Pre-operative Care



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Learning Outcomes

- Describe the principles involved in pre-operative assessment of a patient
- Enumerate the Specific pre-operative problems in preparing a patient for surgery
- Identify the stages in the consent process

Definition

The preoperative period runs from the time the patient is *admitted* to the hospital or surgicenter to the time that the *surgery begins*.

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Pre-operative plan

- Gather and record all relevant information
- Optimize patient condition
- Choose surgery that offers minimal risk and maximum benefit
- Anticipate and plan for adverse events
- Inform everyone concerned.

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Steps of P.O.P's

- History
- Examinations
- Investigations
- Preoperative treatments
- Documentation
- Communications – Valid consent

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Types of patients

- Out-Patient Department
- Usually seen 1-2 weeks before surgery at preadmission clinic
- Emergency department
- Need initial assessment & immediate resuscitation

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Principles of History taking

- Listen: What is the problem? (Open questions)
- Clarify: What does the patient expect?

  (Closed questions)
- Narrow: Differential diagnosis

  (Focused questions)
- Fitness: Comorbidities (Fixed questions)

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Examination

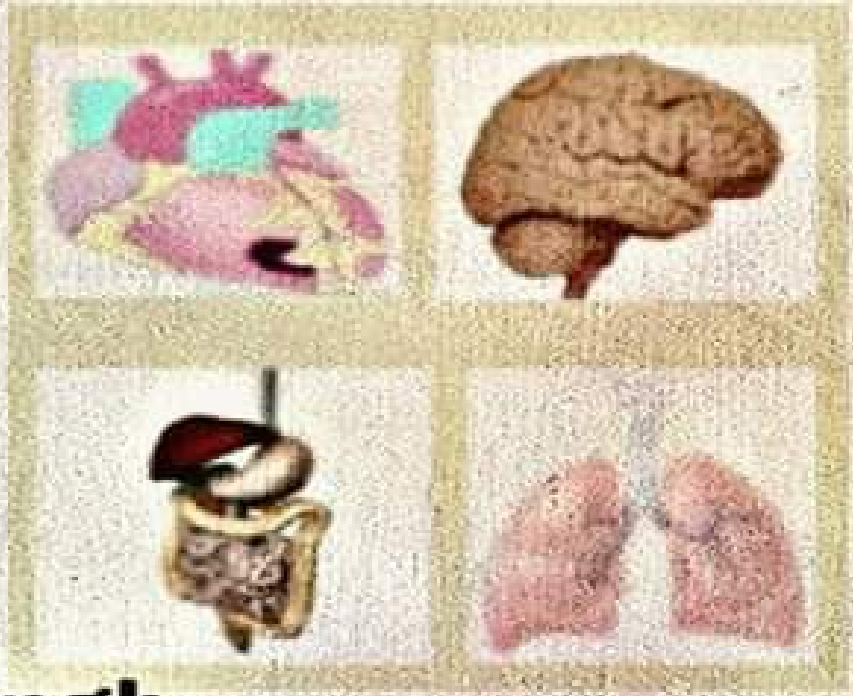
- **General:** + findings even if not related to the proposed procedure should be explored
- **Surgery related:** Type and site of surgery, complications which have occurred due to underlying pathology
- **Systemic:** Comorbidities and their severity
- **Specific:** For example, suitability for positioning during surgery.

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General Physical Ex:

- To check fitness for anesthesia & surgery.
- **GPE**
- **<u>Systemic:</u>**

- **CVS**
- **CNS**
- **GIT**
- **Respiratory system**



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Specific Surgical Ex:

- Its aim: to confirm previous findings & diagnosis, to determine severity & to gauge extent.
- E.g. in inguinal hernia confirm it's inguinal not femoral, reducible or not & whether there are any signs of bowel obstruction.

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Specific Medical Ex:

- Its aim: to evaluates the presence & severity of other problems.
- E.g. Diabetic patient undergoing surgery need careful examination for sepsis , neuropathy or microvascular disease

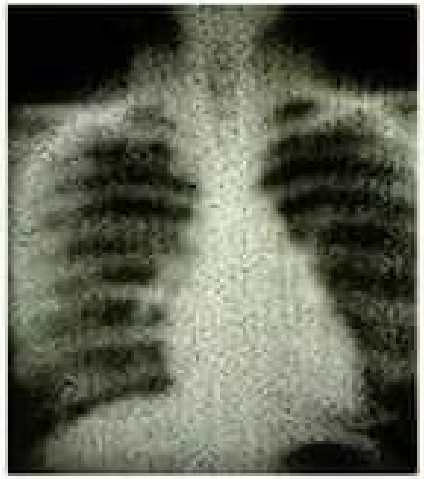
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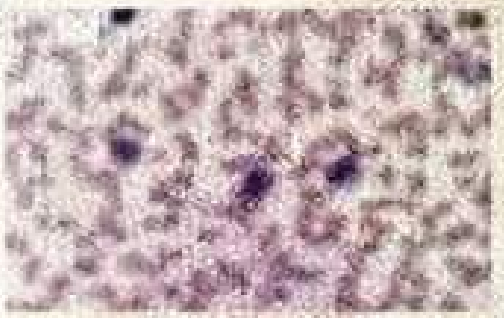
Investigations – Routine

- Every unit and ward has its own protocol.
- The tests which normally performed on most patient coming to surgery:

  * **Full Blood Count**
  * **Basic Biochemistry**
  * **Chest Radiography**







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Investigations – Targeted tests

- **Hematology** : to exclude anemia, for platelets count & to assess the amount of blood may be needed during or after operation.

- **Urea, Creatinine & Electrolytes:** state of dehydration & renal insufficiency.

- **Liver Function Tests**: Alb & Protein guide to nutritional status & shows any clotting problems.

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Investigations – Others

- **ECG :** It's recommended in all patient >65years, pt. with blood loss & cardiovascular/pulmonary problems.
- **Urinalysis:** used for determination of renal function, inflammation, infection & metabolic disorders.
- **Pregnancy Test:** (B- HCG)
- **HBsAg** & **HIV** testing.
- **RBS & HbA1c :** Diabetes
- **Blood gas analysis:** Occ. required

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Management plan – Key points

- Provide all information necessary for the patient to make an informed decision
- Use common language
- Discuss the options rather than telling the patient what will be done
- Give the patient time to think things over
- Encourage to discuss things – trusted person
- Suggest to write down a list of points that to be discussed

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Specific Pre-op problems

Specific P.O.P – C.V.S

- Hypertension
- IHD / Recent MI
- Arrhythmias
- Cardiac failure
- Anaemia & Blood transfusion
- Prosthetic valves



- BP > 160 systolic or > 95 diastolic - surgery deferred till control of BP.
- MI – No surgery – 6 mths.
- Consider transfusion if Hb% < 8 g/dl.

Specific P.O.P – R.S

- Infection
- Asthma
- COPD
- Pulmonary fibrosis

- Stop smoking - 4 wks & continue inhalers
- LRI – to be treated
- Avoid respiratory suppressants (narcotics)

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Specific P.O.P – G.I.T

- Malnutrition
- Obesity
- Regurgitation risk
- Jaundice

- Nutritional support is required - a minimum of 2 weeks prior to surgery
- Extra measures – obese patients
- No solids – 6hrs / No fluids – 2hrs
- Sec complications – jaundice pts

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Specific P.O.P – G.U.D

- Renal impairment
- UTI
- Categorize – Pre-renal / Renal & Post-renal
- Start antibiotics – UTI Care taken – maintain good urine output

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Specific P.O.P – Metabolic disorders

- Diabetes
- Adrenocortical suppression
- Rare disorders
- Risk-reduction strategies for Diabetic pts
- Extra dose steroids to avoid crisis

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Specific P.O.P – Coagulation disorders

- Drugs X clotting casades
- Acq. Coagulopathy
- Thrombophilia
- Thromboprophylaxis for High risk groups / Stopping of anticoagulant drugs
- Complex bleeding disorders – consult haematologist
- Correct hypothermia



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Specific P.O.P – Other disorders

- Neurologic
- Psychiatric
- Locomotor

- Neuropathies / myopathies – need prolonged ventilation
- Psychiatric pts – need GA
- Inflammatory arthropathies to be identified

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Documentation

- History – presented logical manner
- Investigations & Mgt plan – listed for action
- Drug chart – routine / prophylactic

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Taking Consent - Stages

- Lead in
- Explore
- Diagnosis
- Treatment
- Options

- Introduce yourself and identify the patient
- How much does the patient know
- Why the operation is being proposed
- Explain whether the treatment proposed is in accordance with protocols
- Discuss all the options

- Results
- Eventualities
- Adverse events
- Sound mind
- Open question
- Notes

- Explain likely outcome
- For example, the possibility of needing to remove the testicle in a hernia operation
- Myocardial infarction, stroke and embolus & bleeding
- Ask if they have understood
- Check if further clarification
- Document everything discussed and agreed

Conclusion

- • The anticipated outcome of preoperative preparation is a patient who is informed about the surgical course, and copes with it successfully. The goal is to decrease complications and promote recovery.
- • When patients are adequately prepared psychologically and physically, and policies and guidelines have been followed, the risk of postoperative complications should be low, leading to a quick recovery

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“ LED TO REASON ”



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Thank You

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