



SEIZURE DISORDER

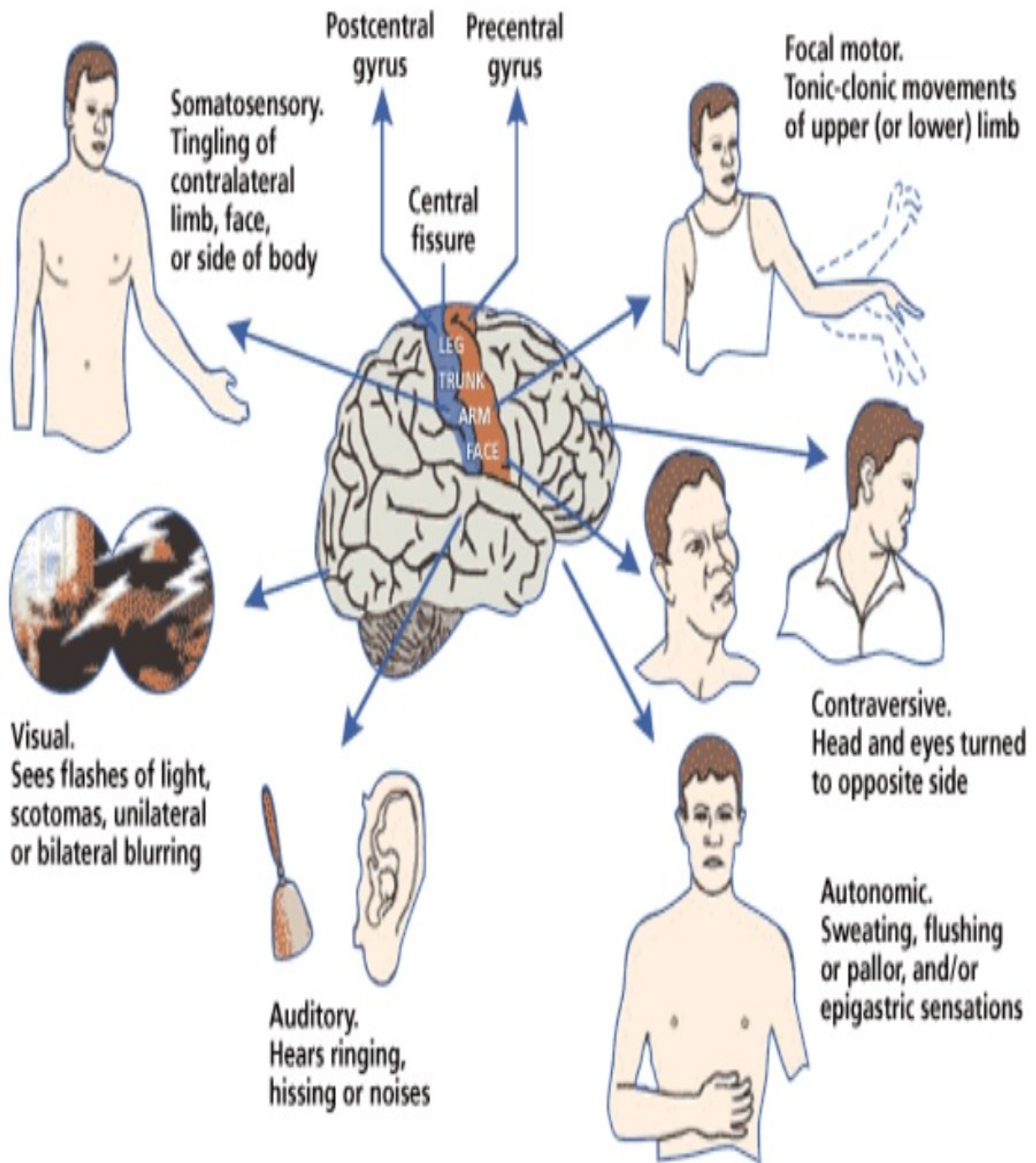


SEIZURE DISORDER

SEIZURES are episodes of abnormal motor, sensory, autonomic or psychic activity (or combination of these) that result from sudden excessive discharge from cerebral neurons.

CLASSIFICATION OF SEIZURES

- ***Partial Seizure*** – begin in one part of the brain.
 - Simple Partial Seizure – consciousness remains intact
 - Complex Partial Seizure – impairment of consciousness
- ***Generalized Seizure*** – involvement of the whole brain

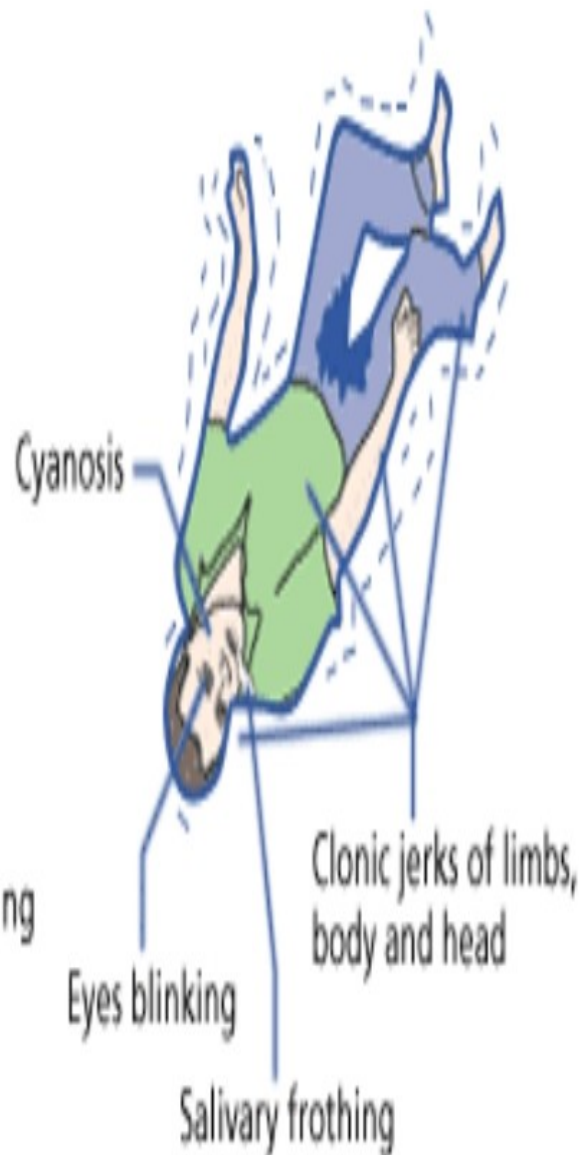


Partial Seizure

A. Tonic phase



B. Clonic phase



C. Post-ictal confusional fatigue

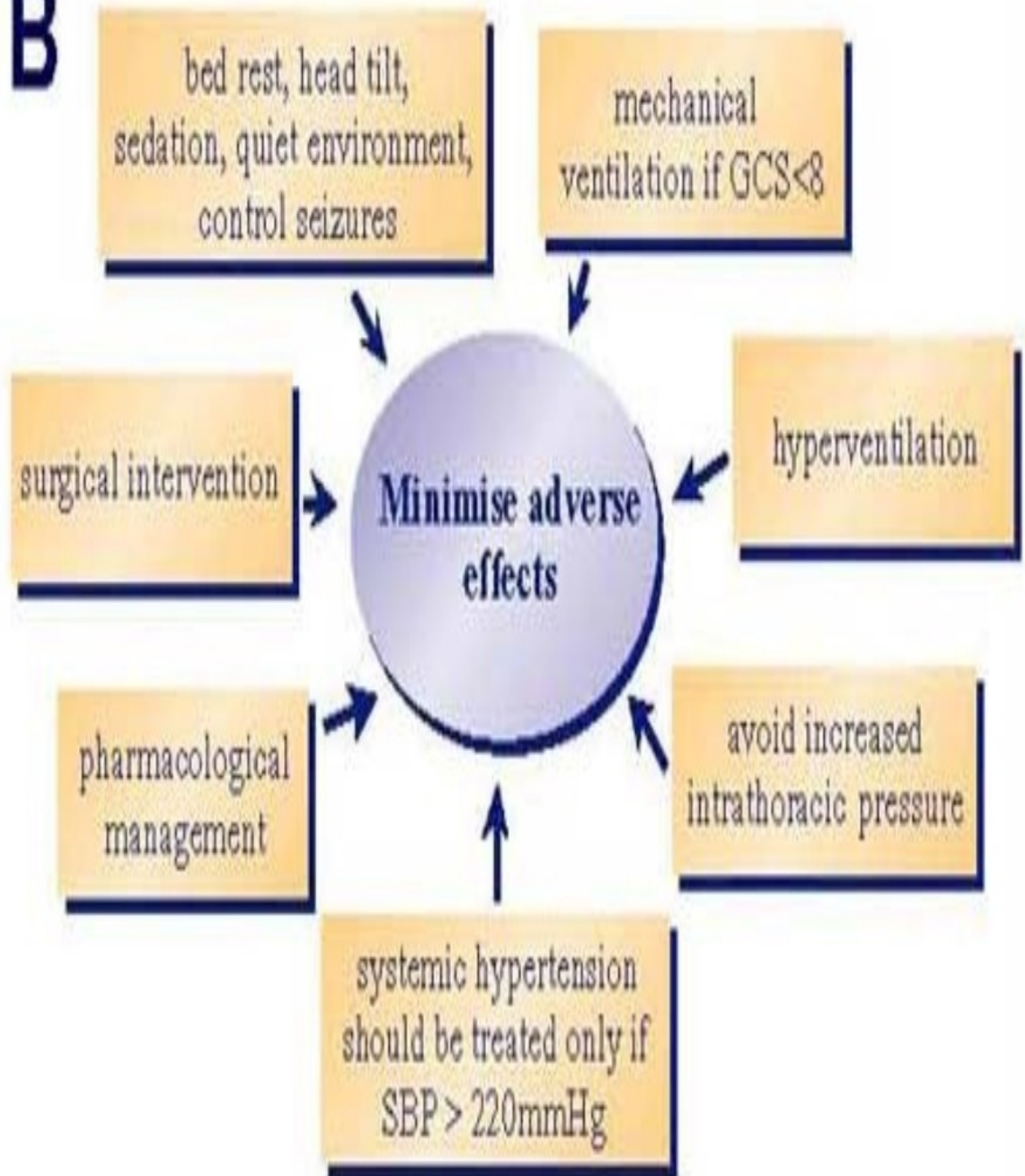


CAUSES OF SEIZURE:

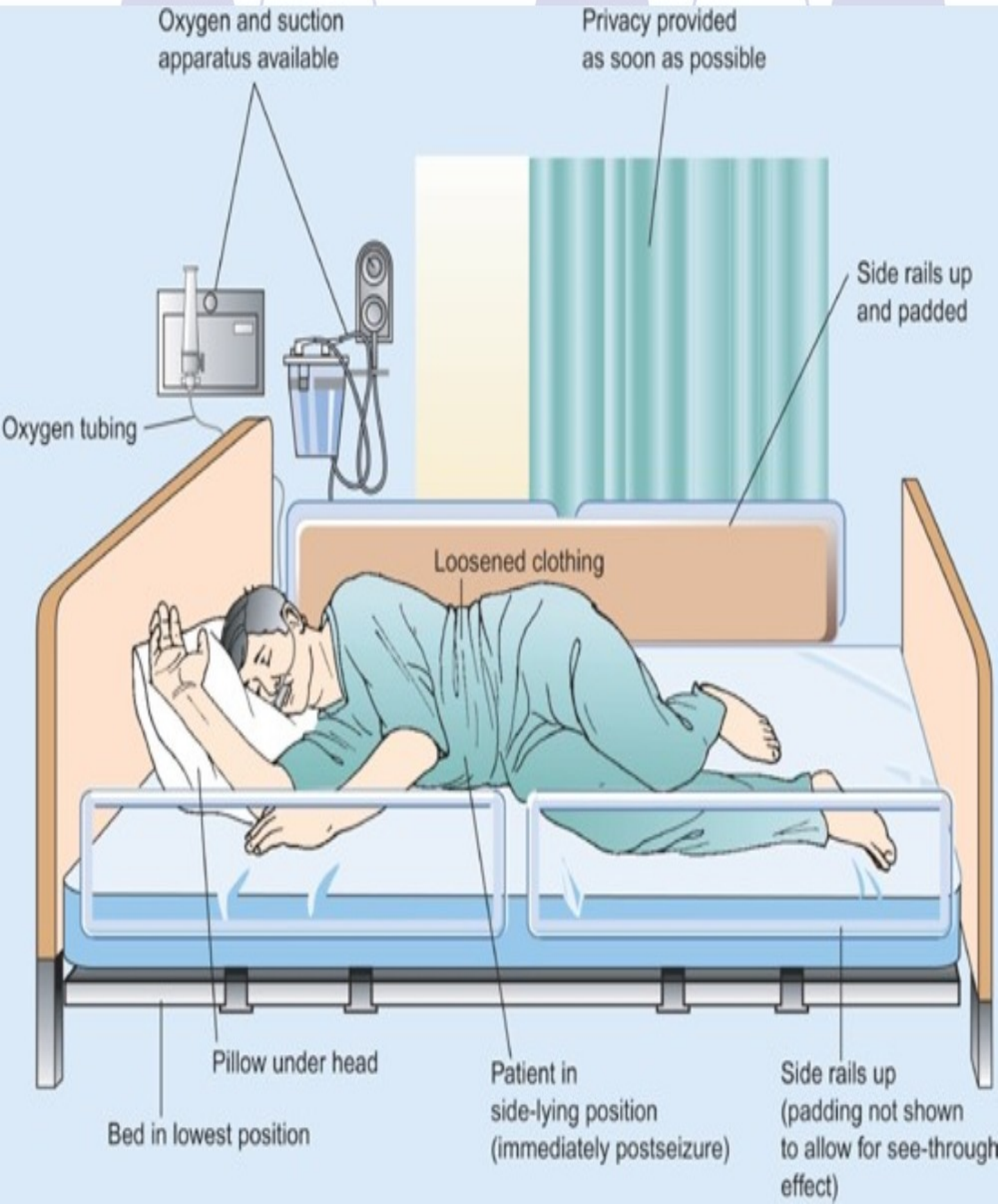
- Cerebrovascular Accident
- Hypoxemia
- Fever (childhood)
- Head Injury
- Hypertension
- CNS Infection
- Metabolic and toxic conditions
- Brain Tumors
- Drugs and Alcohol withdrawal
- Allergies

NURSING MANAGEMENT

B



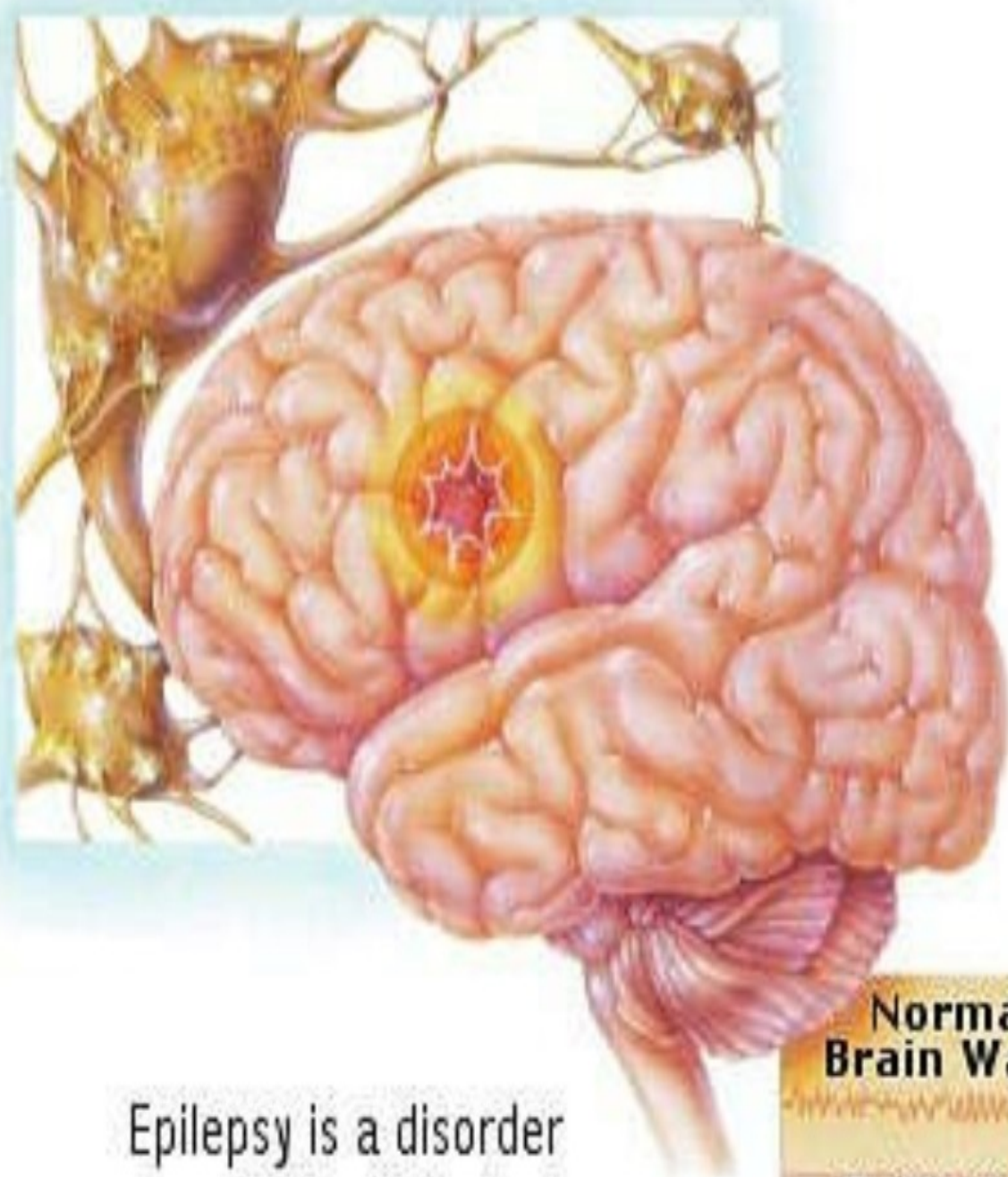
Guidelines for Seizure Care



THE EPILEPSY

EPILEPSY is a group of syndromes characterized by unprovoked, recurring seizures.

- ***Primary*** – idiopathic
- ***Secondary*** – cause is known and the epilepsy is a symptom of another underlying condition such as brain tumor.



Epilepsy is a disorder marked by disturbed electrical rhythms in the central nervous system.

**Normal
Brain Wave**



**Petit Mal
Seizure**



**Grand Mal
Seizure**



Epilepsy can follow:

- ☞ Birth trauma
- ☞ Asphyxia neonatorum
- ☞ Head injuries
- ☞ Some infectious disease (bacterial, viral, parasitic)
- ☞ Toxicity (carbon monoxide and lead poisoning)
- ☞ Circulatory problems



@Fever

@Metabolic

@Nutritional disorders

@Drug or alcohol intoxication

• *Also associated with:*

✚ Abscesses

✚ Congenital malformations

✚ Brain tumors

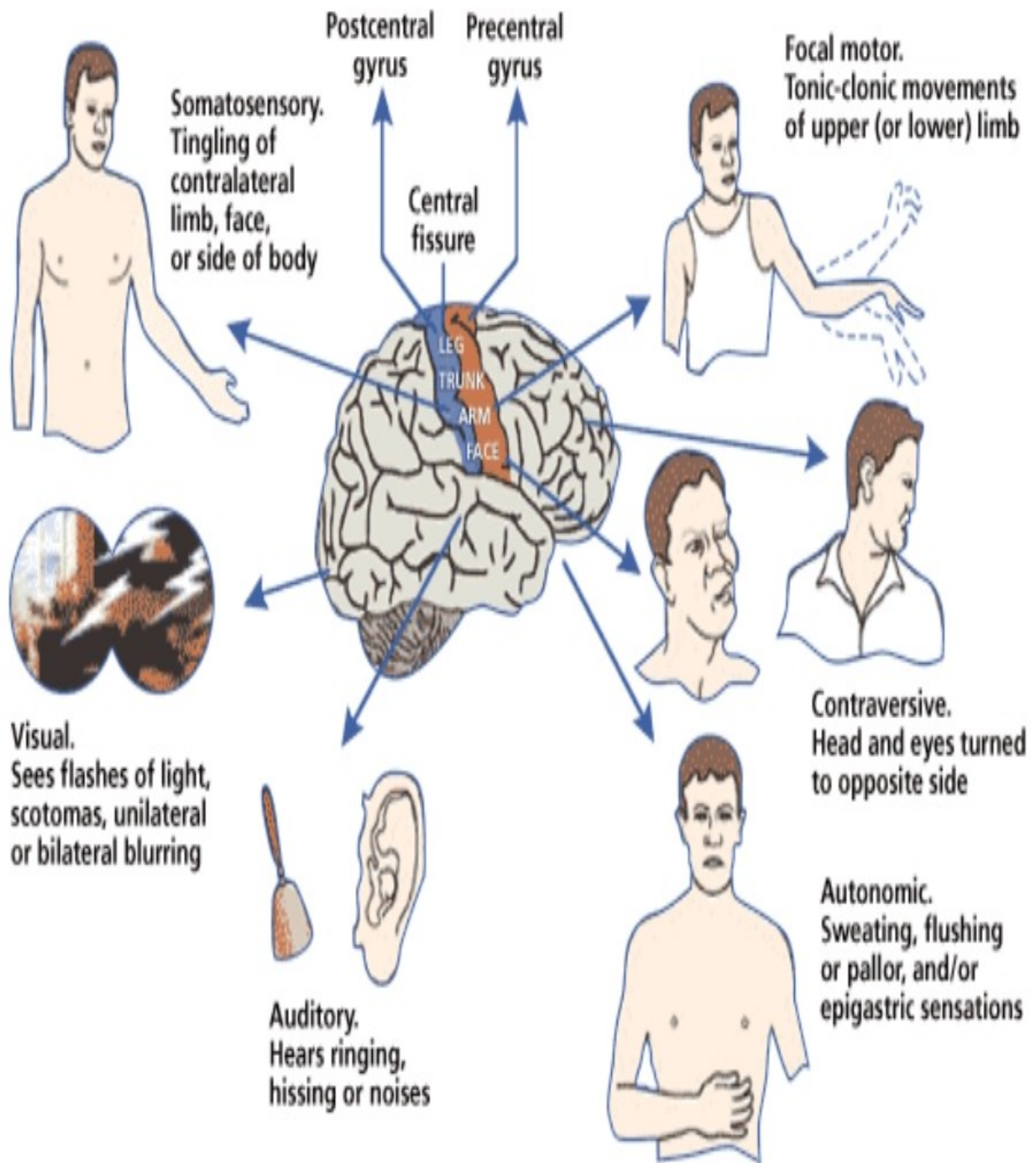


CLINICAL MANIFESTATION

● **Simple Partial Seizure**

- Only finger or hand may shake
- Mouth may jerk uncontrollably
- May talk unintelligibly
- Dizzy
- May experience unusual sound or unpleasant sounds, odor, or taste but without loss of consciousness





Simple Partial Seizure Manifestations

🌍 ***Complex Partial Seizure***

- ☀ Remains motionless or moves automatically but inappropriately for time a place
- ☀ May experience excessive emotions of fear, anger, elation, or irritability
- ☀ Does not remember the episode when its over

🌍 ***Generalized Seizures***

- ☀ Intense rigidity of the entire body may occur.
- ☀ Alternating muscle relaxation and contraction (tonic-clonic contraction)
- ☀ Patient is incontinent in urine and feces
- ☀ Tongue is often chewed



● *After Postictal State (after seizure)*

- ☀ Often confused and hard to arouse
- ☀ May sleep for hours
- ☀ May report headache, sore muscle, fatigue and depression

ASSESSMENT AND DIAGNOSTIC FINDINGS

Aimed to determine:

- Type of seizure
- Frequency
- Severity
- Factors that precipitate them.
- Developmental history taking (events of pregnancy and childbirth)
- Questioned about illnesses or head injury

Diagnostic Examination includes:

- Biochemical, hematologic, and serologic studies.
- MRI
- Electroencephalogram (EEG)\
- SPECT

EPILEPSY IN WOMEN

Women with Epilepsy is often noted to an:

- Increase in seizure frequency during menses
- Linked to increase sex hormone
- Effectiveness of contraceptives is decreased by anti-seizure medications.

High Risk mothers:

- Teenagers, women with histories of difficult deliveries, women who use illicit drugs
- Women with DM or HPN

GERONTOLOGIC CONSIDERATIONS

Associated with:

- Stroke
- Head injury
- Dementia
- Infection
- Alcoholism
- Aging



PHARMACOLOGIC THERAPY

Objective is to achieve seizure control with minimal side effects.

Side effects of anti-seizure drugs:

7. Idiosyncratic or allergic disorder (primarily as a skin reaction)
2. Acute toxicity (occur when medication is initially prescribed)
3. Chronic toxicity (occurs late in the course of the therapy)

SURGICAL MANAGEMENT

Surgery is indicated for patients whose epilepsy results from:

- Intracranial tumor
- Abscesses
- Cyst
- Vascular anomalies
- Patient with intractable seizure disorder that do not respond to medication

STATUS EPILEPTICUS

- ⊕ A series generalized seizures that occur without full recovery of consciousness between attacks.
- ⊕ Electrical seizures (on EEG) lasting at least 30 minutes, even without impairment of consciousness.
- ⊕ Considered a medical emergency.
- ⊕ Status Epilepticus produces:
 - ✱ Cumulative effects.
 - ✱ Vigorous muscular contractions impose a heavy metabolic demand; and
 - ✱ Interfere with respirations.

Factors that precipitate Status Epilepticus:

- Withdrawal of antiseizure medication,
- Fever
- Concurrent infection.

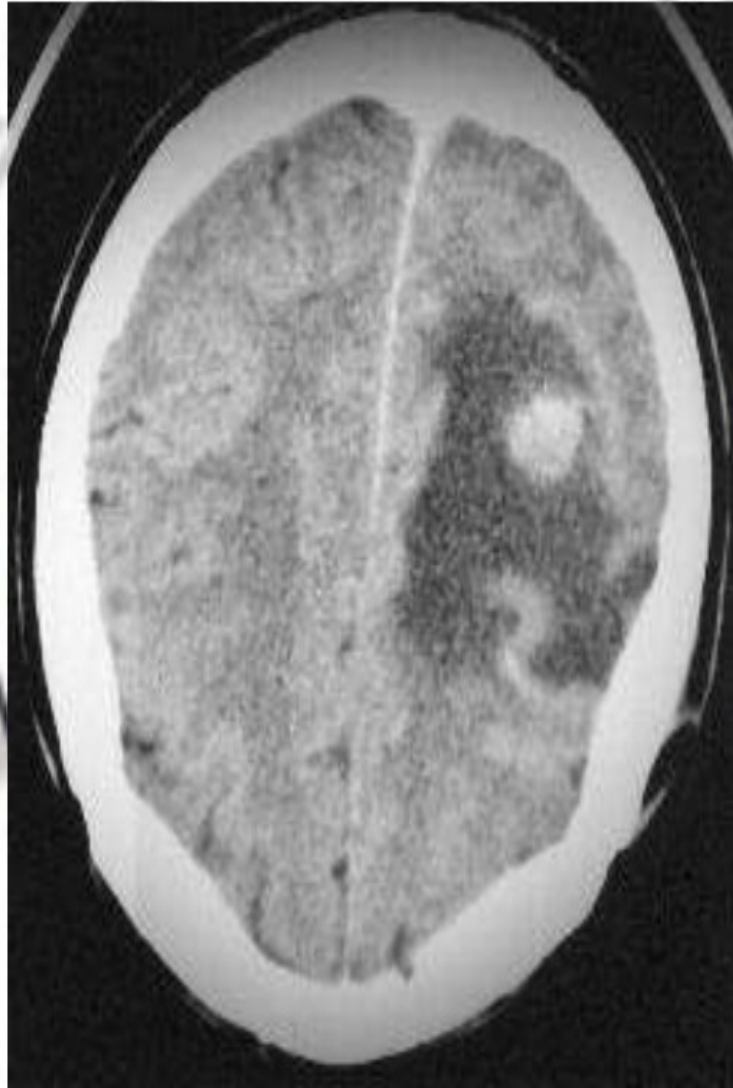
Medical Management

- Stop the seizures as quickly as possible,
- Ensure adequate cerebral oxygenation, and
- Maintain the patient in a seizure-free state.
- An airway and adequate oxygenation are established.
- If the patient remains unconscious and unresponsive, a cuffed Endotracheal tube is inserted.
- **Medications:**

Intravenous Diazepam (Valium), Lorazepam (Ativan), or Forphenytoin (Cerebyx)\

Nursing Management

- Assessment and monitoring of respiratory and cardiac function
- Antiseizure medications and sedatives.
- Monitoring and documenting the seizure activity and the patient's responsiveness.
- The patient is turned to a side-lying position, if possible, to assist in draining pharyngeal secretions.
- The IV line is closely monitored





SEIZURE DISORDER



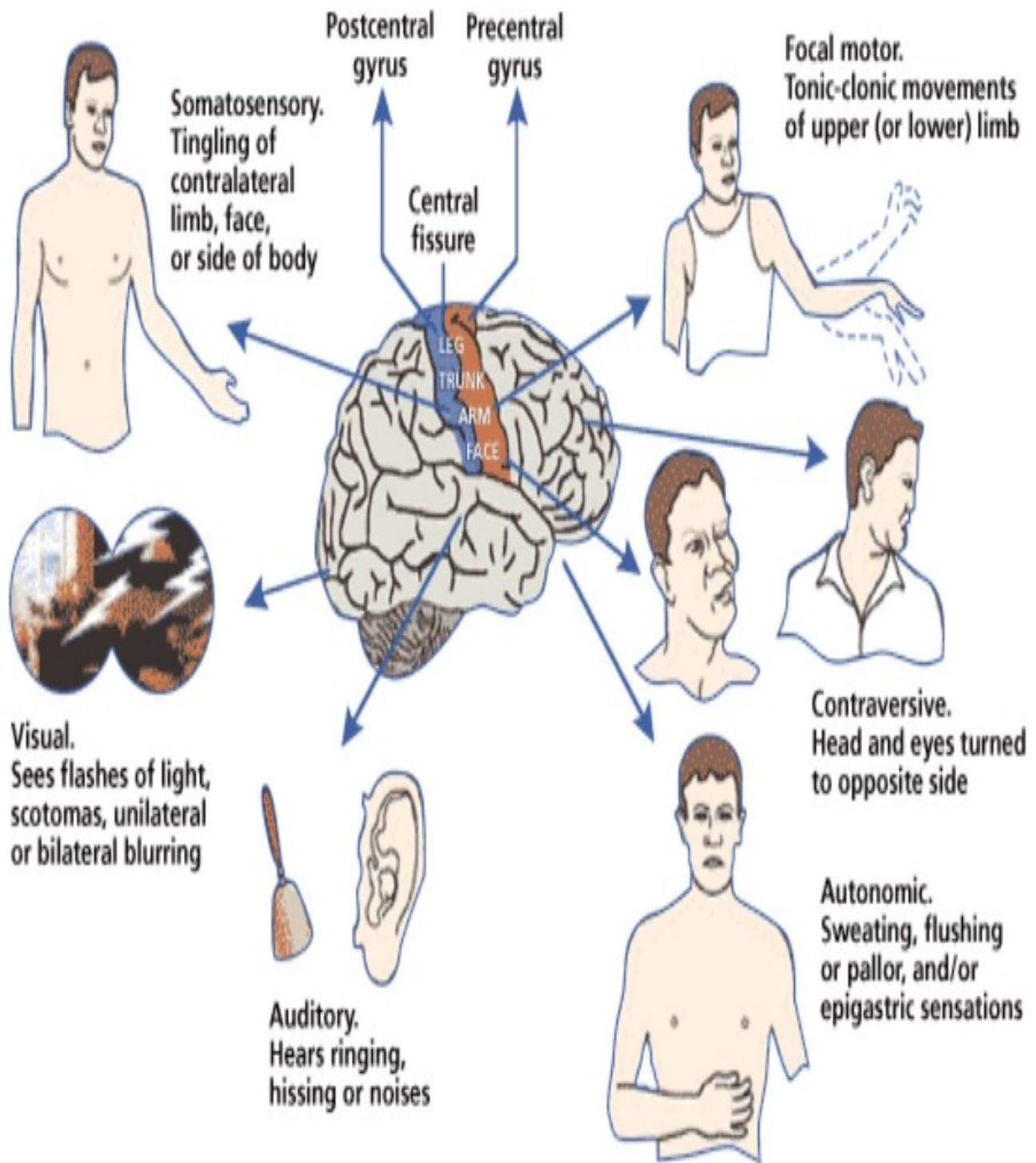


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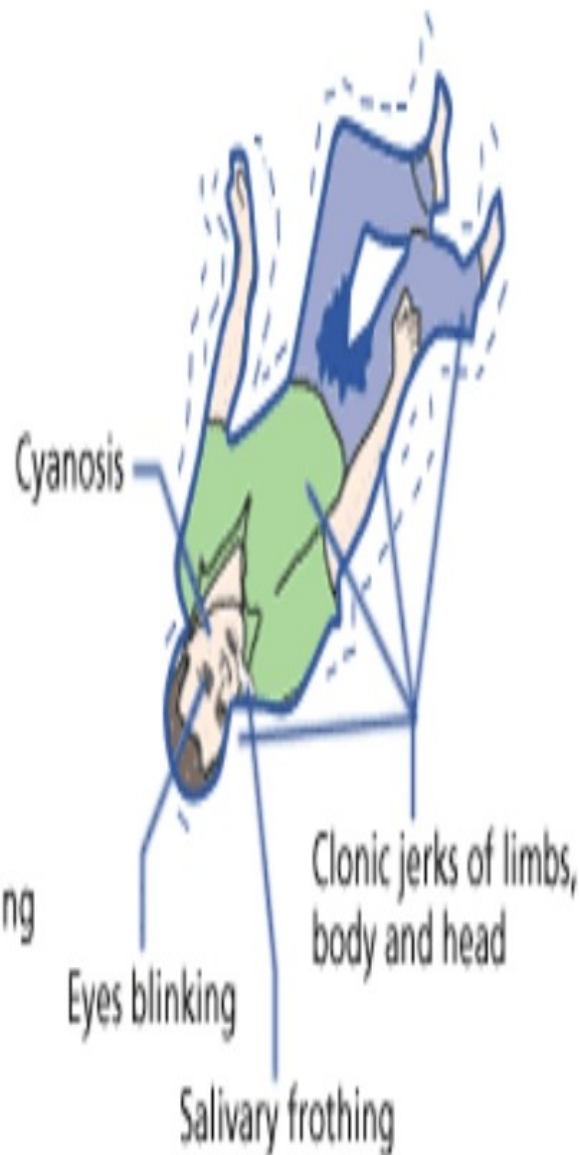


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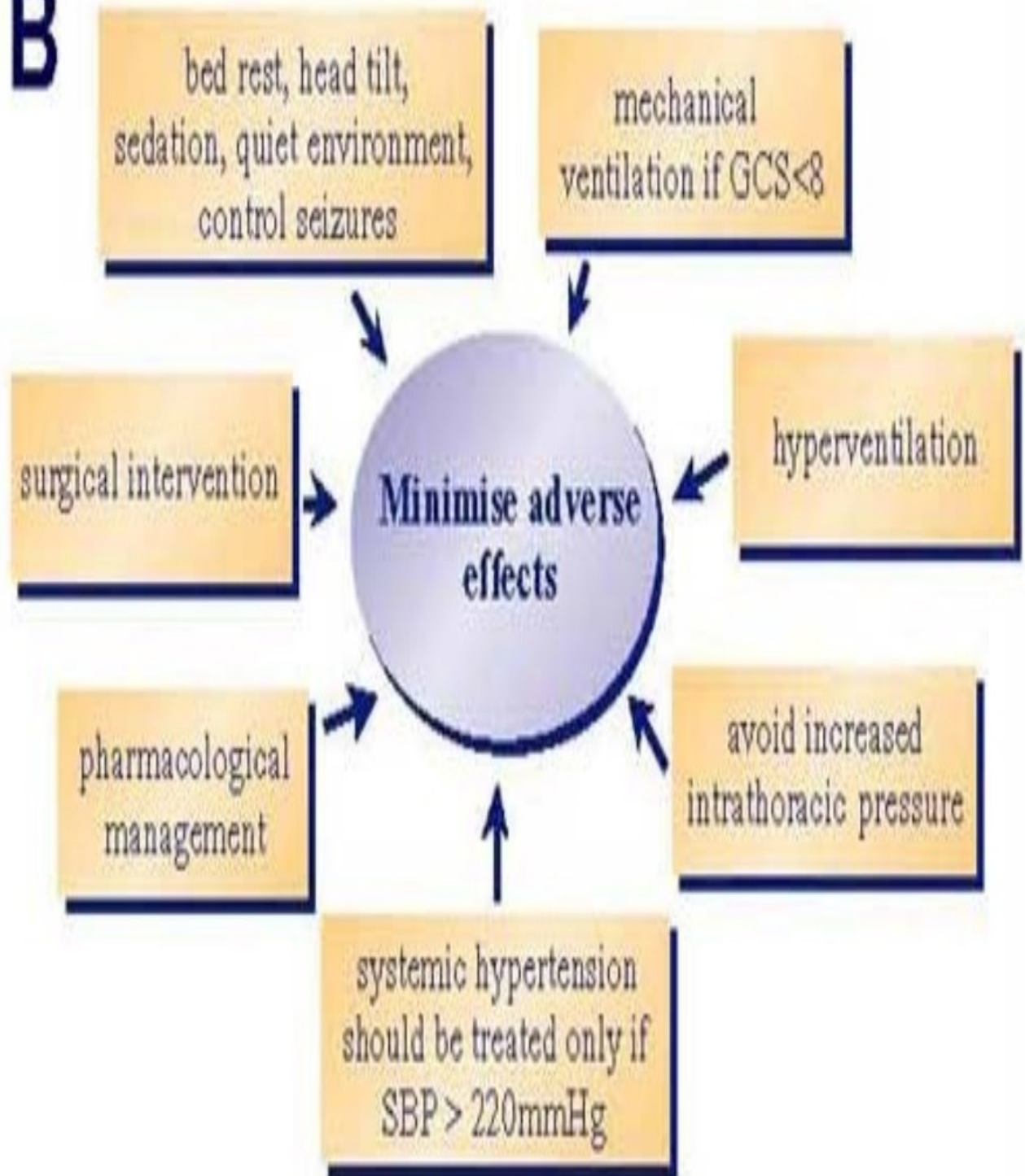


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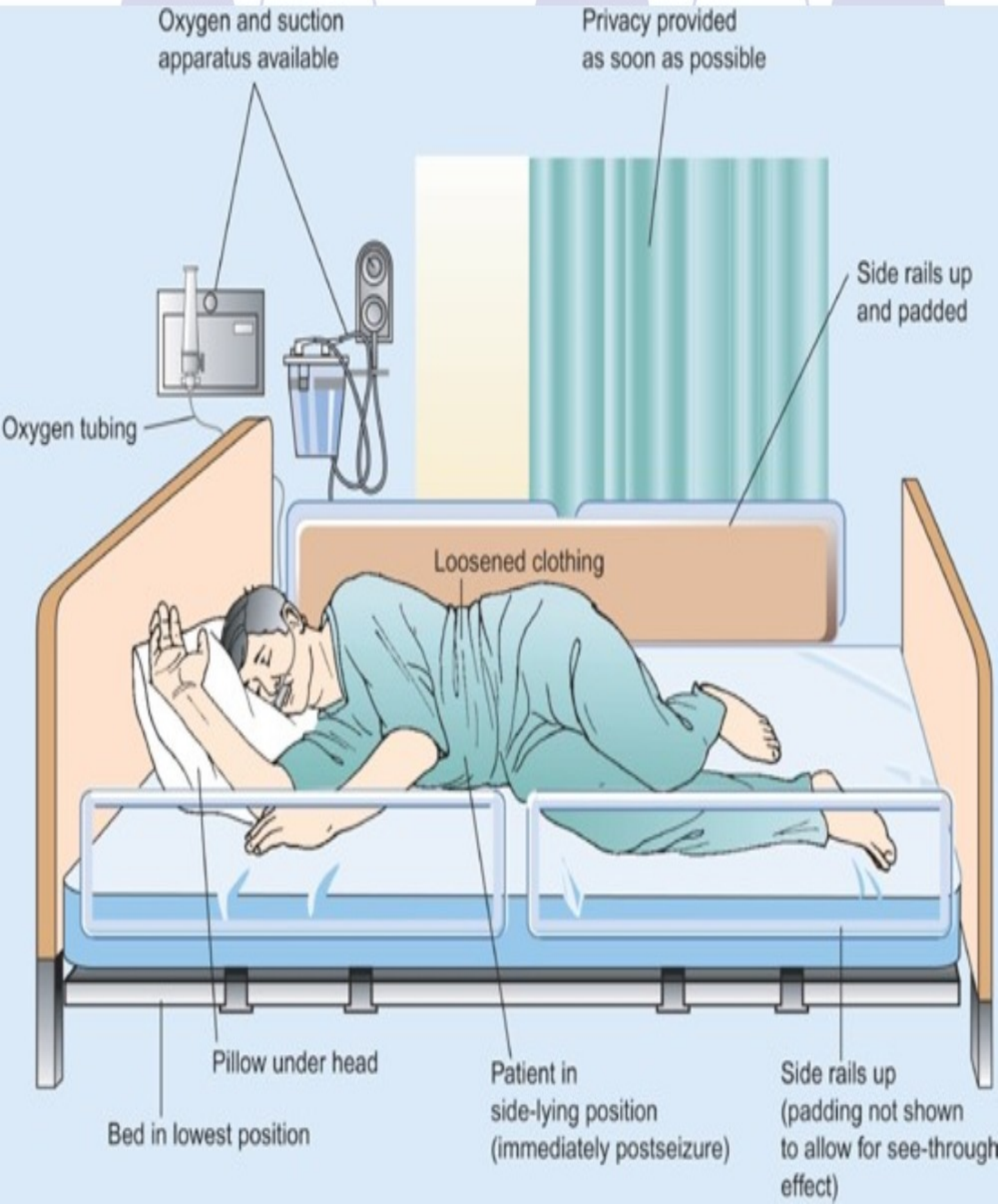
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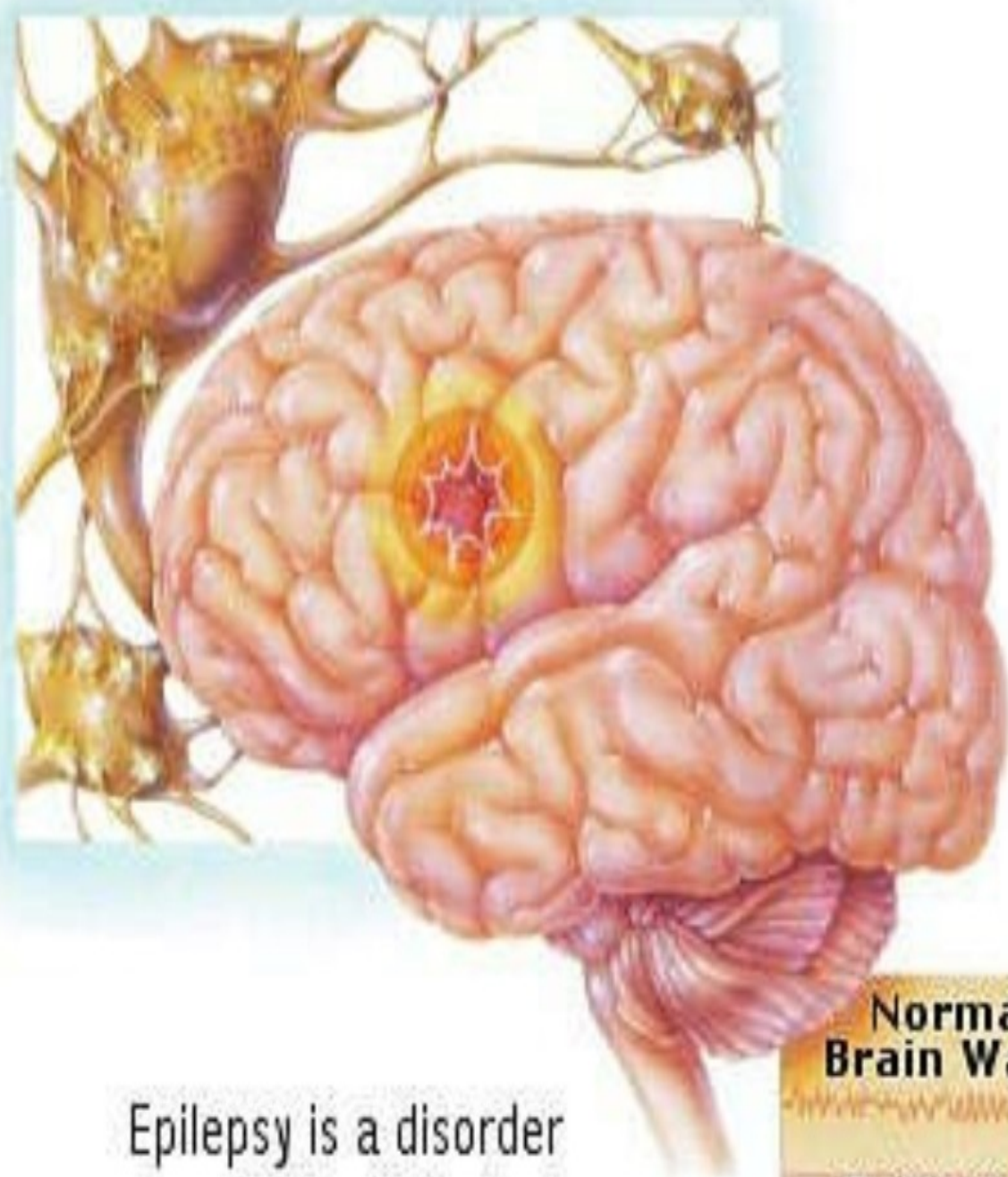
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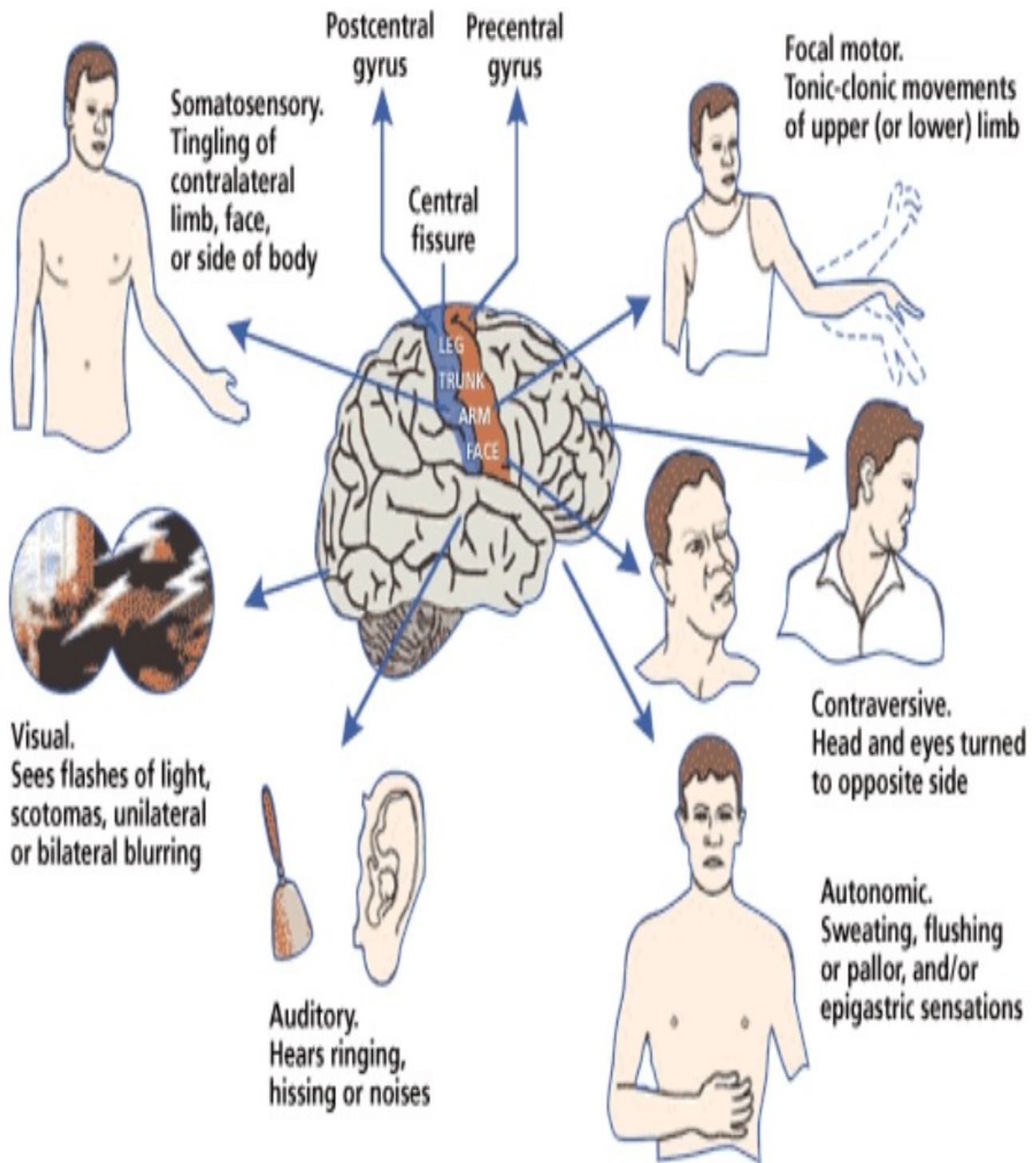


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