الجامعة السورية الخاصة
كلية الطب البشري
قسم الجراحة

Pre Operative Patient Assessment And Preparation

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Surgical Operation

1. Preoperative phase >> Assessment >> Preparation .
2. Intraoperative phase >> Anaesthesia >> Surgery .
3. Postoperative phase >> Postoperative care >> Follow up .

Approches to preoperative evaluation

1. Nature of complaint .
2. The proposed surgical intervention .
3. Patients age and health .
4. Assessment of risk factors .
5. The results of investigation .
6. Interventions to optimize the patients over all status .
7. Readiness for surgery .

Preoperative Evaluation

1. The aim is to identify and quantify any comorbidity that may have an impact on the operative outcome .
2. To uncover problem areas that may require further investigation to perform the preoperative optimization .
3. To assess the fitness of the patient for anaesthesia and surgery.
4. A well conducted history and physical examination.

Determination of preoperative evaluation

1. Planned procedure (low , medium , or high risk).
2. Planned anaesthetic technique .
3. The postoperative disposition of the patient (outpatient , inpatient , ward bed , or intensive care) .
4. To identify patient risk factors for postoperative morbidity and mortality .

Consultation with other colleague of relative medical specialty , to facilitate the workup and direct management to achieve the goals of the surgical interference and expedite the hoped results .

Questions to be answered

1. Is this a healthy patient ?
2. What is the indication for surgery.
3. What is the classification of the surgical procedures (Low , intermediate , or high risk)?

Evaluation of associated existing illness

1. Hypertension .
2. Diabetes .
3. Cardio-vascular problems .
4. Pulmonary diseases .
5. Renal diseases .
6. Hepatic diseases .

Associated conditions

1. Pregnancy .
2. Geriatric .
3. Malignancies .
4. Malnutrition .
5. Coagulation disorders .

Clinical evaluation

1. History .
2. Physical examination .
3. Nutritional assessment .
4. Surgical risk assessment.

History

Should concentrate on :

1. Known medical problems .
2. Previous surgical operations .
3. Problems during previous anaesthesia (difficult intubation , bleeding tendencies , anaesthetic jaundice , delayed recovery) .
4. Family history .
5. Drugs allergies .

Anaesthetist should be informed

1. Patients medication (digitalis , insulin , corticosteroids)
2. If the patient has stopped taking corticosteroids within a month of surgery that he or she may have hypofunctioning adrenal cortex .

Physical examination

Concentrate on :

1. Cardiovascular .
2. Pulmonary .
3. Gastrointestinal .
4. Nervous system .
5. Renal and endocrine troubles .

Nutritional assessment

Enquiries from the past of :

1. Wound dehiscence .
2. Infection .
3. Weakness .
4. Loss of functional independence .
5. Fluid assessment .

Investigation

1. Full blood count .
2. Blood urea & electrolytes .
3. Electrocardiogram (ECG) indicated above 40 years unless other wise .
4. Posteroanterior and lateral chest X ray .

Surgical risk assessment

1. Surgical risk assessment includes the anaesthetic risk .
2. Cardiovascular and pulmonary complications are common causes of peri-operative morbidity and mortality in elders (25 – 30%)

ASA

(American Society of Anaesthiologist)

physical status classification system

ASA 1 . Normal healthy patient .

ASA 2 . Patient with mild systemic disease .

ASA 3 . Patient with sever systemic disease that limits activity bur is not incapacitating .

ASA 4 . Patient who has incapacitating disease that is a constant threat to life .

ASA 5 . Moribund patient not expected to survive 24 hours with or without an operation

Consent for surgery

An informed consent in writing from the patient and / or his relatives is essential before any procedure is undertaken

- Patients must receive sufficient accurate information about their illness , the proposed treatment and its prognosis .
- Describe the procedure itself , including information about its practical implications and its prognosis .
- Outline other surgical or medical alternatives to the proposed treatment , including non – treatment , along with their general advantages and disadvantages .

Counseling

- The surgeon should gain the confidence of the patient by his kind approach and frank discussion about the problem , and possible benefits and risks especially in cases involving amputation or possible disability or disfigurement .
- Preoperative counseling by the doctors , trained staff , social workers and patients who had undergone major surgery ,will prevent depressive effect .

N P O
Nil by mouth

- **Babies under 1 year :**

  No breast milk for 2 – 3 h before anaesthesia ,

  Clear fluids may be given up to 3 h before anaesthesia .

- **Children over 1year :**

  No food / milk for 6 h before anaesthesia .

  Clear fluids up to 3 h before anaesthesia .

Preparation of bowel

- GIT surgery needs complete evacuation and cleansing of alimentary tract .
- Sterilization of bowel by oral anti microbial agents .
- Routine nasogastric tube aspiration and strong purgatives, enemas .

Other preparation

- **Blood grouping and Rh typing :** reserve necessary units of blood for possible requirment.
- **Sleep :** Good sleep should be ensured on the night before surgery.
- **Skin preparation :** haircut , shaving , taking care not to injure the skin . Patient should be given a good bath before surgery .
- **Bladder emptying .**
- **Pre-medication :** Routine premedication for anaesthesia.