of guilt regarding paraphiliac behavior, and history of normal sexual behavior

What is the treatment for paraphilias?

The treatment is not specialized but insight-oriented psychotherapy, behavior therapy, and pharmacologic treatments have been successful.

Gender Identity Disorder

What is gender identity disorder?

Also known as transsexuality, people feel that they were born the wrong sex and suffer discomfort about their own gender.

Can people with ambiguous genitalia be diagnosed with gender identity disorder?

No

By about what age is one's gender identity apparent (one's internal feeling of what gender they belong to)?

Age 3

Dissociative Disorders

What are the dissociative disorders?

Disturbances of the integration of memory or identity

! Differentiate the causes of dissociative and amnestic disorders.

Amnestic disorders can be caused by medical conditions, whereas dissociative disorders occur secondary to stressful life events.

What is the most common dissociative disorder?

Dissociative amnesia

Dissociative Amnesia

What is dissociative amnesia?

Temporary inability to recall important personal information

Does dissociative amnesia affect more men or women?

Women

! According to the DSM-IV, how is dissociative amnesia diagnosed?

- At least one episode of inability to recall personal information usually pertaining to a stressful event.
- The amnesia cannot be attributed to simple forgetfulness or to another medical cause or by medications.
- Symptoms cause distress and impair daily functioning.

What is the typical course of dissociative amnesia?

Most patients return to baseline within days, sometimes within minutes.

What is the treatment?

The goal of treatment should be assisting patients in retrieving lost memories through psychotherapy with the assistance of lorazepam, sodium amytal, or hypnosis to help patients relax.

Dissociative Fugue

What is a dissociative fugue?

Sudden, unexplained travel, far from one's home, in combination with an inability to recall one's identity. Patients generally assume a new identity when they reach their destination and are unaware that they left their home.

What are predisposing factors?

Traumatic life events, head trauma, alcohol abuse, major depression, and epilepsy

! According to the DSM-IV, how is a dissociative fugue diagnosed?

- Sudden, unexpected travel accompanied by an inability to recall one's past
- Assumption of a new identity or confusion about one's identity
- Symptoms result in impairment in daily functioning
- Not attributable to other medical or pharmacologic causes

What is the typical course of a dissociative fugue?

It can last anywhere from hours to days. When the episode ends, patients reassume their true identity and are unaware of the preceding episode.

What is the treatment?

Same as dissociative amnesia (see “Dissociative Amnesia,” above)

Dissociative Identity Disorder

What is the colloquial term for dissociative identity disorder?

“Multiple personality disorder”

What is dissociative identity disorder?

Disorder in which patients manifest sense of self into two or more distinct personalities

What are predisposing factors?

Female gender, childhood trauma, bipolar disorder, personality disorder, and substance abuse

What is the average age at diagnosis?

30

! According to the DSM-IV, how is dissociative identity disorder diagnosed?

- Presence of at least two distinct identities that are capable of controlling the patient’s behavior
- Inability to recall the personal information from other personalities when one is dominant
- Not attributable to medical or pharmacologic causes

What is the typical course of the disease?

It is chronic and has a poorer prognosis than the other dissociative disorders.

What are treatments for dissociative personality disorder?

Treatments are controversial, but hypnosis, psychotherapy, and pharmacotherapy have all been used.

Depersonalization Disorder

What is depersonalization disorder?

A sense of being detached from one’s own body, similar to recurrent “out of body” experiences

What is the most common demographic affected by this?

Women between 15 and 30 and those suffering from intense stress

What type of epilepsy can be associated with depersonalization?

Temporal lobe epilepsy

! According to the DSM-IV, how is depersonalization disorder diagnosed?

- Recurrent feelings of being detached from one’s body
- Reality testing remains normal throughout the episodes

	<ul style="list-style-type: none">• Results in social impairment (including anxiety and depression)• Cannot be attributed to medical or pharmacologic causes
What is the typical course of depersonalization disorder?	Chronic
Can any patient describing a single out-of-body experience be diagnosed with depersonalization disorder?	No, episodes must be recurrent
What is the treatment for depersonalization disorder?	Symptomatic treatment of the anxiety and depression associated with the episodes

IMPULSE CONTROL DISORDERS

How can impulse control disorders be characterized?	By an inability to resist harmful behaviors
What is intermittent explosive disorder?	Failure to resist inappropriately intense aggressive impulses that lead to assault or damage
What is the treatment for intermittent explosive disorder?	SSRIs, antiepileptics, propranolol, and lithium have all shown effectiveness, as has group therapy. But there is no definitive treatment for this disorder.
What is kleptomania?	Failure to resist urges to steal objects that are not “needed” by the patient, with an accompanying pleasurable feeling
Are symptoms more pronounced during stressful times?	Yes
What other psychiatric disorder is commonly associated with kleptomania?	Bulimia nervosa: Approximately 25% of all bulimics exhibit signs of kleptomania. Other disorders associated with kleptomania include mood disorders, anxiety disorders, and substance abuse.
What is the treatment for kleptomania?	Therapy (insight-oriented or behavioral) and SSRIs
What is pyromania?	Recurrent episodes of intentional fire setting

What is trichotillomania?

Recurrent pulling out of one's hair (usually scalp) resulting in disfiguring hair loss. The act relieves tension that is present before the hair pulling. It is believed to be related to obsessive-compulsive disorder (OCD).

What is the treatment for trichotillomania?

SSRIs, antipsychotics, lithium, hypnosis, behavioral therapy, and relaxation techniques have all been used.

Law and Ethics in Psychiatry

PROFESSIONAL RESPONSIBILITIES

What are some general ethical responsibilities of physicians?

- Act in the best interests of the patient.
- Avoid harming the patient.
- Maintain confidentiality whenever possible.
- Keep patients abreast of all aspects of treatment.
- Encourage patients to be autonomous in their care.
- Do not engage in sexual or inappropriate relationships with patients.
- Avoid conflicts of interest.
- Document treatment precisely and completely in the medical record.

What is confidentiality?

The long-standing principle that patients have the right to expect that information provided to a physician will be kept secret.

Is it acceptable for a psychiatrist to become personally involved with a patient after the termination of their doctor-patient relationship?

In their most recent code of ethics, the American Psychiatric Association (APA) unequivocally states that sexual activity with patients is a misuse and exploitation of the transference relationship, which may persist long after treatment ends.

In what situations can the confidentiality rule governing doctor-patient relationships be breached?

1. Clinical information can be discussed among designated treatment personnel.
2. In the case of a subpoena, requested medical information must be released.
3. If **child abuse** is suspected, there is an obligation to report to the proper authorities.
4. A physician has a **duty to warn third parties of possible serious harm** to them by a patient if they are readily identifiable, and if the risk of harm is substantial and imminent.
5. During an **emergency**, essential information can be released.
6. If a patient is **suicidal**, the physician may need to admit the patient involuntarily and share information with medical staff.

What is the Tarasoff Duty?

The obligation of a physician to inform third parties or authorities if a client poses a threat to himself or herself or to another identifiable individual. Specific guidelines vary by state.

What steps are health-care professionals obligated to take in order to prevent a patient from committing suicide?

- Suicidal patients may be involuntarily detained for brief periods pending psychiatric evaluation.
- Reasonable steps such as close observation by nursing staff must be taken to prevent self-injury during treatment.

What rules govern the treatment and abandonment of patients?

1. Physicians have a duty to provide acute treatment during emergencies.
2. Physicians are not legally obligated to accept patients for nonemergent treatment.
3. Physicians cannot arbitrarily terminate treatment without providing the patient with treatment alternatives.

ADMISSION TO A PSYCHIATRIC HOSPITAL

List and describe the two main categories of admission to a psychiatric hospital.

1. **Voluntary admission:** Patient requests or agrees to be admitted to the psychiatric ward. The patient is first examined by a staff psychiatrist, who determines if he or she should be hospitalized.
2. **Involuntary admission:** Patient is found by two staff physicians to be potentially harmful to self or others, so may be hospitalized against his or her will for a certain number of days. Each state has laws dictating the set number of days the patient may be hospitalized. After this period has passed, the case must be reviewed by an independent board to determine if continued hospitalization is indicated.

! What are some examples of potentially harmful behavior to self or others worthy of involuntary admission to a psychiatric hospital?

What elements of a patient's history are associated with an increased likelihood of violence?

- Suicidal or homicidal behavior
- Inability to care for self
- History of violence
- History of impulsivity
- Psychiatric diagnosis
- Specific threat with a plan
- Substance abuse

What is the best predictor of future violence?

Previous history of violence

What must be provided to patients when they are involuntarily admitted to a psychiatric hospital?

Commitment or "hold" papers, explanation of their rights, opportunity to ask any question regarding their commitment

What are the rights of an individual committed involuntarily to a psychiatric hospital?

Patients who are admitted against their will retain legal rights and can contest their admission in court at any time.

What is *parens patriae*?

Legal doctrine that allows civil commitment for citizens unable to care for themselves

INFORMED CONSENT

What is informed consent?

! List and describe the three components for informed consent.

What situations do not require informed consent?

What are “emancipated minors”?

What rules pertain to emancipated minors regarding informed consent?

The process by which patients knowingly and voluntarily agree to a treatment or procedure

1. **Information:** Patient must be informed of risks, benefits, and alternatives to the treatment.
 2. **Voluntariness:** Informed consent cannot be explicitly or implicitly coerced.
 3. **Capacity:** Patient must have the understanding and judgment necessary to make the decision.
- Lifesaving medical emergency.
 - Suicide or homicide prevention (involuntary hospitalization).
 - Minors—Physicians must obtain consent from parents **except** when giving **obstetric care**, treatment for **sexually transmitted diseases (STDs)**, or treatment for **substance abuse**. In these cases, consent may be obtained from the minor directly, and information must be kept confidential from parents.
 - Therapeutic privilege—In rare circumstances, a physician may elect not to divulge information about a procedure to a patient because the information would be extremely harmful for the patient to know. The reasoning behind this decision must be carefully documented in the medical record.

Minors are emancipated if they:

- are self-supporting
- are in the military
- are married
- have children

Emancipated minors are considered competent to give consent for all medical care without input from their parents.

COMPETENCE AND CAPACITY

What is the difference between “competence” and “capacity”?

Competence and capacity are terms that refer to a patient’s ability to make informed treatment decisions. Competence is a legal term and can only be decided by a judge, whereas capacity is a clinical term and may be assessed by physicians.

What criteria must a patient meet in order to be considered to have decisional capacity?

1. Understands the relevant information regarding treatment, such as purpose, risks, benefits, and alternatives
2. Appreciates the situation and its potential impact or consequences according to his or her own value system and understands the ramifications of refusing treatment
3. Can logically manipulate information regarding the situation and reach rational conclusions
4. Expresses a clear choice or preference

How should a person designated as health care proxy make decisions for a patient who lacks decisional capacity?

Current legal approaches require health care proxy to make decisions based on the principle of **substituted judgment**, which means that the decision maker should try to make the decision based on what the patient would do if he or she could make decisions on his or her own. In the absence of any idea of what the patient might want, the decision maker should use the **best-interests approach**, which involves making the decision based on what could reasonably be expected to be the in the best interests of the patient in the situation at hand.

How can the physician determine if a patient understands information regarding treatment?

The patient must be able to explain this information to the physician.

What criteria must a patient meet in order to be considered competent to stand trial?

- Understand charges against him or her
- Have the ability to work with an attorney
- Understand consequences
- Be able to testify

MEDICAL MALPRACTICE

! What conditions must be met in order to prove that medical malpractice occurred?

1. *A duty was owed:* A legal duty exists whenever a hospital or health care provider undertakes care or treatment of a patient.
2. *A duty was breached:* The provider failed to conform to the relevant standard of care.
3. *Damages:* The deviation resulted in damages (monetary, physical, or emotional) to the patient.
4. *Direct causation:* The breach of duty was a proximate cause of the damages.

Think of the 4 Ds: Divergence from a duty that directly caused damages.

What is the most frequent basis for malpractice claims brought against psychiatrists?

Improper treatment accounts for 33% of all malpractice claims against psychiatrists. Next are cases involving attempted or completed suicide, which account for 20% of all claims.

What principles can reduce the likelihood of malpractice and liability?

- Document all important clinical observations, actions, and reasons in the medical record.
- Seek consultation and document the opinions of colleagues in the medical record.
- Communicate clearly and effectively with patients and their families.

What are compensatory damages?

Awarded to patient as reimbursement for medical expenses, lost salary, or physical suffering

What are punitive damages?

Awarded to the patient only in order to “punish” the doctor for gross negligence or carelessness

Psychopharmacology

ANTIDEPRESSANTS

What is the mechanism of action for selective serotonin reuptake inhibitors (SSRIs)?

Increase level of serotonin by binding to presynaptic serotonin reuptake proteins so as to inhibit reuptake

What is the mechanism of action for tricyclic antidepressants (TCAs)?

Block presynaptic uptake of both serotonin and norepinephrine

What is the mechanism of action for monoamine oxidase inhibitors (MAOIs)?

Increase levels of serotonin, dopamine, and norepinephrine by inhibiting monoamine oxidase

What are some advantages of using SSRIs over TCAs or MAOIs?

SSRIs have very low sedative, anticholinergic, and orthostatic properties, and they are very safe in overdose. There is also no need to avoid tyramine in the diet as a patient taking an MAOI would.

When do the adverse drug reactions to SSRIs become most apparent?

Within 1–2 weeks of initiating therapy. Clinicians should also reassess suicidal ideations during this time period.

! What are the three most common side effects of SSRIs?

- Sexual side effects such as decreased libido or delayed orgasm
- Gastrointestinal (GI) upset
- Mild weight gain

Why should TCAs be avoided in the elderly?

Orthostatic hypotension may occur and put an elderly patient at an increased risk of falling. Elderly patients may be more sensitive to the **anticholinergic** side effects of a TCA such as dry mouth, constipation, urinary hesitancy, blurred near vision, and constipation.

Name another serious side effect of a TCA.

Cardiotoxicity. TCAs may cause cardiac arrhythmias, heart block, or prolongation of PR, QRS, and QT intervals. Patients with conduction system disease should avoid TCAs.

! What dietary changes must a patient make while taking an MAOI?

Avoid tyramine-rich foods such as cheese (except cottage and cream), red wine, cured meats or fish, overripe fruits, and fermented beverages such as beer.

! What may result from taking MAOIs and ingesting foods rich in tyramine?

Hypertensive crisis

How is a hypertensive crisis treated?

IV phentolamine or continuous IV nitroprusside infusion

What is a specific side effect of the MAOI tranylcypromine (Parnate)?

Insomnia and agitation

What is a specific side effect of the MAOI phenelzine (Nardil)?

Daytime somnolence

What is the mechanism of action of bupropion (Wellbutrin)?

Inhibiting the uptake of dopamine and norepinephrine

What is the major advantage of using bupropion (Wellbutrin) as compared to SSRIs?

Lower incidence of sexual side effects

What is a disadvantage of using bupropion (Wellbutrin) compared to other antidepressants?

At higher doses, bupropion (Wellbutrin) lowers the seizure threshold.

What is the mechanism of action of mirtazapine (Remeron)?

Modulates norepinephrine and serotonin

! What are two advantages of using mirtazapine (Remeron)?

- Causes weight gain for patients who have decreased appetite or weight loss
- Low incidence of sexual side effects

What is a side effect of mirtazapine (Remeron) and how can it be remedied?

Sedation. It is less sedating at higher doses (i.e., ≥ 30 mg).

MOOD STABILIZERS

What are mood stabilizers primarily used for?

Treatment and prophylaxis of manic episodes

What are some other less common uses for mood stabilizers?

- Potentiation of antidepressants and antipsychotics in treatment of depression and psychosis

	<ul style="list-style-type: none"> • Enhancement of abstinence in treatment of alcoholism • Treatment of aggression and impulsivity
List the most common mood stabilizers.	Lithium, valproate (Depacon), and carbamazepine (Tegretol) are the most common. Other anticonvulsants (e.g., lamotrigine [Lamictal]) and atypical antipsychotics (e.g., olanzapine [Zyprexa]) are also effective.
What are the indications for lithium?	First-line treatment of acute mania and prophylaxis for manic and depressive episodes in bipolar disorder (BD). Also used to augment response to antidepressant therapy for depression.
What is the mechanism of action of lithium?	Thought to affect neuronal sodium transport
What is notable about the therapeutic range of lithium?	It is very narrow (0.7–1.2); patients can become toxic at serum levels >1.5. Thus, close monitoring of patients' plasma levels is essential.
What are the major side effects of lithium?	Fine tremor, sedation, ataxia, thirst, metallic taste, polyuria, edema, weight gain, GI problems, benign leukocytosis, thyroid enlargement, hypothyroidism, renal damage, and nephrogenic diabetes insipidus
! What lab tests should be monitored in patients taking lithium?	Blood urea nitrogen (BUN)/creatinine and thyroid-stimulating hormone (TSH) as lithium can be toxic to the kidneys and thyroid.
What is the effect of lithium on pregnancy?	Associated with cardiac abnormalities (atrial-septal defects, e.g., Ebstein's anomaly) and therefore is contraindicated in the first trimester of pregnancy. Women should receive a pregnancy test before starting lithium.
What factors increase lithium levels?	Nonsteroidal anti-inflammatory drugs (NSAIDs), thiazide diuretics, dehydration, salt deprivation, and impaired renal function
What are the indications for valproate (Depacon)?	First-line agent for treatment of typical and mixed manic episodes and rapid-cycling BD

What is the mechanism of action of valproate (Depacon)?

Thought to increase central nervous system (CNS) levels of gamma-aminobutyric acid (GABA)

What are the possible side effects of valproate (Depacon)? How should one monitor patients on this medication?

Sedation, weight gain, alopecia, GI distress, **hepatotoxicity, hemorrhagic pancreatitis, and thrombocytopenia**. Physicians should monitor a patient's liver function tests (LFTs) and complete blood count (CBC) regularly.

Valproate (Depacon) use during pregnancy can lead to what side effect in the fetus?

Neural tube defects

What are the indications for carbamazepine (Tegretol)?

First-line agent for treatment of typical and mixed manic episodes and rapid-cycling BD

What is the proposed mechanism of action of carbamazepine (Tegretol) for treatment of BD?

Blocks sodium channels and may also indirectly interact with GABA receptors

What are the side effects of carbamazepine (Tegretol)?

Skin rash, drowsiness, ataxia, pancytopenia, agranulocytosis, aplastic anemia, hyponatremia, and elevated liver enzymes. Physicians should monitor a patient's LFTs and CBC regularly.

What is the major cardiac side effect of carbamazepine (Tegretol) that can occur at therapeutic doses?

Decreased atrioventricular (AV) conduction. This may progress to AV block at toxic doses.

What is the overall effect of carbamazepine (Tegretol) on drug levels?

Strong enzyme inducer of the cytochrome P-450 system, so blood levels of carbamazepine (Tegretol) and other drugs may fall

Lamotrigine (Lamictal) is generally used as an anticonvulsant, but is also used to treat what disorder?

BD, especially the depressive episode

! What life-threatening dermatologic side effect is associated with lamotrigine (Lamictal)?

Stevens-Johnson syndrome

ANTIPSYCHOTICS

What are antipsychotics primarily used for?

Treatment of psychotic disorders, psychotic symptoms, psychomotor agitation, and certain movement disorders

What are the two classes of antipsychotics?	Typical and atypical antipsychotics
List some typical antipsychotics.	Chlorpromazine (Thorazine), thioridazine (Mellaril), trifluoperazine (Stelazine), haloperidol (Haldol)
List some atypical antipsychotics.	Risperidone (Risperdal), clozapine (Clozaril), olanzapine (Zyprexa), quetiapine (Seroquel), aripiprazole (Abilify), ziprasidone (Geodon)
What distinguishes high and low potency typical antipsychotics?	<ul style="list-style-type: none"> • Low potency drugs—dosed in hundreds of milligrams, tend to be sedating, have strong anticholinergic properties, and are somewhat less likely to cause extrapyramidal symptoms (EPS). For example, thioridazine (Mellaril) and mesoridazine (Serentil). • High potency drugs—dosed in milligrams and tens of milligrams, are less sedating, less anticholinergic, and more likely to cause EPS. For example, haloperidol (Haldol) and fluphenazine (Prolixin).
<p>! How do typical and atypical antipsychotics differ in their side effect profile?</p> <p>! What are EPS, what drugs are they associated with, and how are they treated?</p>	<p>Atypical antipsychotics are associated with fewer side effects; they rarely cause EPS, or tardive dyskinesia.</p> <ul style="list-style-type: none"> • <i>Dystonia</i>: Spasms of face, neck, and tongue. Occurs within hours to days and can be life threatening (e.g., dystonia of diaphragm causing asphyxiation). • <i>Parkinsonism</i>: Resting tremor, rigidity, bradykinesia. Occurs within days to weeks. • <i>Akathisia</i>: Feeling of restlessness. Occurs after weeks. <p>EPS are associated with high potency typical antipsychotics. Treat with antiparkinsonian agents (e.g., benztropine [Cogentin], amantadine [Symmetrel]) and Benadryl. Benzodiazepines are used to treat akathisia.</p> <ul style="list-style-type: none"> • Anticholinergic symptoms: Flushing, dry mouth, blurred vision, altered mental status, fever. Think: “Red as a beet, dry as a bone, blind
! Describe the other side effects of antipsychotics.	

as a bat, mad as a hatter, and hot as a hare.” Associated with low potency typical antipsychotics and atypical antipsychotics. Treat symptoms individually.

- Antihistaminic effects: Sedation.
- Anti-alpha-adrenergic effects: Orthostatic hypotension, cardiac abnormalities, and sexual dysfunction. Associated with low potency typical antipsychotics and clozapine (Clozaril).
- Weight gain.
- Elevated liver enzymes.
- Lowered seizure threshold. Low potency typical antipsychotics are more likely to cause seizures than high potency.
- Tardive dyskinesia: Darting or writhing movements of face, tongue, and head; appears 6 months after beginning treatment. Associated with typical antipsychotics and more often seen in women. Treat by discontinuing offending agent and substituting atypical antipsychotic; untreated cases may become permanent.
- Neuroleptic malignant syndrome: Confusion, high fever, elevated blood pressure (BP), tachycardia, “lead pipe” rigidity, sweating, and greatly elevated creatine phosphokinase (CPK) levels. **Twenty percent mortality rate.** Associated with all antipsychotics, but most often seen with typical high potency antipsychotics. Treat immediately by discontinuing offending agent and providing supportive care.
- Metabolic syndrome: Hypertension, insulin resistance, abdominal obesity, and dyslipidemia. Associated with atypical antipsychotics, especially clozapine (Clozaril). Consider switching to different antipsychotics, such as aripiprazole (Abilify) or ziprasidone (Geodon), in patients with significant weight gain.

! How do atypical and typical antipsychotics differ in their mechanism of action?

Atypical antipsychotics are selective in binding to mesolimbic dopamine sites, as opposed to typical antipsychotics, which bind to mesolimbic and nigrostriatal dopamine receptors equally. Atypical antipsychotics also bind to serotonin (5-HT₂) receptors.

What is thought to be an adequate trial period of an antipsychotic medication?

Taking the minimum dosage for 4–6 weeks

Which antipsychotics are most effective in treating psychosis?

All typical and atypical antipsychotics are equally effective, with the exception of clozapine, which is more effective in refractory schizophrenia

! What is the potentially life-threatening side effect of clozapine?

1–2% incidence of agranulocytosis: patients must receive weekly blood draws for the first 6 months (if normal, thereafter every other week) to check CBC.

What other side effect of clozapine must physicians be aware of, particularly at high doses?

Seizures. Occurrence of seizures is dose-dependent: 5–10% of patients have seizures at dosages >600 mg daily.

What are the neuroendocrine side effects of antipsychotics?

Prolactinemia, secondary to dopamine blockade. This can lead to osteoporosis in both sexes, gynecomastia in men, and amenorrhea and galactorrhea in women. Treat with amantadine (Symmetrel) or bromocriptine (Parlodel). Prolactinemia is most often associated with risperidone (Risperdal).

What antipsychotic medication is associated with pigmentary retinopathy?

Thioridazine (Mellaril)

What side effect is more prominent with olanzapine (Zyprexa) and clozapine (Clozaril) than with other antipsychotics?

Weight gain. Should be used cautiously in patients with a history of obesity or diabetes.

What are some unique features of quetiapine (Seroquel)?

Low incidence of EPS even at higher doses, which makes it the preferred agent in patients with preexisting movement disorders or who are at risk for developing these symptoms. Along with olanzapine (Zyprexa) and risperidone (Risperdal), it is associated with an increased risk of new-onset diabetes.

Which antipsychotic drugs are available in depot injection form?

Haloperidol decanoate (every 2–4 weeks), fluphenazine decanoate (every 1–2 weeks), and risperidone depot (every 2 weeks)

ANXIOLYTICS

What classes of medications are generally considered to be the first-line treatment for most anxiety disorders?

SSRIs and benzodiazepines

Why are benzodiazepines considered safer than barbiturates?

Benzodiazepines lead to less respiratory depression in comparison with barbiturates.

Compare the mechanisms of action of benzodiazepines and barbiturates.

Benzodiazepines increase the frequency of opening of GABA channels (chloride permeable), whereas barbiturates increase the duration of GABA channel opening. **Think: “barbiturate” = increased duration.**

Which benzodiazepines are short acting, intermediate acting, and long acting?

- *Short acting*: oxazepam (Serax), triazolam (Halcion)
- *Intermediate acting*: alprazolam (Xanax), clonazepam (Klonopin), lorazepam (Ativan), temazepam (Restoril)
- *Long acting*: chlordiazepoxide (Librium), diazepam (Valium), flurazepam (Dalmane)

What are the major side effects of benzodiazepines?

Drowsiness, slowed intellectual function, and reduced coordination. Care should be taken not to combine benzodiazepines with alcohol as respiratory depression may ensue.

What three benzodiazepines are safe to use in patients with liver failure?

Lorazepam, Oxazepam, and Temazepam are all safe to use in liver failure as their metabolism does not require an oxidation step.
• **Think:** “Patients who drink a LOT of alcohol should get: Lorazepam, Oxazepam, Temazepam.”

What are the nonbenzodiazepine sedatives that also work at the GABA receptor?

Zolpidem (Ambien) and zaleplon (Sonata). These medications exert the same effect as benzodiazepines but

! What is a rare but well-established (and frequently tested) side effect of trazodone (Desyrel)?

What is buspirone (BuSpar)?

are from a different class of medication. They cause less physiologic dependence than the benzodiazepines.

Priapism or sustained, painful erections

This nonbenzodiazepine anxiolytic acts at the 5-HT-1A receptor but has a slower onset of action than the benzodiazepines. It is useful in alcoholics as it does not exhibit cross-tolerance with alcohol and has a low potential for addiction.

PSYCHOSTIMULANTS

What is the mechanism of action of methylphenidate (Ritalin)?

What side effects are associated with the use of psychostimulants in children?

Stimulates CNS activity; blocks reuptake and increases release of norepinephrine and dopamine in extraneuronal space

- Loss of appetite and weight loss
- Deceleration of linear growth (adult height not affected)
- Irritability
- Headaches
- Abdominal pain
- Crying spells
- Tics (rare)

What adverse effect prevents the common usage of the psychostimulant pemoline (Cylert)?

Hepatotoxicity

DRUGS USED IN ALZHEIMER'S DEMENTIA

What are the two most common classes of drugs used to enhance cognition in Alzheimer disease?

List the most common acetylcholinesterase inhibitors.

How are acetylcholinesterase inhibitors thought to enhance cognition?

1. Acetylcholinesterase inhibitors
2. NMDA receptor antagonists (*N*-methyl-D-aspartic acid)

Donepezil (Aricept), tacrine (Cognex), rivastigmine (Exelon), galantamine (Razadyne)

Cognition is partly mediated by cholinergic neuron projections between the basal forebrain, cerebral

	<p>cortex, and hippocampus. In Alzheimer's disease, the loss of these cholinergic neurons hinders the cognitive pathway. By reversibly inhibiting the break down of acetylcholine, more of this neurotransmitter is available in the synaptic cleft of the surviving cholinergic neurons.</p>
What are the side effects of acetylcholinesterase inhibitors?	<p>Bradycardia, diarrhea, vomiting, abdominal pain, increased gastric acid secretion, and urinary retention</p>
What adverse effect is specific for tacrine (Cognex)?	<p>Elevations in serum transaminases</p>
What is the theoretical mechanism of action for NMDA receptor antagonists?	<p>To block the effects of glutamate, slow calcium influx, and prevent nerve damage</p>
What is the most commonly used NMDA receptor antagonist?	<p>Memantine (Namenda)</p>
What are the side effects of memantine (Namenda)?	<p>Fatigue, pain, elevated BP, dizziness, headache, constipation, confusion</p>

Clinical Vignettes

An 84-year-old woman selects her husband for medical decision making because she knows that her cognitive abilities will deteriorate due to a recent diagnosis of frontotemporal dementia. Two years later, the woman's disease has progressed to the point that she is not capable of making medical decisions for herself. Her physician recommends a new experimental drug that will increase levels of acetylcholine in her brain. How should the patient's husband make the decision of whether or not to have the medication administered?

A 21-year-old woman is brought to the emergency room (ER) after her friends found her passed out in an acquaintance's dorm room. Her friends say that they "were all out partying and met some boys at a bar," after which they went back to their dorms for more drinks. The patient apparently went off into one of the boys' rooms but she does not remember anything after leaving her friends. On examination, there are signs of vaginal trauma suggestive of rape but the patient cannot recall having intercourse. What drug may she have unknowingly ingested?

A 46-year-old woman lives alone in a dilapidated house in a residential neighborhood. She spends most of her time collecting items from other people's trash. According to her neighbors, she refers to these items as her "antique collection." Despite having lived in the

Current legal approaches require health care proxy to make decisions based on the principle of **substituted judgment**, which means that the decision maker should try to make the decision based on what the patient would do if he or she could make decisions on his or her own. In the absence of any idea of what the patient might want, the decision maker should use the **best-interests approach**, which involves making the decision based on what could reasonably be expected to be the best interests of the patient in the situation at hand.

GHB; gamma-hydroxybutyrate (GHB), also known as the "date rape drug," has profound depressive and memory loss effects. A serum GHB screen should be performed in this patient.

Schizoid personality disorder; this disorder involves a pattern of voluntary social withdrawal and restricted range of emotional expression, beginning by early adulthood and present in a variety of contexts. Patients with this disorder

neighborhood for many years, she does not have any friends and mostly keeps to herself. When a neighbor approached her recently and criticized the condition of her house, the woman seemed unfazed. What is the likely diagnosis?

A 5-year-old girl presents to her family physician with her parents who have been concerned that she is not progressing like the other children around her. She has not yet been toilet trained. She has difficulty writing her name, learning the alphabet, and dressing herself. Her speech is slightly difficult to understand. Her mother had limited prenatal care. IQ testing of the child was performed and calculated to be 50. The physician scheduled an MRI and ordered several metabolic and genetic tests. What is the most common cause of mental retardation? What is the most common cause of inherited mental retardation?

A 26-year-old man walks into the urgent care clinic. You attempt to interview the man but cannot get a word in as he speaks extremely quickly about animals crawling all over him. He keeps scratching his skin but you cannot observe any skin abnormalities aside from the obvious scratch marks. He is difficult to interview because he will not stop talking. His vitals are: T 98.6°F, HR 96, BP 135/80, RR 18, O₂ saturation 100% on room air. You suspect intoxication of some sort and perform a urine drug screen. What metabolite would you expect to see in the urine?

A 15-year-old boy is finally brought to the physician by his foster mother after repeated requests from his school because of bad behavior. For the last year the boy has been starting fights at school, spray painting the bathroom walls with graffiti, stealing money from other students' lockers, and skipping school. Two years ago he was arrested by the police for setting fire to a neighbor's garage. He is failing all of his classes and his teachers suspect that he is using illicit drugs. He lives with his foster mother because his

are typically indifferent to criticism or praise.

Down syndrome, Fragile X syndrome; the diagnosis of mental retardation is characterized by IQ less than or equal to 70, onset before age 18, and impaired adaptation to environments such as home or work. Down syndrome (trisomy 21) is the most common cause of mental retardation, whereas Fragile X syndrome is the most common cause of inherited mental retardation. Other causes include inborn errors of metabolism, maternal diabetes, early childhood head injuries, rubella, substance abuse, toxemia, and social deprivation.

Benzoyllecgonine; it is likely that this man used cocaine recently as he appears to be having tactile hallucinations ("cocaine bugs") and is clearly in a "stimulated" state. Benzoyllecgonine, a cocaine metabolite, will usually remain in the urine for up to 3 days (and possibly up to 1 week).

Patients with conduct disorder may develop antisocial personality disorder, somatoform disorders, depression, or substance abuse; for more than a year, this boy has exhibited a persistent pattern of behavior that violates the basic rights of people or animals or violates societal norms including violence, rape, vandalism, fire setting, theft, or truancy. This behavior is diagnostic of conduct disorder. Oppositional defiant disorder is less severe without destructive

biological mother is in jail for selling cocaine and his father died in a gang fight. What disorders may develop in persons with this disorder when they reach adulthood?

A 19-year-old man is brought into the ER accompanied by three police officers. He is kicking at everything in sight and needs to be restrained to the bed. He will not calm down and needs to be sedated with Haldol. The police tell you that he is being held as a suspect in a violent assault and battery. What drug did the patient most likely take and what physical sign is virtually pathognomonic for intoxication with this drug?

A 14-year-old boy asks his parents if they need their cars washed. The cars are not particularly dirty, and he washed them only 5 days ago. The boy has never seemed this eager to do chores around the house. About 2 months ago his father gave him \$20 to wash his car. According to behavioral theory, what type of conditioning has affected this boy?

A 16-year-old female is brought to her family physician by her mother, who is distraught about her daughter's recent rapid weight loss. Her current height and weight are 5'4" and 88 lb, respectively. Her mother claims that she refuses to eat and spends long hours jogging at a nearby park. What is the next appropriate step in management?

and aggressive behaviors characterized primarily by annoying, disruptive, and disobedient behavior toward authority. If the boy was older than 18, this disorder would be antisocial personality disorder. Twenty-five to forty percent of children with conduct disorder progress to antisocial personality disorder in adulthood. Other disorders present in adulthood among children and adolescents with conduct disorder include somatoform disorders, depression, and substance abuse.

phencyclidine (PCP); PCP (a.k.a. "angel dust") produces hallucinations and is often linked to violent behavior. Rotatory nystagmus is pathognomonic for PCP intoxication.

Operant conditioning; behavioral theory proposes that behaviors are learned from the environment or through reward. This boy's behavior can be explained by operant conditioning. He has learned that washing his parents' cars will result in a monetary reward so he seeks out this behavior. Another example of operant conditioning is behavior learned to avoid a punishment. Operant conditioning should not be confused with classical conditioning, which describes behavior learned by responding to a neutral stimulus in the environment.

Hospitalization; the physician should hospitalize her, as she is more than 20% below her ideal weight. The most important treatment goals should be to correct the physiologic effects of her starvation and restore her to a safe weight.

An 18-year-old female is brought into the ER by her mother who reports having found the girl on the bathroom floor confused and drowsy. According to the mother, the only medication that her daughter takes is alprazolam (Xanax) for anxiety. In addition, the mother reports that her daughter has never had a seizure, but her 12-year-old brother did have seizures as a younger child. Her vitals are: T 98.7°F, HR 66, BP 118/76, RR 6, O₂ saturation 98% on room air. The patient is arousable to painful stimuli and her pupils are reactive. What is the proper management of this patient?

A 38-year-old white man presents to the ER with fever and “swollen arms.” The patient was in his usual state of health until he developed a fever of 102.5°F and his right arm became red and edematous. He is vague when discussing his past medical history. He denies any alcohol or substance abuse. On examination, he is febrile, tachycardic, and anxious. Pus can be expressed from multiple venipuncture sites on his right arm with surrounding erythema, and induration. On trying to obtain old medical records it becomes evident that he has visited several medical centers across the Midwest. When questioned about his previous hospital visits and the nature of the venipuncture sites, he becomes extremely angry and yells: “What does it matter? Can’t you see I am sick?” How can this disorder be differentiated from other somatoform disorders?

A 59-year-old African American man with a history of hypertension and diabetes is brought to his physician by his son because

Airway management +/- flumazenil; airway protection is the chief concern and intubation may be necessary in patients with compromised respiratory drive or function. Although benzodiazepines do not generally cause respiratory depression that is as severe as that resulting from barbiturates, clinicians must still be alert to respiratory status in benzodiazepine overdose. A toxicology screen should be performed, and flumazenil should be considered to reverse the effects if the screen is positive for benzodiazepines (such as alprazolam). However, flumazenil can lower seizure threshold, and given the patient’s family history, care should be taken if it must be administered. Activated charcoal via a nasogastric tube can also be considered to halt the gastrointestinal (GI) absorption of any remaining pills in the patient’s stomach.

In factitious disorder, signs and symptoms are consciously produced to obtain the sick role; the history of multiple hospital visits separated by geography and infection with an obvious, self-inflicted source suggests the diagnosis of factitious disorder. Patients afflicted with this disorder may have anger against authority figures or issues of dependency, but most often they have a need to assume the “sick role.” Their purpose in assuming this role is to receive nurturing, support, and attention from health care professionals. In comparison to other somatoform disorders, signs and symptoms are **consciously** produced by the patient to obtain the **sick role** and not for external incentives.

Pick dementia; the characteristics of memory loss in addition to loss of one or more cognitive abilities with

of “strange behavior.” The son notes that his father has had trouble remembering various appointments around town. Recently, his father has needed assistance to find his own way to the Senior Citizen Center, because he can no longer find his way by himself. Apparently, other people at the center have also remarked that the man has not been himself. He has been loud, unusually mean, and has “lost his sense of humor.” At home his son has found him talking to an empty room as if there was someone there. On examination, he is uncooperative and demonstrates mild difficulty with memory tasks, but no other neurologic findings. An MRI shows frontal and temporal atrophy. What is the diagnosis?

A 26-year-old man has been extremely complimentary to his coworkers for the past week. He has purchased gifts for everyone at his office for no apparent reason. When asked how he had the time to buy and wrap each individual gift after working every day, he claims that he just “feels more energy” despite his surprising lack of sleep recently. His coworkers are confused when his mood completely changes a month later and he becomes avoidant, lethargic, and uninterested in his normal activities. He is overheard telling his boss that he feels as if life is not worth living anymore. What is the diagnosis?

A 24-year-old woman is seen by her OB-GYN, and during the pelvic examination the doctor is unable to pass her finger into the patient’s vagina. The woman says that her husband has noticed this lately during intercourse. The OB-GYN suspects that the woman has vaginismus. What is a treatment option for the woman?

A 62-year-old man with a past history of basal cell skin cancer presents to his dermatologist with a dark spot on his arm. This is his 15th visit to a dermatologist

chronic onset support the diagnosis of dementia. Frontal and temporal atrophy are characteristic neuroimaging findings in Pick’s dementia. This form of dementia usually presents between the ages of 50 and 60 with changes in personality and language being the prominent features of this disease.

Bipolar disorder (BD) II; this young man exhibits a major depressive episode which is preceded by an episode of hypomania. Although BD II has a more stable course and better prognosis when compared to BD I, the treatment is the same.

Desensitization; the treatment for vaginismus centers on desensitizing the woman to penetration. In an intimate situation with her husband, they can try to desensitize her with light vaginal touching. As she becomes more comfortable, they can initiate more sexually exciting touching until penetration can be achieved.

Complications in hypochondriasis may arise from repeated tests or procedures; this man’s preoccupation with fear of skin cancer and

over the last 6 months. Each visit he has pointed out a different dark spot on his arm. He has switched dermatologists three times because they have reassured him that each spot is not suspicious of cancer. On examination, the spot is less than 3 mm, perfectly round with regular borders, and light brown in color without any area of darker pigmentation. He remarks that he is terrified of dying from skin cancer. What complication may arise as a result of this disorder?

A 45-year-old man and his wife are seeing a doctor to try to obtain “Viagra” for his erectile dysfunction. While taking the man’s history, the doctor learns that he does have erections while sleeping (according to the wife) but is unable to obtain an erection prior to attempted sexual intercourse. Given this piece of information, what is the most likely etiology of the man’s erectile dysfunction?

A 34-year-old African American mother of four comes into your office complaining of back pain, difficulty sleeping, and irritability. When you ask what has been happening in her life lately, she responds with a list of concerns such as getting the kids to school on time, making sure the house is clean, and getting the freshest foods for her kids. She claims that she has been worrying about these things for years and says that her mother always called her a “worry-wart.” What is the likely diagnosis?

What is the best treatment plan for the patient above?

conviction that subtle bodily perceptions are manifestations of severe pathology suggest the diagnosis of hypochondriasis. Personal past history of disease, such as basal cell carcinoma in this man, is a predisposing factor. Patients with hypochondriasis often doubt the credentials of their physicians or seek second opinions. Because of the frequency and conviction with which they present to health care facilities, multiple diagnostic tests are usually conducted. The most likely complication of hypochondriasis stems from the risks of the tests or diagnostic procedures. Gathering a sound psychosocial history and documentation of hypochondriasis may help to avoid future unnecessary testing.

Psychological causes; if the patient is able to have an erection during sleep, then the cause of his erectile dysfunction is unlikely to be organic. Viagra can be prescribed for men with erectile dysfunction due to psychological causes.

Generalized anxiety disorder (GAD); the patient describes excessive worry about everyday events and also reports constitutional symptoms such as muscle pain and irritability. Most importantly, the patient describes herself as a “worrier” and reports that these worries and symptoms have been long standing. All of these characteristics are consistent with GAD.

The most effective way to treat GAD is psychotherapy in combination with medications (either buspirone [BuSpar], a benzodiazepine, or a selective serotonin reuptake inhibitor [SSRI]).

A 43-year-old woman follows up with her psychiatrist for anxiety and depression. Although she receives pharmacologic therapy, she feels that she also benefits from psychotherapy. She has been seeing this psychiatrist for 2 years now on a regular basis. During her visits she does most of the talking, and the psychiatrist mainly listens to her. Over the years she has talked much about her childhood conflicts with her mother. The psychiatrist has encouraged her to remember emotionally significant events during this stage of her life as he believes they have great significance on her present day problems. She has come to the realization that her anxiety comes from the pressure of high expectations put on her by her mother. She also now believes that her conflicting thoughts about her father have contributed to her depression. What type of therapy has this psychiatrist used with his patient?

A 42-year-old Hispanic woman with a history of mental retardation is brought to her primary care physician by her parents because of "forgetfulness." She has been working at a nearby grocery store bagging groceries for customers over the last 15 years. Her boss called her parents to tell them that she is no longer able to function at her job. She appears as if she does not know what to do with the groceries. She has been showing up late and even got lost on her usual walk to the store from her house. At work she has uncharacteristically been making sexual advances on some of the customers. When her parents ask her about her day at work she has difficulty remembering what happened. On examination, she has a flat face with a short nose, prominent epicanthic skin folds, small low-set ears, a thick tongue, and a single transverse palmar crease. She has difficulty with short-term memory, calculation, and sequential tasks. What is the etiologic link between the two diagnoses this patient carries?

Psychodynamic psychotherapy; in this form of therapy the psychiatrist uses psychodynamic theory to facilitate a patient's understanding of how previous experiences as early as childhood, some even relegated to the unconscious, contribute to a current state of psychopathology. Techniques used by the therapist include listening, asking questions, encouraging free associations and recollection of emotionally significant events, and discussing transference and defenses.

The amyloid precursor protein (APP) gene on chromosome 21 is the etiologic link between Down syndrome and Alzheimer disease; with the history of mental retardation and characteristic physical findings it is clear that this patient has Down syndrome. The most common cause of Down syndrome is trisomy 21. Almost all patients over 30 years of age with Down syndrome develop the plaques and neurofibrillary tangles characteristic of Alzheimer disease. The gene APP has been implicated in some cases of early onset, autosomal dominant Alzheimer disease. The APP gene is located on chromosome 21. Aβ amyloid results from the breakdown of the protein coded for by the APP gene and is deposited in neuritic plaques. Considering these genetic findings, it has been proposed that an extra copy of the APP gene from a trisomy of chromosome 21 leads to excess cerebral amyloid and thus the Alzheimer dementia seen in Down syndrome patients.

A 19-year-old female college student reports occasionally falling sleep in the middle of the day. This occurs even when she is with her girlfriends watching their favorite daytime soap opera. She also says that she is always tired in the mornings before class despite going to bed at a reasonable hour. She reports seeing the image of her dead cousin flying above her bed just before she falls asleep. She has come to your office today because when she awoke this morning, she was unable to move despite being alert to her surroundings. This lasted only 20 seconds, but she was very upset by the episode. What is the most likely diagnosis and how would you proceed with treatment?

A 36-year-old woman is brought to the clinic by her husband because he is concerned about her “mood swings.” He describes a 2-week period over the summer when she was very irritable and went on several shopping sprees, eventually reaching the limits on their credit card. Then, during winter holidays she would not leave the house. At the time she was tearful and unable to finish daily chores, complaining of a lack of energy and an inability to concentrate. This sort of episode happened again at the end of February. Recently, she has been staying up late and her husband is surprised at how much of a “go-getter” she has become. What is the diagnosis and how should she be treated?

A 22-year-old man reports to his primary care physician for an annual checkup. His vital signs are T 98.5°F, HR 76, BP 115/80, and RR 20. His body mass index (BMI) is 31. When questioned about his lifestyle, the man admits to not exercising much and “occasionally” overeating. When pressed for more details, the man describes eating large amounts of food a few times a week, after which he will often have feelings of physical discomfort and guilt. He is interested in weight loss programs. What is the diagnosis and appropriate treatment?

Narcolepsy; the patient exhibits some classic symptoms of narcolepsy: sudden sleep attacks during the day, cataplexy, and hypnagogic hallucinations. (Remember: hypnagogic—going to sleep; hypnopompic—perking up.) Narcolepsy in this case would likely be treated with timed daytime naps and possibly amphetamines.

Rapid-cycling BD. Treat with anticonvulsants; because of the existence of four mood disturbances (in this case, two depressive and two manic) in 1 year, the diagnosis of rapid-cycling BD can be made. Stressful life events, disturbances in sleep-wake cycles, and the postpartum period can be triggers of mood disturbances in rapid-cycling BD. She should be treated with anticonvulsants such as valproate (Depacon) or carbamazepine (Tegretol).

Binge eating disorder; treat with psychotherapy, behavioral therapy, and diet/exercise. The man exhibits the typical symptoms of binge eating disorder, including frequent, recurrent episodes of binge eating, as well as physical and emotional distress over binge eating. Treatment includes individual psychotherapy and behavioral therapy and strict diet and exercise programs.

A 51-year-old man enters the ER complaining of chest pain, palpitations, sweating, and dizziness. He says that he feels like he is “dying.” What is at the top of your differential diagnosis?

An 8-year-old boy is brought to his pediatrician by his mother because she is concerned about his recent clumsiness. On the soccer team he has trouble running with the other boys and rarely is able to kick the ball correctly. He had similar trouble playing baseball in that it was very difficult for him to hit the ball with the bat. Thinking that perhaps music would be better than sports for her child, his mother signed him up for piano lessons, but he has had trouble hitting the correct keys with his fingers. A general medical examination is unremarkable and the child has no problems with social interactions. What is the diagnosis and prognosis?

A 22-year-old female was diagnosed with schizophrenia after one episode of psychosis (auditory hallucinations and paranoid delusions) that lasted 9 months. She was immediately started on risperidone and since then has been symptom free for 18 months. What treatment change(s), if any, should be made?

A 46-year-old man follows up with his psychiatrist for depression. He has been taking an SSRI for 2 years now with good results. Initially his sleep patterns were disturbed, feelings of guilt persisted, decreased energy and lack of initiative prevented him from being successful at work, and his mood was generally low. The medication has helped him with these aspects of his disease. In addition to pharmacologic treatment this patient has agreed to participate in psychotherapy. With his psychiatrist the patient has identified how he thinks about the outside world. He believes his coworkers have little faith in his ability and that his family feels that he is a failure. He makes a list of

A myocardial infarction *must* be ruled out; although this man could be having a panic attack, a myocardial infarction presents similarly and must be worked up before the appropriate panic disorder workup.

Developmental coordination disorder; variable prognosis; this boy’s clumsiness and poor athletic and fine motor skills suggest the diagnosis of developmental coordination disorder. This disorder is characterized by impairment in the development of motor skills that cannot be attributed to a general medical condition or autism. The prognosis of developmental coordination disorder is variable with deficits often improving over time.

Since the patient had only one episode of psychosis and has been symptom free for over 1 year, her physician should minimize and, if possible, discontinue the medication. This should be done gradually, with frequent visits to her psychiatrist, so as to reduce the risk of relapse.

Cognitive restructuring in cognitive therapy; this psychiatrist has used cognitive therapy to help the patient find ways of correcting negative schemas by creating healthier, more adaptive ways of thinking. By employing the technique of cognitive restructuring, the psychiatrist assists his patient in making a list of factual events to prove that his beliefs are irrational and erroneous. This patient realizes that his coworkers must have faith in his work if he recently received a commendation. He also realizes that his family recognizes his success since they acknowledge his accomplishments.

events at work and at home that contradict his beliefs. For example, he recently received an “Employee of the Month” award at work, and his wife took him out to a celebratory dinner to acknowledge a recent promotion. Making this list helps him to realize that his beliefs are in fact erroneous. What type of therapy is this psychiatrist using and what specific technique has been employed with this patient?

A 23-year-old woman reports difficulty concentrating at work. She says that she has suffered from inattentiveness for as long as she can remember and that she has “always” had a lack of energy and “never” seemed to find any activity that made her happy or excited. She denies any psychomotor or neurovegetative symptoms. What is the likely diagnosis?

An 86-year-old man with a history of hypertension, diabetes, and chronic obstructive pulmonary disease (COPD) is hospitalized for congestive heart failure. He has been in the hospital for 4 days and has been receiving furosemide and metoprolol in addition to his regular medications, which include hydrochlorothiazide, lisinopril, Protonix, metformin, insulin, albuterol inhaler, ipratropium bromide inhaler, and aspirin. He has had a Foley catheter for 3 days because he has been too weak to get out of bed to use the bathroom. According to his family, he is a very mild mannered, pleasant gentleman at home; however, over the last hour the nurses have complained that he has been yelling at them, trying to get out of bed, and talking to people who are not actually in the room. At times he appears calm and sleepy, and then he shifts back into the behavior described by the nurses. Over the last few hours he has also developed a cough. What is the approach to diagnosis and treatment in this patient?

Dysthymia; since this patient is presenting with a history of chronic, mild depression the most likely diagnosis is dysthymia. Given this history, the criteria for a major depressive disorder are not met.

Delirium; identify and treat any life-threatening conditions then search for other underlying causes; this patient is an elderly man with a significant medical history on a prolonged hospital stay. His waxing and waning course of confusion and agitation suggests delirium over dementia. Yelling, restlessness, changes in consciousness, and hallucinations are all manifestations of delirium. Whenever a patient presents with delirium, an extensive search for the underlying cause must be undertaken. Elderly age is a risk factor for the development of delirium. He is taking multiple medications including ipratropium, the anticholinergic properties of which can cause delirium. An elderly person who has stayed in the hospital for a few days is at risk for infection, another frequent cause of delirium. Sources of infection for this patient include nosocomial pneumonia, as suggested by the acute onset of cough, and urinary tract infection, as suggested by having a bladder

catheter in place for more than 3 days. Vital signs, physical examination, electrolytes, white blood count, chest x-ray, urinalysis, and urine and blood cultures are appropriate for this patient. If his urinalysis is positive for infection, his urinary catheter should be removed. In this patient's case it may be necessary to insert a new, sterile catheter to achieve diuresis in the setting of congestive heart failure. Depending on the results of these steps, empiric antibiotics may be warranted until cultures allow the antimicrobial spectrum to be narrowed. This patient's medications should also be reviewed, and any extraneous agents should be eliminated. Health care providers should make every attempt to ensure the patient's safety, reorient him to the environment, and evaluate the appropriateness of using low-dose haloperidol if agitation becomes marked.

The family of a 49-year-old man with chronic schizophrenia brings a lawsuit against his psychiatrist after the man develops repeated grimacing and lip-smacking movements. The family is concerned that the man's antipsychotic medication may have caused these effects. On what grounds could a lawsuit such as this be successful?

The case could be successful if informed consent was not obtained; if the psychiatrist had not adequately described the possible side effects of the medication to the patient at the time of its institution, this would be a violation of informed consent laws. Also, if the patient underwent a competency evaluation and was deemed to not have been capable of making an informed decision at the time of the institution of this treatment, this would violate informed consent laws.

A 20-year-old male is brought to the emergency department (ED) after refusing to eat any food for almost a week. He tearfully states that the government has been poisoning all the food in his family's household. He admits to having attempted suicide recently, and claims that he would be "better off dead." He has been expressing these fears regarding the government for the last 6 months. What is the likely diagnosis?

Schizoaffective disorder, depressive type; this disorder involves at least 1 month of simultaneous mood disorder and psychotic symptoms, and at least one 2-week period where the patient experiences psychotic symptoms in the absence of mood symptoms.

An 8-year-old girl presents to her physician because she has been having trouble with her schoolwork. She is perfectly attentive in class and does not demonstrate any disruptive or impulsive behaviors. Around her home she helps her mother with chores and is capable of cleaning and dressing herself. She has the most difficulty with reading and according to her mother it takes her “forever” to read a single page of a book. She does poorly on her reading exams and cannot keep up with the rest of her class. At recess she plays well with the other children. What is the approach to the diagnosis of this disorder?

A 14-year-old boy recently in trouble for repeated use of profanity in class presents to his primary care physician for evaluation. The boy is sitting in a chair, occasionally grunting and snorting with repetitive eye blinking and throat clearing. He has had terrible difficulty completing his schoolwork lately and admits to using profanity in class. He tells the physician he is aware that shouting profanity in class is wrong but he feels an urge to do so. His father has a similar problem. What is the treatment for this disorder?

A 76-year-old man complains to his doctor of extended, painful erections after beginning a new antidepressant medication. What drug is he likely taking?

A 43-year-old woman has been homeless for 5 years since her husband left her and she lost her job. She lived on the street and moved from one shelter to another. Through one of the job skills training programs at a shelter she learned how to sew and obtained a job at a tailor’s shop

Before making the diagnosis of learning disorder, investigate the potential for socioeconomic disadvantages, poor schooling, language barriers, hearing or vision impairment, communication disorders, mental retardation, and pervasive developmental disorders. In the absence of any functional impairment, this child’s specific difficulty with reading as compared to children of her age suggests the diagnosis of learning disorder, or more specifically reading disorder. Five percent of school-age children have learning disorders. They are usually diagnosed by specific intelligence and achievement testing.

Treat Tourette disorder with clonidine or antipsychotics; multiple, involuntary, and uncontrollable motor and vocal tics characterize Tourette disorder. Tics are sudden, swift, repetitive, arrhythmic, stereotyped movement or vocalization. This boy’s coprolalia is an example of a type of vocal tic. Low doses of antipsychotics such as haloperidol, risperidone, olanzapine, and ziprasidone are used to treat Tourette disorder in addition to supportive psychotherapy targeted at minimizing negative social consequences of multiple vocal and motor tics. The use of pimozide is avoided because of the potential for QTc prolongation.

Trazodone (Desyrel) and nefazodone (Serzone) can cause priapism (painful erections).

Altruism; she has demonstrated altruism by finding a way to help or care for other people so as to decrease her own anxiety or fears about becoming homeless again. Altruism is a mature defense mechanism learned during late

where she has worked for 8 months now. She saved enough money to move into a small apartment where she pays monthly rent. She remembers what it was like to be homeless and fears that something bad will happen to her that will cause her to lose her apartment so that she will be homeless again. Three nights each week she volunteers at the homeless shelter giving out food and helping to teach job skills. What defense mechanism has this woman employed?

A 31-year-old man is arrested after a woman complains that he was rubbing his genitals against her leg on the subway. When interviewed by police, the man claims he is seeking help from a psychiatrist for a disorder. What is he being treated for?

A 21-year-old, emaciated woman is seen in the ER for "malnutrition." Physical examination is unremarkable aside from the presence of fine, thin hair on the trunk of her body. Laboratory results are as follows: Na 140, K 3, Cl 97, HCO₃ 18, and pH 7.29. Her BMI is 17. What is the likely diagnosis and cause of her abnormal lab findings?

A 15-year-old female is brought to her physician for being significantly underweight. On questioning, she expresses dissatisfaction with her body and wishes that she was "a few pounds lighter." Her last menstrual period was 1 year ago. She complains of a loss of interest in her hobbies and spends most of the day in bed. For the past month, she has been unable to concentrate on her schoolwork, and she is now in danger of failing some of her classes. What is her diagnosis? How should she be treated?

A 31-year-old African American woman with a history of a prior caesarian section

childhood or early adulthood and distorts external reality to a lesser degree than an immature defense mechanism.

Frotteurism; frotteurism is sexual excitement derived from rubbing one's genitals on unsuspecting people, usually in a crowded place.

Anorexia nervosa, purging type; her abnormally low BMI suggests the diagnosis of anorexia, as bulimic patients typically maintain normal body weight. This woman also has a metabolic acidosis, as indicated by her low bicarbonate and pH levels. The likely cause of this acid-base disorder is diarrhea secondary to laxative abuse. The fine hair on the trunk of her body is lanugo, which is a physical sign of malnutrition.

Anorexia nervosa and major depression. Treat with psychotherapy, weight gain programs, and anti-depressants; major depression and obsessive-compulsive disorder are the psychiatric disorders most often seen in patients with anorexia. Psychotherapy (e.g., behavioral [with a focus on operant conditioning] therapy and family therapy) and supervised weight gain programs are most effective in treating anorexia nervosa. Fluoxetine and other SSRIs are useful for comorbid depression.

Manage somatization disorder by providing psychological support

for a triplet pregnancy presents to her family physician with an inability to enjoy sexual intercourse. Over the last 2 years she has had difficulty becoming sexually aroused with her partner of 10 years. In addition, she reports experiencing nausea; frequent diarrhea; headache; muscular pain in her legs, neck, and back; and numbness in her fingers. She thinks that her mother had experienced similar symptoms when she was younger. Her father has lived in her home over the past 3 years while dying of pancreatic cancer. What is the ideal approach to managing this disorder?

A 56-year-old woman recently diagnosed with depression complains of difficulty in achieving orgasm during sexual intercourse. Which antidepressant should be initiated to treat depression and which should be avoided?

A 52-year-old woman is brought to the hospital by a local policeman because she presented to the police station asking about where she was. She does not recognize any parts of the city around her. She is able to correctly identify herself and remains alert without any trouble speaking or slurring of speech. She denies alcohol or drug use. The physical examination is completely normal except for memory testing. The last thing she remembers is being with her husband and two children 3 hours ago but has no idea where they are or where she is now. After 2 hours of observation in the hospital while the physicians attempt to locate her

through a therapeutic relationship; in the absence of a medical cause, the existence of a sexual symptom, at least four pain symptoms, at least two GI symptoms, and at least one pseudoneurologic symptom all beginning before the age of 30 and lasting for at least 2 years is suggestive of somatization disorder. This disorder is more common in females, lower socioeconomic class, and those with family history of illness. The symptoms are not consciously produced by the patient. The ideal approach to managing this disorder involves commitment to developing a therapeutic doctor-patient relationship and providing psychological support in the form of regular follow-up visits focused on psychotherapeutics instead of further medical workup.

Bupropion or mirtazapine. Avoid SSRIs; patients taking bupropion (Wellbutrin) or mirtazapine (Remeron) have a lower incidence of sexual side effects. SSRIs, as a class of antidepressants, have a higher incidence of sexual side effects and may be avoided in patients already experiencing sexual dysfunction if other antidepressant treatment options are available.

Transient global amnesia; sudden loss of memory and recent events accompanied by the inability to recall new information suggests the diagnosis of transient global amnesia. This disorder typically presents in middle or elderly age. Attacks are episodic, lasting between minutes to hours and usually resolving within 24 hours without any residual memory loss. Note that this woman was aware of her deficits and retained her personal identity. She inquired mostly about the details of her surroundings. There was no impairment of executive functioning or language.

family, she suddenly remembers exactly where she is and has no further memory deficit. What is the diagnosis?

A 35-year-old man is described by his acquaintances as something of an “odd duck.” A few years ago he was convinced that his neighbors were conspiring against him, but he no longer thinks that this is true. He has strewn an assortment of dolls on his front lawn, stating that he believes that they will bring him good luck. Once in a while, he is seen walking from house to house in his neighborhood, seeking to enlist members for a “new age” religion that he claims to have founded. What is the likely diagnosis?

A 28-year-old male complains to his primary care physician who recently started treating his hypertension that he is not sleeping well, has lost interest in playing in his corporate softball league, and feels “down.” His vitals are T 98.6°F, HR 78, BP 128/82, and RR 14. What diagnosis must the physician rule out?

A 35-year-old investment banker comes to your office seeking help for “insomnia.” He reports making it into bed by midnight every night but that he doesn’t fall asleep until 3 a.m. He is then exhausted the next day and must drink four espressos over the course of the day to keep awake and productive. What advice would you give him?

A 9-year-old boy comes into his parents’ room in the middle of the night. He is crying and screaming and when asked what the problem is, he responds simply with more crying. His parents try to console him, but he remains upset until he soon returns to bed and falls back asleep. In the morning, the boy has no recollection of the event. His parents comment that this sort of episode has been happening for months. What is the diagnosis?

A 45-year-old man is admitted to the ICU after a car accident. He has three fractured ribs and a few minor contusions, but no

Schizotypal personality disorder; this disorder involves a pattern of social deficits marked by eccentric behavior, cognitive or perceptual distortions, and discomfort with close relationships, beginning by early adulthood and present in a variety of contexts. Patients with this disorder may display magical thinking and bizarre fantasies. Schizotypal personality disorder must be distinguished from schizophrenia, in which patients are frankly psychotic.

Substance-induced mood disorder; the patient may be taking a beta-blocker for his hypertension, which can induce depressive symptoms.

Advise the patient to reduce the amount of caffeine that he drinks every day and also to try to limit coffee and caffeine intake to earlier in the day.

Sleep terror disorder; the patient awakes upset, is unable to be consoled, and is unable to recall the event. All of these features are suggestive of a sleep terror.

Airway management and withdrawal prevention; airway protection is always the paramount

neurologic deficits. His vitals are T 101.2°F, HR 104, BP 126/75, RR 20, O₂ saturation 99%. On examination, his pupils are 4 mm and reactive bilaterally. His patellar and biceps reflexes are 3+ bilaterally. His toxicity screen from admissions shows a blood alcohol level (BAL) of 30 mg/dL. What is the proper management of this patient?

A 3-year-old boy is brought to his physician by his parents because they have noticed he acts very differently from children of the same age. His parents complain that their son never looks at them in the eye, seems bothered when hugged, never seems to smile, and has not developed much of a vocabulary. In the office, the child faces a corner making a repetitive high-pitched sound while rocking back and forth. When the physician approaches him, the child starts screaming uncontrollably. The child does not respond to his name and is comforted only by a toy car which he shakes incessantly. His parents describe this as his usual behavior in addition to eating according to a very specific time schedule at home. Any alteration in the schedule causes unrest in the child. What disease processes frequently accompany this disorder?

concern. With his documented history of alcohol use and signs/symptoms of sympathetic hyperactivity (fever, tachycardia, and hyperreflexia), this patient is at risk for alcohol withdrawal. Although he may not require intubation now, threshold for intubation should be low in patients withdrawing from alcohol. His BAL is relatively low, and given the history, this likely means that he has nearly finished metabolizing the alcohol in his system. It is at this time that patients are at greatest risk for withdrawal and delirium tremens (DTs). It is important to note that a patient's BAL does not need to be very high nor zero for them to begin withdrawing. Another major concern is that this patient will begin to seize and/or go into DTs, as occurrence of these problems is most common within the first 48 hours after his last drink. Therefore, the patient should be started on a lorazepam drip and slowly tapered over the next few days.

Comorbid seizures and mental retardation frequently accompany autistic disorder; impaired social interactions, impaired communication skills, and a highly limited set of activities and interests characterize autistic disorder. As noted in this child, poor eye contact, lack of facial expression, and poor response to social cues are among the most frequent initial disturbances noted in patients with autistic disorder. Behaviors and interests are described as restrictive, repetitive, and inflexible. This disorder belongs to the spectrum of pervasive developmental disorders. Twenty-five percent of children with autistic disorder have comorbid seizures and seventy-five percent have mental retardation.

A 45-year-old homeless man with chronic schizophrenia is seen in a free mental health clinic. He has had schizophrenia for 20 years but has always refused to take medications regularly. What is a good treatment strategy for patients who are noncompliant with their medications?

The physician can consider administering a depot injection; injectable depot injections such as haloperidol decanoate, fluphenazine decanoate, and risperidone depot are effective in decreasing the rate of relapse in patients who are not compliant with daily oral medication.

A 78-year-old man is brought to the psychiatrist by his daughter because he has been sad recently. His wife died 2 months ago from breast cancer after 48 years of marriage. The man is neatly dressed and admits to thinking about his wife often. He complains of "not sleeping well or eating much." He has continued to volunteer at the local soup kitchen as he has since retirement. What information must the psychiatrist elicit when making the diagnosis of depression in the context of grief?

Duration of symptoms, functionality, and presence of psychotic symptoms or suicidal ideation; there is much variation in what different individuals and cultural groups deem "normal bereavement." Functional impairment, suicidal ideation, psychomotor agitation, severe or unrealistic guilt, marked hallucinations and delusions, and symptoms that persist for more than 2 months are abnormal reactions to grief and may point to a diagnosis of depression.

A 37-year-old businessman is leaving work one afternoon when he suddenly feels his heart beating quickly "through his chest," breaks into a cold sweat, and feels a huge lump in his throat. He thinks he is having a heart attack and might be dying. After loosening his tie and sitting down, he feels better after 20 minutes. What is the likely diagnosis, and what is the proper treatment if it were to happen again?

Panic attack; as the symptoms became apparent in a very acute fashion and peaked quickly, panic attack is the most likely diagnosis. If it occurred again, he could take a benzodiazepine such as alprazolam (Xanax) for short-term treatment.

A 26-year-old woman gave birth to a healthy baby boy 3 weeks ago. Her husband has noticed that she doubts her ability to care for the child and that she is crying on a daily basis. She has not had any thoughts of harming herself or the child. What is the diagnosis, and what is its prevalence?

Postpartum depression, prevalence of 10–15% in new mothers; the same criteria for depression are used to diagnosis postpartum depression, which should be distinguished from postpartum "blues," a mild dysphoric illness that occurs in up to 50% of postpartum women.

A 4-year-old boy spends most of his day with his mother. He goes to preschool for a couple of hours each day but always spends the rest of the day with his mother. They go shopping together, eat their meals together, and play together. He has a sister who attends elementary school, and his

Oedipal component of the phallic stage; Freud believed that infants have sexual drives and pass through specific stages of psychosexual development. In each stage the individual finds a different source of gratification. In this scenario, the

father works as a lawyer. Around dinnertime his father comes home, embraces his wife, and kisses her in front of the children. The boy becomes enraged, crying, and tugging at his mother's pant leg. According to Freud, what stage of psychosexual development best characterizes the young boy?

A 25-year-old white woman presents to her primary care physician with intractable nausea over the last year. Nothing seems to alleviate the nausea. She has tried antiemetics and a complete change in her diet to no avail. She also complains of headache and pain in her legs and arms. Her menstrual cycles have been regular and a pregnancy test is negative. Her vitals signs and physical examination are normal. Further workup reveals no abnormalities in electrolytes, complete blood count (CBC), endocrine studies, and viral titers. All imaging to this point has been negative. What is the most likely diagnosis?

A 32-year-old emaciated female with a history of anorexia is admitted to the hospital after collapsing at her workplace. According to coworkers, she has eaten very little in the past week and was appearing more and more tired. After physically examining her and obtaining labs, ER physicians determine that she is severely malnourished and start her on IV fluids so as to resuscitate her. On regaining consciousness, the patient pulls the IV out of her arm and demands to leave. The attending physician advises her that because of her condition, she should stay in the hospital for a few days so that she can be fed properly, as her malnourishment is life threatening. The patient refuses. Would it be justifiable for the ER physician to admit her to the hospital involuntarily?

boy is competing with his father for the love and attention of his mother. Freud believed this represented the infant's struggle with his erotic love for his own mother. This describes the oedipal component of the phallic stage of psychosexual development. Resolution of this struggle ends in identification with his father and transference of love to other women. The other stages of psychosexual development are oral, anal, latency, and genital.

Undifferentiated somatoform disorder; with a negative medical workup and multiple somatic complaints, a somatoform disorder is likely. Because these symptoms are fewer and of shorter duration than those required for the diagnosis of somatization disorder, the diagnosis of undifferentiated somatoform disorder is more appropriate. Once medical causes have been ruled out, the treatment of undifferentiated somatoform disorder does not differ from that of somatization disorder.

Yes; since there is strong evidence that the patient is at high risk for harming herself through willful malnourishment, the ER physician would be justified in both admitting and treating the patient against her wishes.

A 37-year-old homeless man is brought into the ED after being picked up by the emergency medical technicians (EMTs) in front of an outdoor café. Apparently the man was yelling at the customers seated at tables about nonsensical things. He kept asking them why he was at the zoo. On examination, he was disheveled, malodorous, and confused. He had trouble keeping his balance and walking a straight line. On extraocular muscle examination, the physician asked him to follow a finger out to his right side with his eyes while keeping his head straight ahead. His left eye moved medially to his nose while his right eye could not move laterally to the finger. BAL was elevated. What is the treatment for this disease process?

A 53-year-old man is constantly belittled by his boss at his banking job. The boss is very critical of the man's job performance in front of his other coworkers. According to his boss, nothing ever seems to be done correctly when this man is responsible for a task. The boss has even started poking fun at the man's personal character in the office. Never before in previous jobs has this man been treated by a superior this way. He often feels humiliated and angry when he comes to work. For the boss's birthday the man gives him a birthday card and a generous gift certificate to his favorite restaurant. What defense mechanism has this man employed?

A 25-year-old male is brought to a psychiatrist by his girlfriend because he "has not been sleeping for the last week." On examination, the man displays several symptoms of mania, including pressured speech, distractibility, grandiosity, and flight of thought. The psychiatrist diagnoses the man with BD and prescribes 300 mg lithium bid. Later, the patient's insurance company requests the records of this patient's treatment. How should the physician respond?

Wernicke encephalopathy, treat with immediate intravenous thiamine infusion; prolonged alcohol abuse leads to thiamine deficiency. Because the mamillary bodies and dorsomedial nucleus of the thalamus are dependent on thiamine, its deficiency may result in Wernicke-Korsakoff syndrome. This patient demonstrates the classical triad of ataxia, abnormal eye movements including nystagmus and lateral gaze palsy, and confusion.

Reaction formation; he has demonstrated reaction formation by converting an unacceptable or distressing emotion into its opposite. Reaction formation is an immature defense mechanism learned during childhood and distorts an individual's external reality in an attempt to cope with a stressor. This defense mechanism is considered to be immature because it does not provide an effective means for adaptation. In this instance, the man's behavior does not address the actual source of anxiety; instead, he rewards his boss and most likely will continue to be belittled and treated poorly in the future.

The physician must obtain authorization from the patient in order to release his medical records. Insurance companies cannot compel psychiatrists to release patient records, although they can deny benefits if the records are not released.

A 14-month-old child presents to her local ER with a seizure. She has never had a seizure before this one. Her parents have not noticed any problems with their daughter since birth. She has had regular checkups with her pediatrician. Until recently she has played with other children, used her hand to hold and drink from a cup, walked, built towers made of blocks, and said “mama” and “dada.” Over the last few weeks her parents noticed a big change in her behavior. She no longer called her parents by name, could not feed herself or drink from a cup, and developed repetitive hand movements. What is the diagnosis?

An 18-year-old college freshman has not slept for 4 days because he has felt “full of energy.” He successfully finished an exam in one of his classes on Friday and attended his morning classes on Monday without any difficulty. Over the weekend and through Tuesday he was very gregarious and his friends noted his mood to be elevated. What is the diagnosis?

A 39-year-old white man with a history of hypertension presents to his primary care physician with his wife because of “forgetfulness.” People around him have commented that he seems to forget conversations, appointments, and recent events. His wife has also noticed strange movements of his upper extremities, which she describes as “dance-like.” He has been dropping things lately, such as his morning cup of coffee that “just doesn’t seem to stay in his hand.” On examination, the man is calm and pleasant with slightly elevated blood pressure. Occasionally, there are slow, writhing movements of his hands, arm, and neck. Examination of the eye reveals golden brown pigmentation on the posterior corneal surface. Lab work shows normal CBC and electrolyte panel. A test for serum ceruloplasmin is low. What is the diagnosis?

Rett disorder; an initial period of normal development followed by numerous deficits and neurologic decline suggests the diagnosis of Rett disorder. This disorder is seen in females and thought to have a genetic cause. Children with Rett disorder appear to develop normally until 6–18 months of age when they enter a period of regression characterized by deceleration of head growth; loss of hand coordination; onset of unusual; repetitive hand movements; loss of social; engagement; and eventually severe retardation.

Hypomania; despite this man’s abnormal mood for 4 days, he was still able to take an exam, socialize, and attend classes. With at least 4 days of abnormal mood and without significant impairment of functioning, a diagnosis of hypomania can be made and should be differentiated from mania.

Wilson disease; Wilson disease is characterized by excess copper due to a deficiency of the copper-carrying protein ceruloplasmin, which can be measured in the serum as it was in this patient. Also termed hepatolenticular degeneration, Wilson disease is an autosomal recessive disorder which presents most often between 20 and 40 years of age. Psychiatric disturbances in this disorder include changes in personality and mood disturbances. Neurologic symptoms may include impairments in memory and executive functioning, difficulty with coordination, gait disturbances, tremor, and rigidity. The golden brown pigmentation of this patient’s posterior corneal surface, or Kayser-Fleischer ring, is a characteristic finding of this disease.

A 53-year-old mother of three with no past medical history complains that over the last 5 days she has experienced decreased concentration, feelings of guilt, trouble sleeping, and low energy. She also says that she skipped her book club meeting yesterday because she did not think it would be any fun. What is the diagnosis?

Depressive disorder not otherwise specified; the diagnosis of major depressive disorder cannot be made until the criteria for depression are present for at least 2 weeks. The diagnosis "depressive disorder not otherwise specified" may be appropriate for presentations of depressed mood with clinically significant impairment that do not meet criteria for duration or severity.

A 35-year-old woman presents to her primary care doctor with her boyfriend of 6 months. She complains that since the beginning of their relationship, her boyfriend has become increasingly helpless. She claims that he is unable to make simple, everyday decisions without her help, and is constantly seeking her support and approval. When asked for his opinion, the boyfriend seems afraid to disagree with her. After further questioning of the man, the physician discovers that he has been in one relationship after another for all of his adult life. What is the likely diagnosis of this man?

Dependent personality disorder; this disorder involves a pattern of submissive and clinging behavior due to excessive need to be taken care of. Common features of this disorder include an inability to express disagreement because of fear of loss of approval and the urgent seeking of another relationship once one ends.

A 35-year-old woman has been diagnosed with schizophrenia for 10 years. She has complained of persistent hallucinations, such as constantly hearing voices that tell her to kill herself. She states that at this point, she has "gotten used to it." She believes that her family is being targeted by the Taliban, and she worries whether she will "make it through the year alive." She does not display disorganized thought or behavior. She has managed to hold a low-paying job over the years. What subtype of schizophrenia does this woman suffer from? What prognosis is this subtype associated with?

Schizophrenia, paranoid subtype. Better prognosis than other subtypes; this subtype is associated with delusions and hallucinations, but has no predominance of disorganized or catatonic behavior. Patients with this subtype tend to be higher functioning and have a better prognosis. Patients with the disorganized subtype of schizophrenia tend to be lower functioning and have a worse prognosis.

A 16-year-old girl has started spending a longer time at the mirror putting on makeup and hair spray before going to school. She suddenly cares more about the clothes she wears, the things she says, and

Identity versus role confusion; Erikson developed a psychosocial model of continual ego development throughout specific task-oriented stages along the continuum of birth

the friends that she spends time with. Prior to this period she was teased about being a tomboy for wearing athletic outfits, and she always participated enthusiastically in physical education class. Now she walks the halls at school like she has seen models do during fashion shows. She tells her teachers that she wants to be a fashion designer. In physical education class she refuses to participate because she does not want to get dirty or sweaty. According to Erikson, what life cycle stage best characterizes this girl?

A 58-year-old woman enters a “persistent vegetative state” following a motor vehicle accident. She is being kept alive with life support measures. Physicians have concluded that the woman has suffered severe, irreversible brain damage. The woman’s siblings state that prior to the accident, they had had numerous conversations with her in which she expressed a desire to be removed from life support should she ever be in a coma. Despite this, the woman’s parents say that they cannot bear to see their daughter die and ask that the life support measures be continued indefinitely. After consulting with the woman’s attorney, physicians discover that she has not signed a living will to document her wishes. What is the most appropriate next step of action?

A patient with schizophrenia presents to the ED with persistent hyponatremia and low urine specific gravity. He complains of frequent urination. What is the likely diagnosis and subsequent management?

to death. He believed that the ego continually develops throughout life, constantly presenting psychosocial challenges to the individual who may choose to successfully resolve the challenge and progress to the next stage or fail to resolve the challenge and developmentally regress. In this scenario, the teenager has been experimenting with different self-identities and is consciously influenced by what others think of her, especially her own peer group. Erikson described this stage as identity versus role confusion in 13–21 year olds. Successful resolution of this challenge results in a solid, stable sense of self. Other life cycle stages include trust versus mistrust, autonomy versus shame, initiative versus guilt, industry versus inferiority, intimacy versus isolation, generativity versus stagnation, and ego integrity versus despair.

The patient has made her wishes clearly known; therefore, even in the absence of a living will, those wishes should be followed, and life support should be withdrawn; in cases where a patient’s wishes have not been clearly communicated, hospitals may carry out their interest in “the protection and preservation of human life” by denying requests from others for discontinuing life support.

Psychogenic polydipsia; restrict water intake; self-induced water intoxication should always be considered in the differential diagnosis of confusional states and seizures in schizophrenia patients; as many as

A 72-year-old woman with a history of congestive heart failure presents to the ED with shortness of breath. She is admitted to a general medical team and over the course of 2 days she receives furosemide for diuresis, and her cardiac markers are assessed to rule out a myocardial infarction. She remains in her hospital bed throughout much of her hospital course. During the middle of the third night she is found by the nurse to be climbing out of bed and calling out her deceased husband's name. The patient becomes agitated as the nurse attempts to reassure her. Eventually the nurse coaxes her to return to bed. Soon after this incident as morning begins, the patient becomes difficult to arouse. On examination, the patient's temperature is 101°F, BP 134/84, HR 95. As she is examined the patient becomes agitated again. She is coughing and rhonchi are heard in the right middle lung field as well as bibasilar crackles. Cardiac examination is unchanged. Abdominal examination is benign. Extremity examination reveals pitting edema improving from previous examinations. How can this patient's cognitive state best be described? What is the likely underlying diagnosis?

A 23-year-old man discusses his sexual life with his psychiatrist. He talks about his upbringing, which he describes as nothing out of the ordinary. His parents bought him toy soldiers and toy power tools. He never played with his sister's dolls. He was pushed to play sports and enlisted in the military at age 18. He had good relationships with his family and identified with his father. After leaving the military at age 21 he began to associate with a new crowd of friends. Often times he dresses as a female when he socializes

20% of schizophrenic patients drink water excessively. Medications such as lithium and carbamazepine, which cause water retention, can aggravate these symptoms.

Delirium most likely secondary to hospital-acquired pneumonia; this patient's acute, fluctuating, and transient disturbance of consciousness accompanied by confusion and other changes in cognition is indicative of delirium. It is important to recognize that delirium is not a diagnosis but rather a sign that there exists some underlying, potentially life-threatening medical condition. Simply staying in a hospital for a few days is a risk factor for an elderly person to develop a hospital-acquired pneumonia. The fact that the patient is febrile, coughing, and has findings on pulmonary auscultation supports a diagnosis of pneumonia. Further tests such as white blood cell count, sputum culture, chest x-ray, and electrolytes are warranted to make the diagnosis as well as rule out other causes of delirium. Empiric treatment of the suspected pneumonia with antibiotics should be initiated until an organism is identified or some other diagnosis becomes more appropriate with further workup.

Male gender identity, female gender role when socializing, homosexual sexual identity; gender identity refers to a somewhat permanent sense of being male or female as determined by upbringing. This identity is established by age 3 and resistant to change. This person's gender identity is male. Gender role refers to a temporary or transitory affiliation of behaviors, attitudes, or dress associated with being male or female. Although most of the time this person dresses male,

but dresses as a man for work. He is not interested in undergoing surgical procedures to alter his genitals. He is attracted to other men and currently is satisfied with his relationship with another man. How can this person be described in terms of gender identity, gender role, and sexual identity?

A 19-year-old man reports “not being able to sleep.” He reports no other symptoms, denies excessive daytime sleepiness, and states that his tossing and turning in bed is a problem nearly every night. Since he is a young man, he has relatively little medical history, and he is not taking any prescribed medications. You cannot give him a diagnosis at this visit and he returns 6 weeks later with the same complaints and now is concerned because his schoolwork is suffering. What other test might you order?

A 41-year-old man presents to his primary care physician with back pain. He reports that he has been afflicted by back pain for years but now it has become intolerable. He works as a plumber and says that he cannot imagine having to work in this condition. He claims that the only thing that has helped him in the past has been Percocet. He asks for a prescription and a note for work so that he can file for disability. He has had no bowel or bladder trouble. On examination, his back is mildly tender to palpation with no sensory loss and negative straight leg raise testing. He walks with an exaggerated limp while clutching his flank. What concepts are important in the treatment of this condition?

A 37-year-old male brings a malpractice suit against his physician. He claims that his physician deviated from the standard of care in not prescribing him antihypertensive medication to treat his high blood pressure, which resulted in him

his gender role can be described as female when he socializes. Sexual identity refers to preference in gender for sexual relations as determined by the individual. This person prefers males in his sexual relations; thus, his sexual identity is homosexual. In contrast to this example, it should be noted that most transvestites are heterosexual and most homosexuals do not cross-dress.

Toxicology screen; substance abuse is a common cause of sleep disorders, specifically insomnia. This patient should be screened for multiple drugs, including alcohol and cocaine. However, prior to ordering a toxicology screen, the physician must take a detailed drug history. By identifying drug use and offering the patient help and treatment, he may be able to get over this current insomnia and also avoid many deleterious health consequences in the future.

Malingering—remove the external incentive; although this patient may have true back pain, his presentation is out of proportion to the relatively benign physical examination. This presentation, in the context of external incentives such as pain medication and being excused from work, is highly suggestive of malingering. The therapeutic approach to such a patient should be nonjudgmental, confidential, and should offer the patient an opportunity for psychotherapy that may reveal underlying psychosocial issues driving the malingering behavior.

Think of the 4 Ds: The lawyer must prove that there was a divergence from the standard of care (duty) that directly caused the patient’s heart attack (damages).

having a heart attack. What must the patient's lawyer prove in order to show that malpractice occurred?

A 31-year-old consultant is about to make a presentation to a prospective client. Outside of the conference room he begins to hyperventilate and perspire. He sits on the ground and cannot bring himself to enter the room. What is the likely diagnosis and the best treatment course?

An 82-year-old white woman with a history of hypertension and diabetes is brought to her physician by her daughter because of "forgetfulness." At first, the daughter noticed only that her mother would not remember phone conversations with her. Recently, she has visited her mother's house to find the stove left on, clothes scattered about the house, and an answering machine full of messages regarding missed lunch appointments with friends. A week ago, a neighbor brought her mother back home after finding her lost in the town's center. On examination, she demonstrates difficulty with word finding, immediate recall, recent memory, and sequential tasks. The patient answers questions accurately about her childhood and does not seem to think that there is anything wrong with her. What are the gross and microscopic pathologic findings in patients with this disease?

A 24-year-old lieutenant who recently returned from combat in Iraq comes into your office complaining of feeling scared every time he drives. He said that this fear began 3 or 4 days ago, and he has been back from the war for only 3 weeks. When he drives, he describes "heightened senses" as well as flashbacks to driving in Iraq and seeing roadside landmines explode. What is the diagnosis?

Social phobia manifested by public speaking; the approved medical treatment for social phobia is paroxetine (Paxil). Some patients with this type of performance anxiety have also been treated acutely with propranolol, a nonselective beta-blocker.

Alzheimer's disease: cortical atrophy, neurofibrillary tangles, and amyloid plaques; the characteristics of memory loss in addition to loss of one or more cognitive abilities (in this case aphasia and impaired executive functioning) with chronic onset support the diagnosis of dementia. Alzheimer's disease is ultimately a pathologic diagnosis; however, prominent memory loss with minimal focal findings on examination makes this the appropriate classification of dementia in this case. Gross pathologic findings include cortical atrophy. Microscopic pathologic findings include loss of forebrain cholinergic nuclei, neurofibrillary tangles, amyloid plaques composed of abnormal tau proteins, and granulovacuolar degeneration. Pharmacologic therapy to treat memory loss in Alzheimer's dementia includes acetylcholinesterase inhibitors and *N*-methyl-D-aspartic acid (NMDA) receptor antagonists.

The diagnosis of posttraumatic stress disorder (PTSD) versus acute stress disorder (ASD) cannot be precisely determined at this point; given that the symptoms have lasted only a few days, a diagnosis of PTSD cannot be firmly established as it requires persistent symptoms for more than 4 weeks. The symptomatology of PTSD and ASD are the same, but ASD is likely the correct diagnosis in this case. If his symptoms lasted another 2 weeks, then PTSD would be the correct diagnosis.

A 37-year-old man is arrested for auto theft. According to his record, he has had five other arrests since the age of 13, for offenses ranging from aggravated assault to vandalism. He also has a history of aggressiveness toward authority and general recklessness. When asked if he feels bad about his actions, he replies "Why should I?" What is the likely diagnosis?

An 84-year-old white woman with a history of hypertension is admitted to the hospital for dehydration and malnutrition. Four months ago, her son brought her to their family physician because of "forgetfulness." At first the son noticed only that his mother would not remember conversations she had with him. Recently, he visited his mother's house to find the stove left on, odd piles of random objects scattered about the house, overflowing trash cans, and an answering machine full of messages regarding missed appointments with friends. An examination at that time demonstrated difficulty with word finding, immediate recall, recent memory, and sequential tasks. The patient answered questions accurately about her childhood and did not seem to think that there was anything wrong with her. During this hospitalization she is highly agitated and refuses to eat. In contrast to her behavior over the last 4 months, the patient has periods of complete clarity mixed with confusion that is worse at night. Her sleep-wake cycles are also disturbed. Her physical examination is notable for orthostatic hypotension, dry mucous membranes, and decreased skin turgor. How can this woman's mental status be best described? What is the most likely underlying cause?

A 53-year-old man with a history of alcohol abuse and depression is hospitalized for malnutrition. He is cachectic on examination without any lymphadenopathy,

Antisocial personality disorder; this disorder involves a pattern of disregard for others and violation of the rights of others since age of 15. Patients with this disorder tend to lack remorse for their actions.

Delirium most likely secondary to dehydration in an Alzheimer's patient; this woman has dementia most likely of the Alzheimer's type, as suggested by characteristics of memory loss in addition to loss of one or more cognitive abilities such as aphasia and impaired executive functioning. It is important to note that delirium can be superimposed on an existing dementia. As the 1-year mortality of delirium approaches 35–40%, detecting delirium in a patient with dementia can be lifesaving. This patient was admitted with dehydration and the physical findings of orthostatic hypotension, dry mucous membranes, and decreased skin turgor suggest that she remains volume depleted. Volume depletion can cause acute changes in attention, arousal, and cognition characteristic of delirium. Careful volume repletion, as well as correcting any electrolyte abnormality, is necessary in this case. The patient should also be kept safe from harming herself or falling. Despite the underlying dementia, every attempt should be made to reorient the patient to person, time, and place using verbal cues as well as visual reminders such as easy-to-read calendars and clocks in an appropriately lit room.

Mirtazapine (Remeron); in addition to treating depression, mirtazapine (Remeron) has the advantage of causing weight gain for patients who

constitutional signs, or strong family history of cancer. A complete neoplastic workup is negative. The patient insists that his appetite is very poor and he has had trouble gaining weight because of this. Which antidepressant may be most appropriate in this case?

A 43-year-old woman presents to her primary care doctor for a regular checkup. She appears to be out of breath and states that she “almost died a few times” on the way to her doctor’s office. Her doctor notices that she answers his questions in much exaggerated terms, but that her answers lack precise detail. Moreover, her speech is provocative and flirtatious. When the doctor excuses himself to answer a telephone call, the patient grows irate, claiming that his job is to pay attention to her. What is the likely diagnosis?

A 21-year-old man is brought to the ED after exhibiting “erratic” behavior. For the last 4 months, he has become increasingly suspicious of the people around him, particularly his parents. He has barricaded himself in his bedroom, and his parents have overheard him shouting at “no one in particular.” In his answers to the attending physicians he is noted to jump from topic to topic randomly. His speech is frequently incoherent, and at other times, he complains of hearing voices that instruct him to harm his parents. What is the diagnosis?

A 29-year-old woman has begun to alienate her coworkers with her behavior. She continually states that no one else is able to meet her standards of excellence, and she constantly berates her colleagues to work harder. Despite her beliefs about the high quality of her work, she frequently misses deadlines, as she spends most of her time focusing on the minor, often irrelevant details of projects. She is known to brag about her great “relationship with God,” and she is quick to judge others on what she perceives as their “moral shortcomings.” What is the likely diagnosis?

have decreased appetite or weight loss.

Histrionic personality disorder; this disorder involves a pattern of excessive emotionality and attention seeking, present by early adulthood and in a variety of contexts. Patients with this disorder often engage in inappropriately seductive or provocative behavior to draw attention to themselves.

Schizophreniform disorder; this patient has had the symptoms of schizophrenia for between 1 and 6 months.

Obsessive-compulsive personality disorder; this disorder involves a pattern of preoccupation with orderliness, control, and perfectionism at the expense of efficiency, present by early adulthood and in a variety of contexts. Patients with this disorder often exhibit excessive conscientiousness and scrupulousness about morals and ethics. Obsessive-compulsive personality disorder must be distinguished from obsessive-compulsive disorder, in which patients have recurrent obsessions and compulsions that cause them distress.

A 52-year-old man with chronic schizophrenia visits his psychiatrist for a routine appointment. His psychiatrist notices that the man continually smacks his lips and grimaces. During the interview, the man blinks constantly, and his tongue occasionally darts out of his mouth. What is the diagnosis and subsequent management?

A 35-year-old white man with a history of hypertension and diabetes is brought to his family physician by his wife because she noticed he has been feeling “down” lately. He has started to have sudden irregular movements of his face and extremities. These movements have been uncontrollable and remind him of his father who had similar problems before dying. His wife describes a sense of worthlessness, a change in sleeping pattern, and an extreme moodiness in her husband. Recently, she has noticed him swatting his hands in the air and calling out as if he was speaking to someone. What is the specific inheritance pattern of the disease underlying this state of dementia?

A 27-year-old man recently diagnosed with schizophrenia presents for his initial evaluation. He is accompanied by his parents. They state that he has been acting strangely for months, even years. They describe him as becoming progressively more withdrawn. They allege that he has become more and more “apathetic”; for example, he recently quit his job and no longer attends to his basic hygienic needs. On questioning, he appears indifferent; he describes the recent death of a friend in a

Tardive dyskinesia; switch to atypical antipsychotic or reduce current dosage; tardive dyskinesia is a late-onset of choreoathetotic movements of the tongue, face, neck, trunk, or limbs, associated with prolonged exposure to antipsychotic medications, especially typical antipsychotics. Patients can be managed by switching from a typical to an atypical antipsychotic, or by reducing their current dosage. Symptoms of tardive dyskinesia may persist despite treatment.

Huntington disease exhibits autosomal dominant inheritance and is associated with trinucleotide repeat expansion on chromosome 4p; Huntington’s disease is an autosomal dominant disorder with complete penetrance. The mutation is due to a trinucleotide (CAG) repeat expansion in the Huntington gene on chromosome 4p. The typical onset is in the middle of the third decade of life. The sudden irregular movements of this patient’s face and extremities are termed choreoathetosis, which may also present as slow, writhing, dance-like involuntary flexion, extension, pronation, and supination of the fingers and hands. The underlying pathology of this disturbance in movement is atrophy of the caudate. This patient’s depressed mood is characteristic of the emotional lability associated with Huntington’s dementia.

Poor prognosis; many aspects of the man’s presentation point toward a poor prognosis: male sex, insidious onset of schizophrenia, poor premorbid functioning, and prominent negative symptoms. The man’s strong social support (in the form of his parents) is associated with a good prognosis. Other features that would be associated with a good prognosis are later onset, positive symptoms, mood

monotone. He exhibits flight of ideas and ideas of reference. His parents state that even when he was much younger, he did not perform well in school and had few friends. Despite this, they are eager to help their son with his troubles. According to the details of this man's presentation, what sort of prognosis can be expected?

A 56-year-old Asian woman with a history of hypothyroidism presents to her family physician with a 3-month history of severe pain in her neck and legs. Her job as an administrative assistant has been extremely demanding since she was hired 5 months ago. She is recently divorced and her recent attempts at dating other people have been unsuccessful. She has been taking Percocet without much pain relief. She has been out of work for 3 days because her pain has bothered her so much. She reports no history of trauma. Physical examination reveals diffuse tenderness to palpation over the back of her neck and the back of her legs without any loss in sensation or motor strength. There is no joint swelling or erythema of her joints and her antinuclear antibody screen is negative. What is the nature of her pain and how should it be treated?

A 24-year-old man was started on haloperidol 2 days ago for persistent hallucinations and delusions. Today he began having muscle spasms in his neck, which led to dyspnea and subsequent respiratory distress. His mother immediately took him to the ED, where the attending physician noted that his eyes were fixed in an upward gaze, and that he continually twisted his neck to the left side. What is the diagnosis and subsequent management?

symptoms, acute onset, female sex, few relapses, and good premorbid functioning.

Pain disorder—pain is unintentional and should be treated with detoxification of pain medications, resumption of normal activity, behavioral techniques, and psychotherapy; severe pain in multiple anatomic sites, psychological impact of a stressful job and recent disarray in personal life, and impairment in function preventing her from going to work suggest the diagnosis of pain disorder. The pain seen in pain disorder is unintentional in nature. General medical conditions, such as autoimmune causes in this case, need to be ruled out before the diagnosis is made. Treatment of pain disorder involves detoxifying patients from pain medications, encouraging the resumption of their normal daily activities, psychotherapy, and educating the patient on behavioral techniques effective in dealing with pain. The use of tricyclic antidepressants (TCAs), monoamine oxidase inhibitors (MAOIs), and SSRIs has shown benefit in some patients with pain disorder.

Acute dystonia; treat with anticholinergics or benzodiazepines; acute dystonia is a brief or sustained muscle spasm. Although any muscle group may be involved, it most commonly affects facial muscles (eyes, jaw, tongue). Acute dystonia occurs within the first 3 days of treatment initiation and is associated with high potency agents. It is treated with parenteral anticholinergic medications or benzodiazepines. Maintaining airway patency is imperative.

A man comes to the ER with no identification and clearly smelling of alcohol. He begins to tell an elaborate story about how he was tossed out of his car near the ER. When you return to the room 30 minutes later, he forgets that he has ever met you. On examination, you observe a jaundiced middle-aged man, with small testes and enlarged breasts. His temperature is 98.0°F, HR is 86, and BP is 134/86. What syndrome do you believe this man may have and how can he be managed?

A 19-year-old woman was recently hospitalized for being severely underweight. Since this time, she insists that she has been “eating regularly” and wishes to be discharged. She promises to continue her healthy eating behaviors on being released from the hospital. Is this sufficient for allowing her to be released?

A 53-year-old man with a history of hypertension, BD, and asthma presents to his physician with a “metallic” taste in his mouth. He has never experienced this taste before and nothing seems to extinguish it. The taste is not associated with any specific foods. On further questioning the patient reports modest weight gain. Considering this patient’s past medical history, what could be a possible explanation for the taste?

A 19-year-old presents to the ER accompanied by the coach of his football team. He seems animated and claims that he is “ready to play in the NFL.” His coach notes that although he has not been sleeping much in the previous week, he has seemed full of energy. During the interview, the teenager begins making sexual advances on a nurse in the room and eventually must be restrained by three security guards. The physician on duty contacts the boy’s father, who states that the boy has no history of this sort of behavior. On admission to the hospital, the boy states that he is ready to use his “healing magic” on other patients. What is the most likely diagnosis? What is the treatment of choice?

Korsakoff syndrome; the patient is showing physical signs of advanced alcoholism (jaundice, testicular atrophy, gynecomastia). He is also confabulating and exhibiting anterograde amnesia, both of which are signs of Korsakoff syndrome. Two-thirds of Korsakoff cases are irreversible but thiamine and folate should be supplemented.

No: The woman must maintain an agreed-upon weight; weight maintenance is the primary goal in the treatment of anorexia nervosa and supersedes all other issues; in this sense, it is not sufficient for the woman to promise to adhere to a healthy diet.

Side effect of lithium; if this patient has been on long-term lithium treatment for BD, he may be experiencing one of its side effects, metallic taste. Other side effects of long-term lithium treatment include weight gain, acne, hypothyroidism, and polyuria.

BD I. Treatment includes lithium, valproic acid, or an atypical antipsychotic; this is an acute manic episode. Because this patient has been experiencing a distinct period of elevated mood associated with grandiosity, decreased need for sleep, pressured speech, and increase in pleasure-seeking activities, his most likely diagnosis is BD I.

A 47-year-old man returns to your primary care office for his yearly examination. You are currently treating him for hypertension and hypercholesterolemia. Despite your repeated urgings for your patient to lose weight, he returns 20 lbs heavier than last year. As you complete the interview and physical examination, he complains that he has been experiencing an occasional headache. On walking your patient out to the waiting room, you see his wife waiting there for him. When she sees you she immediately says to her husband: "You told the doctor about the snoring ...

RIGHT !?" The patient then proceeds to explain that his wife has recently noticed him snoring and that she thinks that he stops breathing during sleep. What is the most likely diagnosis?

A 19-year-old man takes 2 hours to clean and dress himself in the morning. When he is ready to leave the house, he stands in the doorway and must turn the light switch off, then on again, then off, and so on. He does this exactly 200 times before he can leave the house. He claims that if he does not turn the light on and off 200 times, his apartment will catch on fire while he is gone. What is the diagnosis? How would you describe its components?

A 27-year-old law student comes to her primary care physician complaining of a rapid heart beat, abdominal pain, diarrhea, and lightheadedness almost every morning over the past week. These symptoms tend to lessen in severity during the course of the day, but are very troublesome to her. She recognizes that exams are "stressing her out," but she says that tests never worried her before. Before making the diagnosis of panic attacks or panic disorder, what habits should the physician inquire about?

A 39-year-old man is admitted to the ER after a minor automobile accident. He

Obstructive sleep apnea (OSA); the patient has the typical overweight habitus observed in individuals with OSA. These patients are prone to OSA as excessive body fat (around their necks) tends to collapse their upper airway when the patients are supine during sleep. This is the same mechanism that can produce snoring.

Obsessive-compulsive disorder; the obsession is a recurrent and intrusive thought of the man's apartment catching on fire, and the compulsion is his ritualized light-switching in hopes that it will "combat" the obsession. This clearly leads to significant disruption of the man's daily activities. Appropriate treatment includes pharmacologic therapy with SSRIs (at higher doses than those used for depression) or clomipramine (Anafranil) in combination with behavioral psychotherapy.

Caffeine intake and cigarette smoking (in addition to other drug use); these substances can contribute significantly to anxiety and its systemic symptoms. Their use should be limited if panic disorder is a suspected diagnosis.

Narcissistic personality disorder; this disorder involves a pattern of

refuses to let the residents treat him, claiming that only the “chief of the department” is good enough for him. When told that the chief is not available at the moment, he requests a phone, saying that he will “call in some favors.” He becomes enraged when a nurse tells him that all of the phones are currently being used; he yells “Can’t you see I deserve a phone more than anyone else in here!?” What is the likely diagnosis?

A 47-year-old woman with chronic schizophrenia is brought to the ER by her sister after she was found unresponsive with T 102°F. Her BP is 150/80, HR 120. On examination, she is diaphoretic, and her muscles are completely rigid. What is the diagnosis and subsequent management?

A 59-year-old man in excellent physical condition and with no significant past medical history presents to your office with complaints of daytime sleepiness. He reports nearly falling asleep while driving to your office. You order a sleep study that shows an average of seven apneic episodes per hour, each lasting between 20 and 30 seconds. Does this man meet the diagnostic criteria for sleep apnea? If so, what type? What other disease is associated with this type of sleep apnea?

A 46-year-old male is in the final stages of prostate cancer and is being kept alive with life support measures. The cancer has metastasized, and the patient’s physicians predict that his life expectancy is less than 6 months. The patient expresses a wish to have his life support removed. A psychiatric evaluation is performed, and the patient is found to be of sound mind

grandiosity, need for admiration, and lack of empathy beginning in early adulthood and present in a variety of contexts.

Neuroleptic malignant syndrome (NMS); discontinue offending agent; this is a life-threatening neurologic emergency. NMS typically presents with confusion, high fever, elevated BP, tachycardia, “lead pipe” rigidity, sweating, and greatly elevated creatine phosphokinase (CPK) levels. The most important step in management is to discontinue the offending agent. Although their efficacy has not been confirmed by clinical trials, dopamine agonists such as dantrolene and bromocriptine have been used. NMS is associated with all typical antipsychotics.

Yes, he meets the criteria for central sleep apnea (CSA): at least five episodes of apnea per hour, each lasting between 10 and 120 seconds. CSA is associated with heart failure, although it appears unlikely that the patient in this case would have heart failure given his (lack of) medical history.

Since the patient is competent, the life support should be withdrawn in accordance with his wishes.

and able to fully understand the consequences of his decision. However, his family members disagree with his decision and wish to go to court to keep him alive. What is the most appropriate next step of action?

A 42-year-old woman presents to the ED with a “paralyzed leg.” She was in her normal state of health until this morning when suddenly she could not move her left leg. This has never happened to her before. She has a history of hypertension treated with hydrochlorothiazide but otherwise has no medical problems. She has no history of psychiatric disease. On examination, her blood pressure is mildly elevated. Neurologic examination reveals normal strength and range of motion in all extremities except the left leg. She is unable to lift the left leg off the bed. Normal tone is present in the leg with no sign of flaccidity. With help, she can swing her legs over the bed and stand on both feet. Psychiatric examination finds no mood or anxiety symptoms. She does reveal that she was sexually abused as a child and her husband recently lost his job. She has two children who are doing well at college. What is the treatment of this disorder?

A 26-year-old female is seen by her primary care physician for a routine checkup. She is 5'3" and 110 lbs (BMI 19.5). On physical examination, the physician palpates a hypertrophic parotid gland. The rest of the examination is normal except for some scarring on the dorsal aspect of the woman's right hand. On questioning as to the cause of this scarring, the woman becomes quite embarrassed and claims that she does not know the reason. The physician attempts to discuss the woman's eating habits, but the woman is quite evasive, saying only that she feels a lot of pressure “to stay thin.” What is the likely diagnosis and subsequent treatment? What is this patient's prognosis?

Treat conversion disorder with reassurance, psychotherapy, and suggestive techniques; pseudoneurologic symptoms such as paresis in the context of psychosocial stressors suggest the diagnosis of conversion disorder. The fact that she cannot move her leg but is able to stand on it rules out true paresis. This disorder is more common in women, especially those with a history of sexual abuse and current psychosocial stressors. After general medical causes are ruled out, patients can be treated using a variety of suggestive techniques including hypnosis and psychotherapy. Since the patient is not consciously producing the symptom, she should not be confronted about its production. In most cases the patient is responsive to suggestive techniques or the disorder is self-limiting.

Bulimia nervosa; treat with cognitive-behavioral therapy, antidepressants, and psychodynamic psychotherapy. Fifty percent recovery rate; a hypertrophic parotid gland and scarring of the hands are both physical signs of repeated self-induced emesis, which is the most frequently seen compensatory behavior in bulimic patients. Treatment for bulimia includes cognitive-behavioral therapy, antidepressant medications (SSRIs are first-line treatment), and psychodynamic psychotherapy, which can be useful for those patients with concurrent borderline personality disorder. Prognosis for bulimia is better than anorexia: 50% of patients completely recover.

What laboratory finding is typically abnormal in the above patient and how can it be used to assess treatment?

A 46-year-old woman with a known history of depression is brought into the ER. She is comatose and intermittently convulsing. An ECG shows a long QT interval. What drug did she most likely take?

A 38-year-old woman presents to your office for an initial visit with a complaint of sleepiness during the day. She reports falling asleep easily and getting a full 8 hours of sleep every night. She is an otherwise healthy woman with a BMI of 19, and the only medication that she takes is a multivitamin. When questioned further, she reports a lack of energy and interest in many of her hobbies. What disorder(s) must be kept in mind?

A 36-year-old woman with a history of hyperthyroidism, allergic rhinitis, and BD presents with recent feelings of “sadness” and “blues.” Her BD has been relatively well controlled on lithium. Over the course of the last month she began feeling “down” and initially ignored it because she thought it was due to her stressful job. She states that she hasn’t been sleeping well lately and that she can hardly concentrate at work. When questioned further she admits to feelings of guilt. What is the next step in management of this patient?

The salivary component of serum amylase will be elevated in patients who binge and vomit. It should decrease following cessation of this behavior.

TCA such as amitriptyline or imipramine; remember the **3 Cs of TCA toxicity**: Coma, Convulsions, and Cardiotoxicity.

Depression; there are multiple etiologies of “sleepiness” and the physician must re-evaluate the patient’s medical history, medications, social situation, and other factors in order to make the proper diagnosis. Depressive disorders must be considered in the differential diagnosis of sleep disturbances. In this case, depression is likely. Primary hypersomnia does not necessarily coexist with mood symptoms and the patient does not present with a typical history seen in primary insomnia. She is less likely to have OSA given her female gender and normal weight. If depression exists, it may be primarily responsible for the sleep disturbance; thus initial treatment should target depression.

Treatment with an antidepressant; depressive episodes may develop in the course of BD and need to be appropriately treated. An antidepressant may be used in the acute setting; however, care must be taken because there is a 30% chance that an antidepressant may induce mania or rapid cycling. If an antidepressant is used, bupropion (Wellbutrin) has been shown to carry a slightly lower risk of triggering mania. Antidepressants should be tapered and discontinued as soon as depressive symptoms remit. Depression in BD may also be treated with lithium and lamotrigine (Lamictal).

A 23-year-old woman complains that she has difficulty working at her new job because she feels that she steps out of her body and watches herself work. The woman claims that this happens on a near weekly basis, and she becomes very scared that it will happen more often. What is the best treatment for this disorder?

A 40-year-old woman is known by her colleagues as an extremely private person. She seems generally mistrustful of those around her and is reluctant to confide in anyone. Every now and again she is heard accusing various coworkers of conspiring against her. One coworker relates a story in which the president of the company asked her what she was doing after work; in response, she became very fearful and demanded to know why anyone needed to know such information. What is the likely diagnosis? What other disorder is this woman at risk for?

A 38-year-old woman presents to her primary care doctor with the complaint that she has become very lonely. She appears very shy before the doctor and admits to a desire to join new social clubs, but she is “petrified” that people will think that she “isn’t cool.” She reports that she recently quit her job as a receptionist because having to greet people every day became too stressful, as she is convinced that she always “makes a bad first impression.” However, she insists to her physician that she would really like to make some new friends. What is the likely diagnosis?

A 5-year-old boy is brought to his pediatrician by his mother because she is unable to leave him alone without him getting extremely upset. She does not understand why this keeps happening because her family members are all so close to each other. When it is time for him to go to school and her to work, the boy suddenly has a terrible bellyache and begins screaming and crying, refusing to

Symptomatic treatment; the history is suggestive of depersonalization disorder. Treatment is symptomatic, and in this case SSRIs might be warranted to ameliorate the anxiety associated with this woman’s episode.

Paranoid personality disorder. Increased risk for paranoid schizophrenia; this disorder involves a general distrust of others, beginning by early adulthood and present in a variety of contexts. Patients with this disorder are at elevated risk for developing schizophrenia. Paranoid personality disorder must be distinguished from paranoid schizophrenia, in which patients have fixed delusions and are frankly psychotic.

Avoidant personality disorder; this disorder involves a pattern of social inhibition, hypersensitivity, and feelings of inadequacy since early adulthood. Patients with this disorder are typically preoccupied with being criticized or rejected in social situations.

Separation anxiety disorder; refusal to go to school or to sleep alone, somatic symptoms such as stomach or headache, and crying or screaming when being physically separated are all symptoms of separation anxiety disorder. After 3 years of age these behaviors are considered pathologic and may on occasion progress to panic attacks. Children with this disorder

go to school. What is the diagnosis of this disorder?

A 46-year-old woman begins psychotherapy stating that she feels a “void” in her life. She reports having attempted suicide a few times in the past, and she has seen various psychiatrists throughout her life. She describes engaging in a number of impulsive behaviors, particularly those involving promiscuity. She states that she is always “demanding” of her psychiatrists, and that these high standards have led her to terminate therapy in a number of cases. Throughout the course of the interview, the patient describes herself in a variety of ways, often contradicting herself. At one point she says that she is quite liberal; at another moment, she claims to be very conservative. She ends the interview by stating that she is “desperate” to figure out what her goals in life should be. What is the likely diagnosis, and what is a common finding in the past history of patients with this diagnosis?

An 18-year-old woman is admitted to the ER after she attacks her roommate in a frenzy. On questioning, she states that she knows that her roommate has been “following her” and “tape recording her conversations.” She appears alert and oriented but goes off on long tangents before answering the doctor’s questions. She admits to “partying all night long.” The woman then abruptly terminates the interview, refusing to answer any more questions and claiming that she “can’t trust anyone.” According to her roommate, she has no history of such behavior. A urine toxicology screen comes back positive. What is the likely diagnosis and causative agent?

A 39-year-old homeless man is found in an alley by police. He is mumbling and is having difficulty walking. As you examine him in the ER, you notice that his palms

fear that harm will come to themselves or to their loved ones on separation. Separation anxiety disorder is most effectively treated with behavioral psychotherapy.

Borderline personality disorder; this disorder involves a pervasive pattern of impulsivity and unstable relationships, affects self-image and behaviors, present by early adulthood and in a variety of contexts. Research has documented a high frequency of neglect, abandonment, physical abuse, and sexual abuse in the history of individuals with this disorder.

Substance-induced psychotic disorder. Cocaine, amphetamine, PCP, and ketamine can all produce psychotic symptoms in the acute stage.

Protect the patient’s airway; the clinical picture in this case is common for alcoholic patients. The rosy cheeks and palms are additional signs of

and cheeks are red. You also can smell alcohol on his breath. As you attempt to interview the patient, he becomes totally unresponsive. What should be your first intervention at this point?

The patient in the previous vignette is intubated. The nurse is about to start IV D₅ 1/2 NS fluids. What is your concern with this routine therapy?

An 18-year-old man has recently started college. He does not leave his dorm room very much and seems disinterested by the activities around him. One day he buys a TV for everyone on his hall and makes plans to go around the world over winter break. His roommate notices that he is up most of the night working on “projects.” What is the likely diagnosis?

A 17-year-old female is referred to a psychiatrist for evaluation following a period of dramatic weight loss. Her mother claims that she has lost “nearly 20 pounds” in a 6-month period. She is currently 5’5” and 100 lbs. On questioning, the girl states that she “prefers to eat less food” in order to lose some of her “excess fat.” She also wishes she was “a little skinnier.” What is the likely diagnosis? What additional finding would confirm this diagnosis?

A psychiatrist begins seeing a former patient intimately. Their romantic relationship began about 1 year after their therapeutic relationship ended. What are the relevant ethical and legal issues?

chronic alcohol use. In a semiconscious or unconscious alcoholic patient, intubation (with or without sedation) should be considered. Alcoholics tend to aspirate if they vomit and therefore airway protection is key to prevent further complications.

Wernicke-Korsakoff syndrome; if the patient is started on these fluids prior to thiamine supplementation, the glucose will further deplete his thiamine stores. Therefore, the patient should receive thiamine *first* and the necessary IV fluids after. Thiamine replenishment should prevent Wernicke-Korsakoff syndrome in most malnourished alcoholic patients.

BD I; this man’s behavior—decreased need for sleep, excessive expenditures, increase in goal-directed activities—is characteristic of an acute manic episode.

Anorexia nervosa. Amenorrhea would confirm the diagnosis; the patient exhibits the other symptoms of anorexia, including failure to maintain at least 85% of ideal body weight, disturbed body image, and fear of becoming fat.

In its code of ethics, the American Psychiatric Association (APA) states that sexual activity with patients is unethical. Such activity is viewed as a misuse and exploitation of the transference relationship, which may persist long after treatment ends. Insurance carriers for the APA and the American Medical Association (AMA) exclude liability for any such sexual activity.

An 18-year-old female is known by her friends as an “avid exerciser.” She prides herself on her ability to lose weight and is known to spend hours in front of her bedroom mirror analyzing her appearance. Despite her slight physique, she was recently overheard saying that would like to be “a lot thinner.” What neurotransmitter and peptide abnormalities are thought to characterize her condition?

A 45-year-old man has begun to drink heavily every night following the tragic death of his wife a year ago. He is consistently late for work and progressively spends more time alone. He tries to stop drinking but gets the “shakes” and then drinks more. He is spending more and more money each month to buy alcohol because he now needs a pint of vodka to get as drunk as he once got from a few shots. Would this be classified as alcohol abuse or alcohol dependence?

A 9-year-old boy is brought to his family physician by his mother because he has been getting in trouble at school and doing poorly in his classes. He calls out answers in class without being called on. His teacher describes him as very “fidgety.” He is caught staring out the window several times a day and requires his teacher’s direction to remember what he was doing. He treats his fellow classmates well without any violent or larcenous behavior. His mother comments that at home he starts projects around the house and never finishes them. When he sits down to do his homework he is frequently distracted by almost anything in his environment. This behavior has persisted for 2 years. What is the treatment and dosage strategy for this disorder?

Decreased norepinephrine, and increased serotonin, corticotropin-releasing factor (CRF), neuropeptide Y, and cholecystokinin (CCK) are seen in anorexia nervosa.

Alcohol dependence; this is an example of alcohol dependence, as the man exhibits signs of tolerance (requiring more alcohol to achieve same desired effect) and withdrawal (“the shakes”). In addition, he has a desire to cut down on his alcohol consumption. Since he has exhibited these three characteristics in the past 12 months, he fits the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*) classification of alcohol dependence.

Treat attention deficit hyperactivity disorder (ADHD) with methylphenidate (Ritalin) prescribed at the lowest effective dose; hyperactivity, poor impulse control, inattention, distractibility, and disruptiveness in class are behaviors frequently seen in children with ADHD. The diagnosis requires the onset of inattentive, hyperactive, or impulsive symptoms before age 7. The symptoms must be present in two or more settings with a duration exceeding 6 months. The most effective treatment is methylphenidate (Ritalin) prescribed at the lowest effective dose. Because of its side effect profile, children should limit the use of methylphenidate to periods when it is needed most such as during school and around task-oriented events at home. Pharmacologic treatment enables improvements in academic performance and avoidance of behavioral complications of the disorder.

A 28-year-old woman is involved in a car accident and is stuck inside her burning car before being rescued by firemen. She is hospitalized for minor injuries for 2 days and then released. In the following weeks, she experiences periods of time when she is overly focused on the car accident and times when she does not recall that it ever happened. When told about this dichotomy, the woman reportedly experiences panic attacks and is concerned that she is going crazy. What is the likely diagnosis?

A 54-year-old man is brought to the hospital by the police after causing trouble at home. The man works as a wood carver. He was in the Navy for 25 years until he was dishonorably discharged because of continued alcohol abuse. Over the last 4 years, he has been living with his elderly parents who refuse to deal with his alcohol problem any longer. The parents report that their son cannot hold a job, rarely sells a piece of his wood carving, and makes a mess at home. When questioning the man, he is slightly confused and perseverates about his skill as a wood carver. He is able to recount the earlier years of his Navy career, but is unable to account for the happenings of the last 7 years. He cannot exactly remember when or why he left the Navy. On memory testing, he is able to repeat three words immediately after the physician says them; however, he can remember only one of the words after 3 minutes and none of the words after 5 minutes. He is unaware of current political, local, or world events. What is the most likely diagnosis?

A 67-year-old man is found by his wife on the floor. In the ED, his wife explains that his medications were recently changed, but she knows that he was taking Phenelzine in the past. He is tachycardic, diaphoretic, and exhibiting myoclonic jerks with a BP of 192/105. What medication was likely added at his last doctor's visit?

Dissociative amnesia; she has impaired social functioning as a result of recurrent periods of amnesia related to a traumatic event. This meets the DSM-IV criteria for dissociative amnesia.

Korsakoff psychosis; alcohol abuse is a leading cause of substance-related amnestic disorder. Korsakoff psychosis (alcohol-induced persistent amnestic disorder) can persist after proper treatment of Wernicke encephalopathy with thiamine infusion. The diagnosis of Korsakoff psychosis is appropriate in this patient because of his long-standing alcohol abuse history, impaired short-term memory, and permanent gap in memory of a definitive period in time due to anterograde amnesia. Damage to the mamillary bodies causes the amnestic symptoms seen in Wernicke-Korsakoff syndrome.

SSRI; when an SSRI is combined with an MAOI, "**serotonin syndrome**" can result as in this patient's case. This syndrome presents with the classic triad of hyperthermia, rigidity, and labile blood pressure.

An 8-year-old boy presents to his physician with loss of appetite, weight loss, and abdominal pain. One year ago, he was seen in the office because of inability to concentrate, distractibility, impulsive behavior, and poor academic performance. Since then he has been taking his prescription medication with great improvement in these symptoms. At follow-up, the patient's blood is drawn and results are significant for aspartate aminotransferase (AST) = 94 and alanine aminotransferase (ALT) = 105. What medication is this boy most likely taking?

A 19-year-old female has been exhibiting strange behavior over the last 2 weeks. Her father has overheard her talking to herself while no one is in the room. She also claims to be having "visions" involving "tiny men and women patrolling her bedroom." Her father believes that she may be very stressed out, as she is studying hard for her final exams. Her symptoms continue until she finishes her exams, after which her strange behavior ceases completely. She reports no further symptoms. What is the diagnosis?

A 50-year-old physician has been complaining to his colleagues that his wife is "cheating" on him. Despite no evidence to support this, and despite his wife's repeated assurances that she has been faithful, he states "I know she's been fooling around." During this time, the physician has not neglected his professional duties. What is the likely diagnosis?

A 29-year-old mother of two young children is taken to the hospital after her husband reports hearing her yelling while she is alone in the backyard. He tells the physician that the patient has been very sad lately, displayed a lack of energy, has had difficulty sleeping, and has lost weight but that these symptoms apparently abated over 1 month ago. He has heard her talk to herself throughout the past months, but he hoped that it "was nothing big." What is the likely diagnosis?

Pemoline (Cylert); pharmacologic treatment of ADHD includes psychostimulants such as methylphenidate (Ritalin), dextroamphetamine (Dexedrine), and pemoline (Cylert). Side effects of psychostimulants in children can include loss of appetite, weight loss, inhibited body growth, irritability, headaches, abdominal pain, crying spells, and rarely tics. Pemoline (Cylert) is not first-line treatment for ADHD due to its specific side effect of hepatotoxicity.

Brief psychotic disorder; this person has had psychotic symptoms for less than 1 month followed by full spontaneous remission. Brief psychotic disorder is characterized by the sudden appearance of psychotic symptoms, usually following a severe stressor (in this woman's case, her final exams).

Delusional disorder; this disorder is typified by "nonbizarre" delusions and the absence of other psychotic symptoms. Daily functioning is not significantly impaired.

Schizoaffective disorder; this diagnosis is likely because the psychotic symptoms in this case, auditory hallucinations, have persisted for more than 2 weeks since her mood disorder seemingly resolved.

What would the differential diagnosis be if the patient above were to present with depressive symptoms concurrent with the psychotic features?

A 78-year-old white man with a history of hypertension and diabetes is brought to the ER after he was found wandering the town square. He told the EMTs that he knew he had something to do in that area but forgot what it was. When the man's daughter arrived at the hospital she reports that he recently has not been able to recall the events of the last few years. She also remarks that he never liked to take his blood pressure medication. On examination, he is slow in responding to questions and often cannot complete a sentence because he cannot think of a particular word. He demonstrates impairment in short-term memory. Further examination reveals right upper and lower extremity weakness as well as extensor plantar reflexes and a BP of 190/110. How may further progression of this form of dementia be prevented?

A 25-year-old woman has been diagnosed with schizophrenia for the past 5 years. She has tried various antipsychotic medications with no success; she still experiences psychotic symptoms on a daily basis. What medication might be appropriate for her? What additional measures must be taken with this drug?

A 35-year-old female complains to her psychiatrist about feeling "moody" for the past few months. When asked to clarify, she describes a recent incident in which one of her friends did not invite her to a party, saying that she felt "crushed." She also states that she has no energy for anything because she feels as though she has been walking around with "heavy weights" strapped to her body. She appears very tired during the interview and later

Depression with psychotic features or schizoaffective disorder; if the psychotic and depressive symptoms were concurrent, one would not be able to distinguish between these two diagnoses at that point.

Vascular dementia, treat underlying risk factors to avoid progression; this patient's aphasia and memory impairment in the setting of a history of presumably uncontrolled hypertension and neurologic deficits including motor weakness and present Babinski signs suggests multi-infarct or vascular dementia, the second most common cause of dementia. The onset of vascular dementia is sudden and progresses in a stepwise fashion. As hypertension, cerebrovascular, and cardiovascular disease are risk factors for vascular dementia, treatment of these processes may prevent further progression of the dementia. The extent of dementia is determined by cumulative effects of multiple cortical and subcortical infarcts. Neuroimaging may show multiple white matter lacunar infarcts.

Clozapine is the best choice for treatment of refractory schizophrenia. Patients on clozapine must have regular CBCs to check for agranulocytosis, which occurs in 1–2% of all patients on this medication.

Atypical depression; atypical depression typically presents with hyperphagia, hypersomnia, leaden paralysis, reactive mood, and hypersensitivity to interpersonal rejection. Research suggests that MAOIs are effective for atypical depression.

remarks that she has been sleeping “a lot more than usual.” What is the likely diagnosis and subsequent treatment?

A 2½-year-old child is playing with her uncle at a family picnic. The uncle is kicking a ball back and forth with the child. Deciding to play a trick on her, the uncle takes the ball when it comes to him next and places it in the picnic basket. “All gone!” the uncle exclaims. The child is not fooled and runs to the picnic basket where she opens the basket and finds the ball. Is this an example of object constancy or object permanence?

A 66-year-old retired army veteran with a history of hypertension and diabetes is admitted to the hospital for pneumonia. He received appropriate antibiotic therapy and was placed on an insulin sliding scale for diabetes. On hospital day number 2, the patient suddenly becomes agitated and starts yelling at the nurses. He seems to be drifting in and out of sleep. On examination, his temperature is 100.5°F, BP 145/95, HR 110, and RR 22. He is noted to be tremulous. The remainder of his examination is unremarkable. What term best describes this man’s symptoms? What is the most likely underlying cause?

Object permanence; the ability to understand that an object continues to exist even when its location is obscured is called “object permanence.” This child understands that the ball does not cease to exist simply because it is out of sight; rather, it is hidden by the picnic basket. Piaget described this concept in his theories on cognitive development. In contrast, object constancy refers to Mahler’s psychoanalytic theory of an infant’s sense of self.

Delirium most likely secondary to alcohol withdrawal; changes in attention and arousal, or “waxing and waning,” over an acute time course suggest that delirium is responsible for this man’s change in mental status. The diagnostic workup for delirium includes assessing mental status; obtaining vital signs with respect to presence or absence of fever, tachycardia, or decreased oxygen saturation; observing the patient’s general appearance for psychomotor agitation or hallucinatory behavior; examining the pupils, assessing fluid status, and looking for signs of infection or underlying systemic diseases. This patient has an elevated temperature in the setting of tachycardia and tremulousness after being in the hospital for 2 days. An accurate social history at the time of admission may have documented alcohol use but regardless of this information the suspicion for alcohol or benzodiazepine withdrawal should be high. Alcohol withdrawal needs to be treated urgently with benzodiazepines to avoid progression of withdrawal to life-threatening “DTs.” Many institutions have protocols in

Paramedics bring a young, unidentified man into the ER. He was found asleep on a park bench and was difficult to arouse. His HR is 45 and BP is 106/70. On examination, he is diaphoretic and unable to answer questions. His pupils are 1 mm and minimally reactive bilaterally. As the nurse attempts to draw blood from his forearm, you notice multiple track marks. Before the blood work results are finished, what drug can be given to help reverse his state?

A 40-year-old woman presents to the ER after slashing her wrists. This is the fifth time in her life that she has made a suicidal gesture, and she explains that death would be a way for her to escape the “emptiness” that plagues her. Her medical records indicate that she has seen many psychiatrists in the past. When asked why she has changed psychiatrists so many times, she states that they abandoned her and that it was not her fault. She goes on to comment that the doctors in the ER have treated her “perfectly,” while the nursing staff has been “the worst” she has ever seen. What defense mechanism does this patient display? What treatment would be most effective for her illness?

A 3-year-old girl is playing with her toys in the living room while her mother is in the kitchen. The child spends most of her time with her mother and father but just recently has begun playing on her own. The living room is adjacent to the kitchen so the child can hear her mother moving about; however, every 10 or 15 minutes the child gets up from her play to run into the kitchen. She looks for her mother and when she sees her, she smiles and returns to the living room to resume play. According to Mahler, what term describes this behavior?

place for the routine assessment of withdrawal symptoms and their prompt treatment.

Naloxone (Narcan); the history is suggestive of heroin overdose, and the pinpoint pupils are pathognomonic in this situation for opiate intoxication. Naloxone (Narcan) can be given to patients with suspected heroin overdose to act as an opiate antagonist and reverse the heroin’s effect. Most patients will recover to some degree within seconds or minutes of Narcan administration.

Splitting. Treat with psychotherapy; the patient uses “splitting,” a complex defense mechanism in which others are seen as either all good (and thus caring, rescuing sources of strength) or all bad (and thus to blame for all one’s own misery). She suffers from borderline personality disorder, which involves a pervasive pattern of impulsivity and unstable relationships, affects self-image and behaviors, present by early adulthood and in a variety of contexts. The treatment of choice is psychotherapy.

Rapprochement; separation-individuation is the phase of infant development when infants begin to see themselves as a separate entity from their mother. Through this stage of development the infant develops self-identity as well as a stable picture of the mother. Rapprochement is a stage within separation-individuation that describes the sense that infants must continually check-in with their mother and confirm her whereabouts to ensure their safety as they continue to develop their sense of identity through independence. This child continually interrupts her play

A 15-year-old girl presents to her family physician with her mother because of her “huge nose.” Her mother reports that her daughter has recently been skipping school and not attending after school activities or volleyball practice but has been jogging by herself twice a day. The girl describes her nose as “gargantuan,” “bigger than everyone else’s at school,” and “embarrassing.” She requests a referral to a plastic surgeon so that her nose can be “fixed.” Age at menarche was 12 and her menstrual cycles have been regular without any missed periods. On examination, the girl is well appearing, thin, and her nose appears the size of most other girls her age. What is the indication for use of SSRIs in this disorder?¹

A 23-year-old woman is brought to her primary care physician by her boyfriend, who is concerned about her health. He states that recently she has refused to eat meals with him and that he rarely sees her

to confirm that her mother is indeed present a few feet away in the kitchen keeping her safe.

Mood disorders comorbid with body dysmorphic disorder; preoccupation with a specific aspect of physical appearance in a normally appearing adolescent is suggestive of body dysmorphic disorder. Patients with this disorder present most frequently to primary care physicians, dermatologists, or plastic surgeons. This patient manifests fear of exposing the exaggerated physical flaw to others in her avoidant behavior. Although she has been exercising more regularly, the lack of any change in her menstrual cycles does not support a diagnosis of anorexia, an important differential diagnosis. Patients with body dysmorphic disorder must be evaluated for comorbid psychiatric conditions, especially mood disorders, as they may be amenable to pharmacologic intervention such as an SSRI.

Bulimia nervosa; bulimic patients are often embarrassed of or secretive about their eating habits, and their normal weight and the presence of menstruation distinguishes them

¹There has been recent controversy regarding the use of SSRIs in treating depression in the pediatric and adolescent populations. Some data have come from observational studies while much attention has been directed at paroxetine (Paxil). Readers interested in more details surrounding SSRI use for depression and suicide risk in pediatric and adolescent populations may reference the following:

Jick H, Kaye JA, Jick SS. Antidepressants and the risk of suicidal behaviors. *JAMA* 2004;292:338–343.

Zito JM, Safer DJ, DosReis S, et al. Psychotropic practice patterns for youth: a 10-year perspective. *Arch Pediatr Adolesc Med* 2003;157(1):17–25.

Olfson M, Shaffer D, Marcus SC, et al. Relationship between antidepressant medication treatment and suicide in adolescents. *Arch Gen Psychiatry* 2003;60:978–982.

Treatment for Adolescents with Depression Study Team. Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents with Depression Study (TADS) Randomized Controlled Trial. *JAMA* 2004;292:807–820.

eat anything. The woman seems embarrassed to discuss her eating habits, and merely states that she is “not underweight.” On physical examination, the physician notes that the woman has small callouses on her knuckles. He also observes that the woman appears to have poor dental hygiene. What is the likely diagnosis?

A 29-year-old mother brings her 3-year-old child to the ER after the child “passed out.” At home, the 3-year-old is normally very active and has been developmentally normal with regular visits to her family physician until a year ago when the mother and son moved four times within three different states. The mother, who works as a nurse, appears very anxious and concerned about the health of her son. On examination, the child is lethargic and pale. Fingerstick measures glucose of 45. Lab work shows increased insulin levels and decreased C-peptide levels. What is the diagnosis?

A 62-year-old Irish-American woman plans a trip to Ireland with her husband. Due to her lower socioeconomic background, she had never previously traveled abroad. In fact she had never flown on an airplane before. She grew up in an Irish section of Boston close enough to the airport to see planes leaving and landing, and she would often imagine where they were going to or coming from. She prepared for her trip to Ireland for weeks and on the day of departure she and her husband were excited to go to the airport. When she presented her ticket at the counter she was told that her flight was delayed for 2 hours. This made her very upset, and she could not understand why the plane could not take off at the time it was scheduled. After returning from her trip she told her friends and coworkers that flights to Ireland are always delayed. What example of cognitive distortion has this woman employed?

from patients with anorexia. This patient’s callouses and poor dental hygiene are consistent with repeated self-induced emesis, the most frequent compensatory behavior observed in bulimic patients.

Factitious disorder by proxy—in this case it is a form of child abuse and must be reported! The cause of the child’s hypoglycemia is most likely iatrogenic. Hypoglycemia in the setting of high insulin levels and low C-peptide levels is suggestive of iatrogenic exogenous insulin administration as exogenous insulin preparations do not contain C-peptide. The diagnosis of factitious disorder by proxy is appropriate in this case as the signs and symptoms of illness in the son were produced by the mother. Frequently, individuals with this diagnosis are familiar with the medical field in some capacity.

Overgeneralization; making a general conclusion on the basis of one event characterizes the cognitive distortion of overgeneralization. Cognitive theory attributes importance not to the objective events that occur in one’s life, but *how* the individual experiences these events.

A 27-year-old woman is seen in clinic. She is sad and cries while explaining that she can't understand why her boyfriend left her. He told her that she seemed like "another person" on some days and was very inconsiderate to him. She can't recall acting like this. She gives her doctor permission to call her ex-boyfriend for more information, and her ex-boyfriend tells her physician how she would suddenly "change" into a mean-spirited woman who would inexplicably go out and spend inordinate amounts of money on clothes and jewelry. He says: "I always thought that she was bipolar or something." What is near the top of your differential diagnosis?

A 23-year-old woman is seen in the ER and as the psychiatry consultant, you are told that her chief complaint is "only sleeping 2 hours per night." You assume that the woman will be exhausted and complaining of daytime sleepiness. To your surprise, she is typing away on her laptop and making many phone calls. After speaking with the patient, she confirms that she only sleeps a few hours every night, but that she doesn't feel the need to sleep any more than that. She also reports feeling very healthy overall, and she has even been refurnishing her entire apartment with new furniture and electronics until late at night for the past week. What is the likely diagnosis?

The differential diagnosis includes BD and dissociative identity disorder; it is unclear from the history if the woman truly assumed a different identity, but she does seem to fit that diagnosis, given her inability to recall the other identity and significant social impairment. More history, including drug use, mood symptoms, and medications, is needed to make the diagnosis. Furthermore, dissociative identity disorder is an extremely rare disorder.

BD; the patient appears to be having a manic episode, which would suggest a diagnosis of BD. The patient should be questioned further. **The important point here is that many psychiatric disorders will present with sleep-related complaints.**

Index

A

- abandonment of patients, rule governing, 158
- Abilify. *See* aripiprazole
- abulia, 97
- acetylcholinesterase inhibitors, 171–172
 - Alzheimer's dementia treated with, 197
 - side effects, 172
- acting out, 61
- acute stress disorder (ASD), 36–37
 - clinical vignette, 197
- ADHD. *See* attention deficit hyperactivity disorder
- adjustment disorders, 38–39
- affect, defined, 17
- age
 - MDD and, 19
 - sexual changes and, 149–150
- agnosia, 92–93
- agoraphobia, 30
- alcohol. *See also* blood alcohol level; fetal alcohol syndrome
 - dependence, 210
 - intoxication, 129
- alcohol withdrawal, 130–131
 - anxiety induced by, 29
 - clinical vignette, 187–188, 208–209
 - delirium secondary to, clinical vignette, 214–215
 - manic symptoms produced by, 23
- alcoholism, 129, 130
- alcohol-related disorders, 128–132
 - amnesic, 100
 - diagnosis, 128–131
 - epidemiology/etiology, 128
 - treatment, 38, 131
- alpha-adrenergic agents, Tourette disorder, 85
- alprazolam (Xanax), 170
 - panic disorder treated with, 32
 - clinical vignette, 189
 - seizures caused by, clinical vignette, 176
- alprostadil (Caverject), 150
- altruism, 3
 - clinical vignette, 184–185
- Alzheimer's dementia
 - clinical vignette, 197
 - delirium in, 198
 - Down syndrome linked with, clinical vignette, 179
- treatment
 - clinical vignette, 197
 - drugs for, 171–172
- Alzheimer's disease, 93
 - clinical vignette, 197
 - diagnosis, 97
 - Down syndrome linked with, 33
 - clinical vignette, 179
- amantadine (Symmetrel), 48, 169
- Ambien. *See* zolpidem
- amenorrhea, 209
- amitriptyline toxicity, 206
- amnesic disorders, 100–101. *See also* dissociative amnesia
 - diagnosis, 101
 - epidemiology/etiology, 100–101
 - substance-related, 100
 - clinical vignette, 211
 - treatment, 101
- amphetamine-related disorders
 - diagnosis, 135–136
 - epidemiology/etiology, 135
 - psychosis of, 135
- amphetamines
 - anxiety induced by, 29
 - manic symptoms produced by, 23
 - medical uses of, 135
 - narcolepsy treated with, 135, 180
 - psychotic disorder induced by, 208
 - withdrawal, 136
- anaclitic, term, 12
- Anafranil. *See* clomipramine
- anhedonia, 19
- anorexia nervosa, 141–145
 - bulimia nervosa *v.*, 146–147
 - clinical vignette, 175, 209, 210
 - death and, 142
 - diagnosis, 142–144
 - differential, 143
 - epidemiology/etiology, 141–142
 - hospitalization for, 144
 - involuntary, 190
 - MDD and, clinical vignette, 185
 - poor outcome in, 144
 - psychiatric disorders concurrent with, 142, 185
 - purging type, clinical vignette, 185
 - subtypes, 142
 - treatment, 144–145
- Antabuse. *See* disulfiram
- anticonvulsants, 24
- antidepressants, 163–164
 - manic symptoms produced by, 23
- antipsychotics, 166–170
 - BD I treated with, 202
 - body dysmorphic disorder treated with, 114
 - classes, 167
 - depot injection form of, 48
 - mechanism of action, 47–48, 169
 - potency, 167
 - schizophrenia treated with, 45–46
 - side effects, 46–48, 167–168
 - neuroendocrine, 169
 - Tourette disorder treated with, 85, 184
 - trial periods for, 169
 - use, 166

- antisocial personality disorder, 58–60
 clinical vignette, 198
 conduct disorder and, 82
 diagnosis, 59
 differential, 59–60
 treatment, 60
- anxiety
 causes, 29
 defined, 29
 substances contributing to, 203
- anxiety disorders, 29–39. *See also* specific disorders
 anxiolytic treatment of, 170
 anxiolytics, 170–171
- aphasia, 92
- apraxia, 92
- Aricept. *See* donepezil
- aripiprazole (Abilify)
 schizophrenia treated with, 46
 side effects, 47, 168
- arsenic toxicity, anxiety induced by, 29
- ASD. *See* acute stress disorder
- Asperger disorder, 77
- Ativan. *See* lorazepam
- attention deficit hyperactivity disorder (ADHD), 79–81
 diagnosis, 79–80
 differential, 80
 epidemiology/etiology, 79
 mental retardation comorbid with, 71
 symptoms, 80
 treatment, 80–81
 clinical vignette, 210, 212
- autistic disorder
 diagnosis, 76–77
 differential, 77
 epidemiology/etiology, 75–76
 genetics and, 75–76
 mental retardation and, 76
 clinical vignette, 188
 seizures comorbid with, 76
 clinical vignette, 188
 treatment, 77
- autonomy *v.* shame, 7
- avoidant personality disorder
 clinical vignette, 207
 diagnosis, 64
 differential, 64–65
 treatment, 65
- B**
- BAL. *See* blood alcohol level
- barbiturates, 132
 mechanisms of action for, 170
 withdrawal, manic symptoms produced by, 23
- BD. *See* bipolar disorder
- BD I. *See* bipolar I disorder
- BD II. *See* bipolar II disorder
- behavioral theory, 1, 10
- Benadryl, 121
- benzodiazepines, 132
 alcohol-related disorders, 38, 131
 anxiety disorders treated with, 170
- brief psychotic disorder treated with, 49
- cocaine addiction treated with, 136
- delirium treated with, 92
- dementia treated with, 99
- depressive symptoms triggered by, 18
- EPS treated with, 46
- GAD treated with, 88, 178
- jet lag treated with, 124
 mechanisms of action for, 170
- panic disorder treated with, 32
 clinical vignette, 189
- PCP intoxication treated with, 137
- separation anxiety disorder treated with, 87
 side effects, 170
 sleep terror disorder treated with, 125
 withdrawal, manic symptoms produced by, 23
- bereavement, normal, 189
- best-interest approach, 161
 clinical vignette, 173
- beta-blockers, depressive symptoms triggered by, 18
- bilevel positive airway pressure (BiPAP), 123
- binge eating disorder, 147–148
- BiPAP. *See* bilevel positive airway pressure
- bipolar disorder (BD)
 differential diagnosis of, 23, 217
 rapid-cycling, 23
 clinical vignette, 180
 sleep disorders and, 217
 treatment, 166
 clinical vignette, 206
- bipolar I disorder (BD I), 21–24
 clinical vignette, 177, 209
 diagnosis, 22–24
 epidemiology/etiology of, 21–22
 suicide completion risk in, 22
 treatment, 24
 clinical vignette, 202
- bipolar II disorder (BD II), 24
- bipolar mixed episode, 22
- blood alcohol level (BAL), 129
- body dysmorphic disorder
 diagnosis, 113–114
 differential, 113
 epidemiology/etiology, 113
 mood disorders comorbid with, 216
 treatment, 114
- borderline personality disorder (BPD)
 clinical vignette, 208
 defense mechanisms, 61
 diagnosis, 60–61
 differential, 61
 suicide completion risk in, 60
 treatment, 61–62
- Bowlby, John, 10–11
- BPD. *See* borderline personality disorder
- breathing-related sleep disorders (BRSDs), 122–123
- brief psychotic disorder, 49–50
 clinical vignette, 212
 duration of symptoms, 49

- bromocriptine (Parlodel)
 NMS treated with, 204
 side effects, 48
 neuroendocrine, 169
 BRSDs. *See* breathing-related sleep disorders
- bulimia nervosa
 anorexia nervosa *v.*, 146–147
 clinical vignette, 205–206, 216–217
 diagnosis, 145–147
 differential, 146
 epidemiology/etiology, 145
 kleptomania and, 155
 subtypes, 146
 treatment, 147
 clinical vignette, 205–206
- bupropion (Zyban, Wellbutrin), 164
 BD treated with, 206
 depression treated with, 186
 nicotine withdrawal treated with, 139
- BuSpar. *See* buspirone
- buspirone (BuSpar), 171
 GAD treated with, 38
- C**
- caffeine
 anxiety and, 29, 203
 panic attacks and, 31
 caffeine-related disorders, 138–139
 clinical vignette, 187
- CAGE Questionnaire, 128–129
- capacity, 161–162
 decisional, 161
 treatment decisions and, 161
- carbamazepine (Tegretol), 165
 BD I treated with, 24
 BD treated with, 166
 rapid cycling, 180
 schizophrenia treated with, 195
 side effects, 166
- catatonic depression, 26
- Caverject. *See* alprostadil
- central sleep apnea (CSA), 123
 clinical vignette, 204
- Chantix. *See* varenicline
- child abuse
 confidentiality breaching and, 158
 factitious disorder by proxy and, 217
- childhood disintegrative disorder, 78
- childhood disorders, 69–88. *See also* specific disorders
- children
 cognitive development in, 12
 GAD in, 88
 psychiatric assessment of, 69
 psychological tests for, 69
 social phobia in, 88
- chlordiazepoxide (Librium), 170
- chlorpromazine (Thorazine), 167
 schizophrenia treated with, 45
- chromosome 21, 93
- circadian rhythm sleep disorder, 123–124
- classical conditioning, 10
- clomipramine (Anafranil), 35
 clinical vignette, 203
- clonazepam (Klonopin), 170
- clonidine
 nicotine withdrawal treated with, 139
 opiate withdrawal treated with, 134
 Tourette disorder treated with, 85, 184
- clozapine (Clozaril)
 schizophrenia treated with, 45
 clinical vignette, 213
 side effects, 47, 168, 169
- Clozaril. *See* clozapine
- club drugs, 137–138
- cocaine
 addiction, treatment, 136
 intoxication, clinical vignette, 174
 manic symptoms produced by, 23
 psychotic disorder induced by, 208
 schizophrenic symptoms mimicked by, 44
 withdrawal, 136
- cocaine-related disorders, 135–136
 diagnosis, 135–136
 epidemiology/etiology, 135
 psychosis of, 135
- codeine, 133
- Cognex. *See* tacrine
- cognitive development, 11–12
- cognitive disorders, 89–101
- cognitive distortions, 9–10
 clinical vignette, 217
- cognitive restructuring, 13
- Cognitive Theory, 1, 9–10
- cognitive therapy, clinical vignette, 181–182
- communication disorders, 74–75
- compensatory damages, 162
- competence, 161–162
 standing trial and, 162
- compulsions, 34–35. *See also* obsessive-compulsive disorder
- conditioning, 10
- conduct disorder, 81–82
 clinical vignette, 174–175
 diagnosis, 82
 epidemiology/etiology, 81–82
 treatment, 82
- confidentiality, 157
 breaching, 158
- conflict theory, in drive psychology, 6
- continuous positive airway pressure (CPAP), 123
- conversion disorder
 clinical vignette, 205
 defined, 107
 diagnosis, 108–109
 differential, 109
 epidemiology/etiology, 107–108
 subtypes, 108
 symptoms, 108–109
 treatment, 109
- coprolalia, Tourette disorder treated with, 184
- corticosteroids, depressive symptoms triggered by, 18
- countertransference, defined, 14

- CPAP. *See* continuous positive airway pressure
- Creutzfeldt-Jakob, 95
diagnosis, 98
- CSA. *See* central sleep apnea
- cyclothymia, 25
treatment, 27
- Cylert. *See* pemoline
- cyproheptadine, anorexia nervosa treated with, 144
- D**
- Dalmane. *See* flurazepam
- dantrolene, NMS treated with, 204
- defense mechanisms, 1–4
- BPD, 61
clinical vignette, 184–185, 191, 215
HPD, 62–63
immature/mature, 1–4
NPD, 64
OCPD, 67
- delayed sleep phase disorders, 124
- delirium, 89–92
alcohol withdrawal, clinical vignette, 214–215
Alzheimer's dementia and, clinical vignette, 198
causes, 89–90
clinical vignette, 182–183, 195
defined, 89
dementia *v.*, 95–96
diagnosis, 90–91
differential, 91
epidemiology/etiology, 89–90
treatment, 91–92
clinical vignette, 182–183
waxing and waning over the course of a day, 90
- delirium tremens (DTs), 131
- delusional disorder, 50–51
clinical vignette, 212
subtypes, 50
- delusions
bizarre, 51
of grandeur, 42
of guilt, 42
nonbizarre, 51
of reference, 42
types of, 42
- dementia, 92–99. *See also* specific types
cause of, 93–94
characteristics of, 96
deficiencies, 95
defined, 92
delirium *v.*, 95–96
diagnosis, 95–99
epidemiology/etiology, 93–95
hypothyroidism and, 95
late stage, 96
Parkinson's disease developing, 94
pseudodementia differentiated from, 98–99
substances resulting in, 95
treatment, 99
- Demerol. *See* meperidine
- denial, 3
- Depacon. *See* valproate
- dependent personality disorder (DPD), 65–66
clinical vignette, 193
diagnosis, 65–66
differential, 66
treatment, 66
- depersonalization disorder, 154–155
clinical vignette, 207
- depression. *See also* specific types
atypical, clinical vignette, 213–214
cognitive therapy for, clinical vignette, 181–182
pseudodementia of, 98
with psychotic features, 213
sleep disorders and, 206
subtypes, 20
treatment, 21
clinical vignette, 186, 198–199
SSRI, 216
- depressive disorder NOS, 193
- depressive episodes, 19
- depressive symptoms
causes, 18
medical conditions manifesting in, 25
- desmopressin, nocturnal enuresis treated with, 85
- Desyrel. *See* trazodone
- developmental coordination disorder, 73–74
clinical vignette, 181
- Dexedrine. *See* dextroamphetamine
- dextroamphetamine (Dexedrine), 135
ADHD treated with, 81
clinical vignette, 212
- dextromethorphan, 133
- diabetes, antipsychotics and, 169
- dialectical behavior therapy, 14
- diazepam (Valium), 170
PCP intoxication treated with, 137
sedative withdrawal treated with, 133
- DIG FAST, 22–23
- disorder of written expression, 72
- displacement, 3
- dissociative amnesia, 152–153
clinical vignette, 211
diagnosis, 153
- dissociative disorders, 152–155
- dissociative fugue, 153–154
- dissociative identity disorder, 154
differential diagnosis of, 217
- distortion, 3
- disulfiram (Antabuse), 131
- doctor-patient relationships
confidentiality and, 158
sexual, 157, 209
- donepezil (Aricept)
Alzheimer's dementia treated with, 171
dementia treated with, 99
- dopamine hypothesis, schizophrenia, 43
- dopamine reuptake inhibitors, MDD, 20
- double depression, 26
- Down syndrome, 70
Alzheimer's dementia linked with, clinical vignette, 179
Alzheimer's disease linked with, 93
clinical vignette, 179

- clinical vignette, 174
- physical examination findings related to, 71
- DPD. *See* dependent personality disorder
- drive psychology, 5
 - conflict theory in, 6
- DTs. *See* delirium tremens
- Dupuytren's contractures, 129
- dyslexia, 72
 - diagnosis, 73
- dyspareunia, 151
- dyssomnias, 119
- dysthymia, 25
 - clinical vignette, 182
 - diagnosis, 25–26
 - treatment, 26
- dystonia, acute, 201
- E**
- eating disorders, 141–148. *See also* specific disorders
 - binge, clinical vignette, 180
 - defined, 141
 - findings associated with, 143
 - hospitalization of, 202
- ecstasy. *See* MDMA
- ECT. *See* electroconvulsive therapy
- EEG. *See* electroencephalography
- Effexor XR. *See* venlafaxine
- ego, 1
 - development of, 6–7
- ego integrity *v.* despair, 9
- electroconvulsive therapy (ECT)
 - MDD treated with, 20–21
 - schizophrenia treated with, 48
 - side effects, 21
- electroencephalography (EEG)
 - delirium findings on, 91
 - sleep cycle on, 119–120
- emancipated minors, 160
- emergencies, confidentiality breaching and, 158
- entitlement, 63
- EPS, 46
 - antipsychotics and, 167
- erectile disorder, 150
 - psychological causes, clinical vignette, 178
- Erikson, Erik, 6–9
 - ego development and, 6–7
 - life cycle theory, 7–9
 - clinical vignette, 193–194
- erotomanic delusions, 42
- ethics in psychiatry, 157–162
 - doctor-patient relationship and, 209
- Exelon. *See* rivastigmine
- exhibitionism, 151
- expressive language disorder, 74. *See also* mixed receptive-expressive language disorder
- F**
- factitious disorder by proxy, 115–116
 - clinical vignette, 217
 - treatment, 116
- factitious disorders, 114–117
 - clinical vignette, 176
 - confrontation and, 116
 - defined, 114
 - diagnosis, 115–116
 - differential, 116
 - epidemiology/etiology, 114–115
 - subtypes, 115
 - treatment, 116–117
- family therapy, 13
- fetal alcohol syndrome, 73
- fetishism, 151
- flumazenil
 - sedative overdose treated with, 132
 - seizures managed with, 176
- fluoxetine (Prozac)
 - anorexia nervosa treated with, 145
 - MDD comorbid with anorexia nervosa treated with, 185
- fluphenazine (Prolixin)
 - depot injection form of, 48, 170
 - potency of, 167
- flurazepam (Dalmane), 170
- Fragile X syndrome, 70
 - clinical vignette, 174
- Freud, Sigmund, 1–6
 - conversion disorder and, 108
 - ego development and, 6–7
 - personality etiology and, 53
- frotteurism, 151
 - clinical vignette, 185
- G**
- GAD. *See* generalized anxiety disorder
- galantamine (Razadyne)
 - Alzheimer's dementia treated with, 171
 - dementia treated with, 99
- gamma-hydroxybutyrate (GHB), 138
 - clinical vignette, 173
- gender identity, 11
 - clinical vignette, 195–196
 - disorder, 152
- gender role, 11
 - clinical vignette, 195–196
- generalized anxiety disorder (GAD)
 - in childhood, 88
 - clinical vignette, 178
 - diagnosis, 37–38
 - treatment, 38, 178
- generativity *v.* stagnation, 8–9
- Geodon. *See* ziprasidone
- Gestalt therapy, 14
- GHB. *See* gamma-hydroxybutyrate
- group therapy, 13
- H**
- Halcion. *See* triazolam
- Haldol. *See* haloperidol
- hallucinations, 42
 - sleep, 122
- hallucinogens, 137
- haloperidol (Haldol), 167
 - delirium treated with, 92, 183
 - depot injection form of, 48, 170

- haloperidol (Haldol) (*Cont.*):
 potency of, 167
 schizophrenia treated with, 45
 Tourette disorder treated with, 184
- health care proxy
 clinical vignette, 173
 making decisions and, 161
- heroin, 133
 overdose, clinical vignette, 215
- histrionic personality disorder (HPD)
 clinical vignette, 199
 defense mechanisms, 62–63
 diagnosis, 61
 treatment, 63
- HPD. *See* histrionic personality disorder
- humor, 3
- Huntington's dementia, 94
 clinical vignette, 200
 diagnosis, 97
- hydromorphone, 133
- hyperkinetic motor disorders, 84
- hypersomnia, primary, 121, 206
- hypertensive crisis, 164
- hypnotic intoxication, 132
- hypnotic-related disorders, 132–133
- hypochondriasis, 111–112
 clinical vignette, 177–178
 diagnosis, 111–112
 differential, 112
 epidemiology/etiology, 111
 subtype, 112
 treatment, 112
- hypomania
 clinical vignette, 192
 mania distinguished from, 23
- hypothyroidism
 dementia, 95
 depressive symptoms caused by, 25
- I**
- id, 1
- identification, 3
- identity *v.* role confusion, 8
 clinical vignette, 193–194
- illusions, 42
- imipramine, toxicity, 206
- impulse control disorders, 155–156
- industry *v.* inferiority, 8
- infant attachment, 10–11
- infant development, 215–216
- informed consent, 160
 litigation and, clinical vignette, 183
- initiative *v.* guilt, 8
- insomnia
 primary, 120–121
 diagnosis of, 120
 treatment of, 120–121
 substance abuse and, 196
- insurance, releasing medical records
 for, 191
- intellectualization, 2
- intelligence quotient (IQ)
 defined, 69
 mental retardation and, 70
- interferon, depressive symptoms triggered by, 18
- intermittent explosive disorder, 155
 antisocial personality disorder distinguished
 from, 59
 treatment, 155
- intimacy *v.* isolation, 8
- introjection, 3–4
- ippecac, 146
 toxicity, 147
- IQ. *See* intelligence quotient
- isolation, 4
- J**
- jet lag, 124
- K**
- Kernberg, Otto, 6
- ketamine (special K), 137–138
 psychotic disorder induced by, 208
 schizophrenic symptoms mimicked by, 44
- Klein, Melanie, 11
 object relations theory advanced by, 6
- Klein-Levine syndrome, 121
- kleptomania, 155
 bulimia nervosa and, 155
- Klonopin. *See* clonazepam
- Kohut, Heinz, 6
- Korsakoff psychosis, 211
- Korsakoff syndrome, 130
 clinical vignette, 191, 202
- L**
- Lamictal. *See* lamotrigine
- lamotrigine (Lamictal)
 BD I treated with, 24
 BD treated with, 166, 206
 side effects, 166
- law in psychiatry, 157–162
- lead poisoning, learning disorders and, 73
- learning disorders
 causes, 72
 diagnosis, 73
 clinical vignette, 184
 epidemiology/etiology, 72–73
 substance-induced conditions associated
 with, 73
 treatment, 73
- Lewy body dementia, 93–94
 diagnosis, 97
- liability, malpractice and, 162
- Librium. *See* chlordiazepoxide
- life cycle theory, 7
 stages in, 7–9
- life support, discontinuing, 194, 204–205
- lithium, 165
 BD I treated with, 24, 202
 BD treated with, clinical vignette, 206
 indications for, 165
 intermittent explosive disorder treated
 with, 155
 schizophrenia treated with, 195
 side effects, 165
 clinical vignette, 202
 trichotillomania treated with, 156

- litigation
 - clinical vignette, 196–197
 - informed consent and, clinical vignette, 183
 - malingered and, 117
 - living will, 194
 - lorazepam (Ativan), 170
 - alcohol-related disorders, 131
 - dissociative amnesia treated with, 153
 - liver failure and using, 170
 - LSD. *See* lysergic acid diethylamide
 - lysergic acid diethylamide (LSD), 137
 - M**
 - Mahler, Margaret, 11
 - infant development and, 215–216
 - object permanence and, 214
 - major depressive disorder (MDD), 17–21
 - age and, 19
 - anorexia nervosa and, clinical vignette, 185
 - diagnosis, 18–20
 - clinical vignette, 193
 - differential, 19
 - epidemiology/etiology of, 17–18
 - suicide completion risk in, 18
 - treatment, 20–21
 - malingered
 - clinical vignette, 196
 - defined, 117
 - diagnosis, 117
 - epidemiology/etiology, 117
 - treatment, 118
 - malpractice, clinical vignette, 196–197
 - mania, hypomania distinguished from, 23
 - manic episodes, 22–23
 - course of, 23
 - precipitants, 24
 - manic symptoms, causes, 23
 - MAOIs. *See* monoamine oxidase inhibitors
 - marijuana-related disorders, 138
 - Maslow, Abraham, 13–14
 - mathematics disorder, 72
 - MDD. *See* major depressive disorder
 - MDMA (3,4-methylenedioxymethamphetamine, ecstasy), 135, 137
 - medical malpractice, 162
 - medical records, releasing, 191
 - melancholic depression, 26
 - Mellaril. *See* thioridazine
 - memantine (Namenda)
 - dementia treated with, 99
 - side effects, 172
 - mental retardation, 69–72
 - autistic disorder and, 76
 - clinical vignette, 188
 - causes, 70
 - diagnosis, 70–71
 - differential, 71
 - epidemiology/etiology, 70
 - inherited, 174
 - IQ score and, 70
 - treatment, 71–72
 - meperidine (Demerol), 133
 - MAOIs and, 134
 - seizures and withdrawal from, 134
 - mercury toxicity, anxiety induced by, 29
 - mescaline, 137
 - mesoridazine (Serentil), 167
 - methadone, 133
 - opiate dependence treated with, 134–135
 - methamphetamine, 135
 - schizophrenic symptoms mimicked by, 44
 - 3,4-methylenedioxymethamphetamine. *See* MDMA
 - methylphenidate (Ritalin), 135
 - ADHD treated with, 81, 210
 - clinical vignette, 212
 - mechanism of action, 171
 - miosis, 133
 - mirtazapine (Remeron), 164
 - depression treated with, clinical vignette, 186, 198–199
 - mixed receptive-expressive language disorder, 74
 - modeling, 10
 - monoamine oxidase inhibitors (MAOIs)
 - depression treated with, 213–214
 - dietary changes, 164
 - MDD, 20
 - mechanism of action, 163
 - meperidine taken with, 134
 - pain disorder treated with, 201
 - SSRIs combined with, 211
- mood, defined, 17
 - mood disorders, 17–27. *See also* specific disorders
 - body dysmorphic disorder and comorbid, 216
 - with psychotic features, 44
 - mood stabilizers, 164–166
 - uses, common for, 164–165
 - morphine, 133
 - multiple personality disorder, 154
 - Münchhausen syndrome variant, 114
 - epidemiology/etiology, 115
 - mushrooms, 137
 - myocardial infarction, panic attack presentation and, 181
- N**
- naloxone (Narcan)
 - heroin overdose and, 215
 - opiate use determined with, 134
- naltrexone (Revia), 131
- Namenda. *See* memantine
- Narcan. *See* naloxone
- narcissistic personality disorder (NPD), 63–64
 - clinical vignette, 203–204
 - defense mechanisms, 64
 - diagnosis, 63
- narcolepsy, 122
 - clinical vignette, 180
 - treatment, 135
- Nardil. *See* phenelzine
- nefazodone (Serzone), 184
- neuroleptic malignant syndrome (NMS), 47
 - clinical vignette, 204
- neurologic disorder, antisocial personality disorder distinguished from, 59

- neurosyphilis, 95
- nicotine
- anxiety and, 29, 203
 - panic attacks and, 31
 - withdrawal, 139
- nicotine-related disorders, 139
- nightmare disorder, 124–125
- nitroprusside, hypertensive crisis treated with, 164
- NMDA receptor antagonists. *See* *N*-methyl-D aspartic acid receptor antagonists
- N*-methyl-D aspartic acid (NMDA) receptor antagonists, 171–172
- Alzheimer's dementia treated with, 197
- NMS. *See* neuroleptic malignant syndrome
- nocturnal enuresis, 85–86
- normal pressure hydrocephalus (NPH), 95
- diagnosis, 98
- NOS. *See* not otherwise specified
- not otherwise specified (NOS)
- depressive disorder, 193
 - paraphilias, 152
 - personality disorders, 68
 - psychotic disorder, 51
- NPD. *See* narcissistic personality disorder
- NPH. *See* normal pressure hydrocephalus
- O**
- object constancy, 11
- object permanence, 12
- clinical vignette, 214
- object relations theory, 6
- obsessions, 34–35. *See also* obsessive-compulsive disorder
- obsessive-compulsive disorder (OCD), 34–35
- clinical vignette, 199, 203
 - treatment, 35
- obsessive-compulsive personality disorder (OCPD), 35, 66–68
- defense mechanisms, 67
 - diagnosis, 67
 - treatment, 68
- obstructive sleep apnea (OSA), 123
- clinical vignette, 203
- OCD. *See* obsessive-compulsive disorder
- OCPD. *See* obsessive-compulsive personality disorder
- oedipal complex, 5
- clinical vignette, 189–190
- olanzapine (Zyprexa)
- diabetes and, 169
 - schizophrenia treated with, 45
 - side effects, 169
 - Tourette disorder treated with, 184
- operant conditioning, 10
- clinical vignette, 175
 - conversion disorder and, 108
- opiate-related disorders, 133–135
- diagnosis, 133–134
 - treatment, 134–135
- opiates, 133. *See also* specific opiates
- dependence, treatment of, 134–135
 - intoxication, 133
 - withdrawal, 134
- oppositional defiant disorder, 83
- clinical vignette, 174–175
- orgasmic disorder, 150
- OSA. *See* obstructive sleep apnea
- osteoporosis, anorexia nervosa and, 143
- overgeneralization, 217
- oxazepam (Serax), 170
- P**
- pain disorder, 109–111
- diagnosis, 110
 - epidemiology/etiology, 110
 - subtypes, 110
 - treatment, 110–111
 - clinical vignette, 201
- PANDAS. *See* Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infection
- panic attacks
- with/without agoraphobia, 30–31
 - clinical vignette, 189
 - myocardial infarction and presentation of, 181
- panic disorder
- causes, 30
 - diagnosis, 31
 - treatment, 32
- paranoid delusions, 42
- paranoid personality disorder (PPD), 55–56
- clinical vignette, 207
- paraphilias, 151–152
- NOS, 152
- parasomnias, 119
- parens patriae, 159
- Parkinson's disease
- dementia developed from, 94
 - diagnosis, 97
- Parlodel. *See* bromocriptine
- paroxetine (Paxil)
- depression treated with, 216
 - panic disorder treated with, 32
 - social phobia treated with, 197
- Paxil. *See* paroxetine
- PCP. *See* phencyclidine
- PDDs. *See* pervasive developmental disorders
- Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infection (PANDAS), 83
- Tourette disorder and, 84
 - treatment, 85
- pedophilia, 151
- pemoline (Cylert)
- ADHD treated with, clinical vignette, 212
 - adverse effects of, 171
 - side effects, 212
- penicillin, anxiety induced by, 29
- perceptual disturbances, 42
- Percocet, pain disorder treated with, 201
- personality
- defined, 53
 - Freud and etiology of, 53

- personality disorders, 53–68. *See also* specific disorders
 clusters, 54–55
 diagnosis, 53–54
 NOS, 68
 “weird,” 54, 55–58
 “wild,” 54, 58–64
 “worried,” 55, 64–68
- pervasive developmental disorders (PDDs), 75
- phencyclidine (PCP), 136–137
 intoxication, 136
 clinical vignette, 175
 psychotic disorder induced by, 208
 schizophrenic symptoms mimicked by, 44
 withdrawal, 137
- phencyclidine (PCP)-related disorders, 136–137
- phenelzine (Nardil), 164
- phenobarbital, sedative withdrawal treated with, 133
- phenolamine, hypertensive crisis treated with, 164
- phobias. *See also* social phobia; specific phobia
 defined, 32
- phonologic disorder, 75
- Piaget, Jean, 11–12
 object permanence and, 214
- Pick’s dementia, 94
 clinical vignette, 176–177
 diagnosis, 97–98
- pimozide, 85
- postpartum “blues,” 189
- postpartum depression, 26
 clinical vignette, 189
- postpartum psychosis, 51
- posttraumatic stress disorder (PTSD), 35–36
 clinical vignette, 197
 treatment, 36
- PPD. *See* paranoid personality disorder
- premature ejaculation, 150
 treatment, 150–151
- primary gain, 103
- projection, 4
- projective identification, 61
- prolactinemia, risperidone and, 169
- Prolixin. *See* fluphenazine
- propranolol, intermittent explosive disorder treated with, 155
- Prozac. *See* fluoxetine
- pseudodementia, 98
 dementia differentiated from, 98–99
- psychiatric hospital
 admission
 anorexia nervosa, 144, 190
 violent patients and, 159
 discharge, eating disorders and, 202
- psychoanalytic theory, 1–6
- psychodynamic schools, 1
- psychogenic polydipsia, 194–195
- psychological theories, 1
- psychology, classic, 1–5
- psychopathology, schemas leading to, 9
- psychopharmacology, 163–172
- psychosexual development
 anal, 5
 drive psychology in, 5
 genital, 6
 latency, 5–6
 oedipal complex in, 5
 oral, 5
 phallic, 5
 clinical vignette, 189–190
 stages, 5–6
- psychosis. *See also* Korsakoff psychosis; postpartum psychosis
 antipsychotic treatment of, 169
 defined, 41
- psychosocial development, 6–9
- psychostimulants, 171
- psychotherapies
 behavioral, 13
 cognitive-behavioral, 13
 MDD treated with, 20
 humanistic, 13
 individual, 13
 MDD treated with, 20
 psychoanalytic theories contributing to, 1
 psychodynamic, 14, 15
 clinical vignette, 179
 somatic, 14–15
 supportive, 15
 transpersonal, 13–14
 types of, 13–15
- psychotic disorders, 41–52. *See also* brief psychotic disorder; shared psychotic disorder
 NOS, 51
 substance-induced, 208
- PTSD. *See* posttraumatic stress disorder
- punitive damages, 162
- pyromania, 155
- Q**
- quetiapine (Seroquel)
 features, 169
 schizophrenia treated with, 46
- R**
- rapid eye movement (REM) sleep, 119–120
- rapprochement, 11, 215–216
- rationalization, 2–3
- Razadyne. *See* galantamine
- reaction formation, 4
 clinical vignette, 191
- reading disorder, 72
 diagnosis, clinical vignette, 184
- regression, 4
- REM sleep. *See* rapid eye movement sleep
- Remeron. *See* mirtazapine
- repression, 4
- respiratory depression, 133
- Restoril. *See* temazepam
- Rett’s disorder, 77–78
 clinical vignette, 192
- Revia. *See* naltrexone
- risk of harm, confidentiality breaching and, 158

- Risperdal. *See* risperidone
- risperidone (Risperdal)
- delirium treated with, 92
 - depot injection form of, 48, 170
 - diabetes and, 169
 - prolactinemia, 169
 - schizophrenia treated with, 45
 - clinical vignette, 181
 - side effects, 48
 - Tourette disorder treated with, 184
- Ritalin. *See* methylphenidate
- rivastigmine (Exelon)
- Alzheimer's dementia treated with, 171
 - dementia treated with, 99
- Russell's sign, 146
- S**
- SAD PERSONS, 22
- schema, 9
- schizoaffective disorder, 49
- clinical vignette, 183, 212–213
- schizoid personality disorder, 56–57
- clinical vignette, 173–174
- schizotypal personality disorder
- distinguished from, 58
- schizophrenia, 43–48
- diagnosis, 43–45
 - differential, 44
 - dopamine hypothesis of, 43
 - epidemiology/etiology, 43
 - paranoid, 207
 - pharmacology, 45–48
 - phases, 44
 - prognosis, 45
 - clinical vignette, 200–201
 - schizotypal personality disorder
 - distinguished from, 58, 187
 - subtypes, 44–45
 - clinical vignette, 193
 - symptoms, 44
 - treatment, 45–48
 - clinical vignette, 181, 194–195, 213
 - medication noncompliance and, 189
 - treatment-refractory, clinical vignette, 213
- schizophreniform disorder, 48–49
- clinical vignette, 199
- schizotypal personality disorder
- clinical vignette, 187
 - diagnosis, 57–58
 - differential, 58
 - schizophrenia distinguished from, 187
- seasonal affective disorder, 20
- secondary gain, 103–104
- sedative-related disorders, 132–133
- sedatives
- intoxication, 132
 - overdose, treatment of, 132
 - withdrawal, 133
 - anxiety induced by, 29
- seizures
- alprazolam-caused, clinical vignette, 176
 - autistic disorder and comorbid, 76
 - clinical vignette, 188
 - meprobamate withdrawal and, 134
 - selective mutism, 86
 - selective noradrenaline reuptake inhibitors (SNRIs), 20
 - selective serotonin reuptake-inhibitors (SSRIs)
 - anorexia nervosa treated with, 144
 - anxiety disorders treated with, 170
 - body dysmorphic disorder treated with, 114
 - depression treated with, 216
 - GAD treated with, 88, 178
 - MAOIs combined with, 211
 - MDD, 20
 - mechanism of action, 163
 - pain disorder treated with, 201
 - panic disorder treated with, 32
 - separation anxiety disorder treated with, 87
 - side effects, 163
 - sexual, 186
 - "self treat," 34
 - Self-Psychology, 6
 - separation anxiety disorder, 86–87
 - clinical vignette, 207–208
 - diagnosis, 87
 - epidemiology/etiology, 87
 - treatment, 87
 - separation-individuation, 11, 215–216
 - Serax. *See* oxazepam
 - Serentil. *See* mesoridazine
 - Seroquel. *See* quetiapine
 - serotonin syndrome, 134
 - clinical vignette, 211
 - sertraline (Zoloft), 32
 - Serzone. *See* nefazodone
 - sexual arousal disorders, 150
 - sexual changes, aging and, 149–150
 - sexual desire disorders, 150
 - sexual disorders, 149–152
 - sexual dysfunction, 149–151
 - sexual identity, 11
 - clinical vignette, 195–196
 - sexual masochism, 151
 - sexual pain disorders, 151
 - sexual response cycle, 149
 - sexual sadism, 151
 - shared psychotic disorder, 51
 - shift work sleep disorder, 124
 - sick role, clinical vignette, 176
 - SIGECAPS, 18–19
 - sildenafil (Viagra), 150, 178
 - sleep apnea, 123. *See also* central sleep apnea; obstructive sleep apnea
 - sleep cycle, 119–120
 - nightmares during, 124
 - sleep disorders, 119–125. *See also specific disorders*
 - BD and, 217
 - circadian rhythm, 123–124
 - depression and, 206
 - diagnosis, 120–125
 - epidemiology/etiology, 119–120
 - psychiatric disorders associated with, 120
 - secondary, 119
 - shift work, 124
 - substance abuse and, 196
 - treatment, 120–125

- sleep hygiene, 120–121
sleep terror disorder, 125
sleepwalking disorder, 125
SNRIs. *See* selective noradrenaline reuptake inhibitors
social phobia, 32–33
 in childhood, 88
 public speaking manifestation of, clinical vignette, 197
somatic delusions, 42
somatization, 4
 defined, 103
 health care system and effect of, 104
somatization disorder
 clinical vignette, 185–186
 diagnosis, 105–106
 differential, 106
 epidemiology/etiology, 105
 prognosis, 107
 treatment, 106–107
somatoform disorders, 103–118
 undifferentiated, 107
 clinical vignette, 190
Sonata. *See* zaleplon
special K. *See* ketamine
specific phobia, 33–34
 patients who “self treat,” 34
Spitz, Renée, 12
splitting, 61
 clinical vignette, 215
SSRIs. *See* selective serotonin reuptake-inhibitors
Stanford-Binet test, 69
Stelazine. *See* trifluoperazine
steroids, manic symptoms produced by, 23
STUPID In The PM, 89–90
stuttering, 75
sublimation, 2
substance-induced mood disorder, 26
 clinical vignette, 187
 treatment, 27
substance-related disorders, 127–139
 amnesic, 100, 211
 dementia and, 95
 psychotic disorders, 208
substances
 abuse, 127
 sleep disorders and, 196
 anxiety and, 203
 dependence, 127–128
substituted judgement, 161
 clinical vignette, 173
suicide
 BD I and risk of completed, 22
 BPD and risk of completed, 60
 MDD and risk of completed, 18
 preventing, 158
 SSRI treatment and risk of, 216
sulfonamides, anxiety induced by, 29
sundowning, 96
superego, 1
suppression, 2
Symmetrel. *See* amantadine
sympathomimetics, manic symptoms produced by, 23
systemic desensitization, 33
T
tacrine (Cognex)
 adverse effects of, 172
 Alzheimer’s dementia treated with, 171
 dementia treated with, 99
Tarasoff Duty, 158
tardive dyskinesia, 47
 clinical vignette, 200
TCAs. *See* tricyclic antidepressants
Tegretol. *See* carbamazepine
temazepam (Restoril), 170
temperament, 12
thioridazine (Mellaril), 167
 pigmentary retinopathy, 169
 potency of, 167
 schizophrenia treated with, 45
Thorazine. *See* chlorpromazine
thought broadcasting, 42
thought disorders
 content, 41
 process, 41–42
tics, 83
 motor, 84
 vocal, 84
Tourette disorder
 clinical vignette, 184
 diagnosis, 84
 epidemiology/etiology, 83–84
 PANDAS and, 84
 treatment, 85
transference
 defined, 14
 doctor-patient relationship and, 157
transient global amnesia
 clinical vignette, 186–187
 epidemiology/etiology, 100–101
transitional object, 12
transvestic-fetishism, 151
trazodone (Desyrel)
 dementia treated with, 99
 insomnia, primary treated with, 121
 side effects, 171
 clinical vignette, 184
 triazolam (Halcion), 170
trichotillomania, 156
tricyclic antidepressants (TCAs)
 anorexia nervosa treated with, 144
 MDD, 20
 mechanism of action, 163
 pain disorder treated with, 201
 side effects, 164
trifluoperazine (Stelazine), 167
 schizophrenia treated with, 45
trisomy 21, 70, 179
trust *v.* mistrust, 7
V
vaginismus, 151
 clinical vignette, 177
Valium. *See* diazepam

valproate (Depacon), 165
 BD I treated with, 24
 BD, rapid cycling treated with, 180
 indications for, 165
 mechanism of action, 166
 side effects, 166
valproic acid, BD I treated with, 202
varenicline (Chantix), 139
vascular dementia, 94
 clinical vignette, 213
 diagnosis, 97
venlafaxine (Effexor XR), 38
Viagra. *See* sildenafil
violent patients, psychiatric hospital
 admission and, 159
voyeurism, 151

W

Wellbutrin. *See* bupropion
Wernicke encephalopathy, 130
 clinical vignette, 191
Wernicke-Korsakoff syndrome, 129–130, 209

Wilson disease, clinical vignette, 192
Winnicott, Donald, 12

X

Xanax. *See* alprazolam

Y

Yocon. *See* yohimbine
yohimbine (Yocon), 150

Z

zaleplon (Sonata), 170–171
 insomnia, primary treated with, 121
ziprasidone (Geodon)
 schizophrenia treated with, 46
 side effects, 47, 168
 Tourette disorder treated with, 184
Zoloft. *See* sertraline
zolpidem (Ambien), 170–171
 insomnia, primary treated with, 121
Zyban. *See* bupropion
Zyprexa. *See* olanzapine