

PREMEDICATION

DEFINITION:

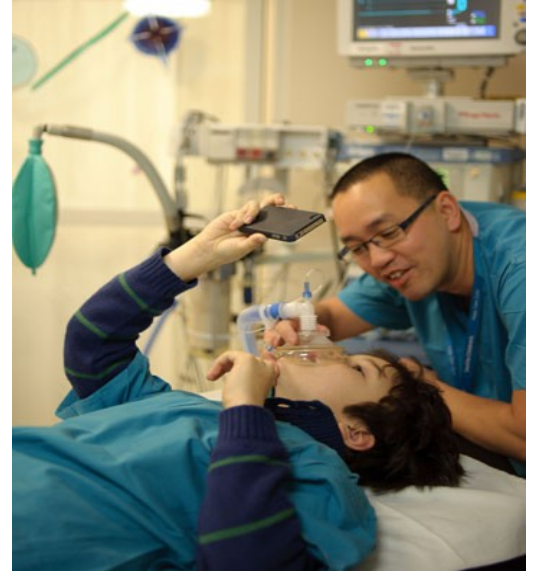
Administration of drugs before induction of Anaesthesia.

Components: Psychological
Pharmacological



PSYCHOLOGICAL PREMEDIATION

Nonpharmacological antidote to anxiety



PHARMACOLOGICAL PREMEDICATION

- Consists of administration of the drugs 1 -2 hrs before the induction of anaesthesia .
- Route of administration :
 - Orally
 - Intramuscular
 - Intravenous
 - Intranasal
 - Dermal
- GOALS OF PREMEDICATION:
 - Primary goals
 - Secondary goals.

Primary goals

- Anxiolysis & Sedation
- Analgesia
- Amnesia
- Increase in gastric fluid pH and decrease in gastric fluid volume
- Antisialagogue effect
- Decreased S N S reflex response
- Hemodynamic stability
- Decrease in anaesthetic requirement

Secondary Goals

- Facilitation of induction of anaesthesia
- Facilitation of Postoperative analgesia
- Prevention of post operative nausea and vomiting





Factor to be considered before premedication

- Patient's Physical status
- Age
- Level of anxiety and pain
- Type of Surgery
- Timing of surgery
- History of drug allergy , nausea , vomiting.

Anxiolysis & sedation

Sedation is a ranging from minimum anxiolysis to a state of deep sedation but not including G A .

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- To minimize physical discomfort, and pain.
 - To control behavior particularly movements.
 - To minimize psychological disturbances and distress.
 - To maximize the potential for amnesia.
 - To guard patient's safety.

DRUGS USED FOR SEDATION

- ★ Benzodiazepines :
 - e.g: Diazepam ,*midazolam*,lorazepam
- Barbiturates :
 - e.g: phenobarbitone
- Others :
 - Promethazine

Factors limiting giving sedatives

- Extremes of age.
- Head injury.
- Altered mental status.
- Minimal cardio- pulmonary reserve
- Hypovolemia.
- Full stomach.

ANALGESIA

- **OPIOIDS:**
 - Pethidine 50 -100 mg im
 - Morphine 8 – 12 mg im
 - Fentanyl 50 – 100 microg iv
- **NSAIDS**
 - Ketorolac
 - Diclofenac

ASPIRATION PROPHYLAXIS

- What is Aspiration ?
- Complications of Aspiration ??

RISK FACTORS FOR ASPIRATION


- Extremes of age
- Emergency cases
- Type of surgery
- Recent meal
- Trauma
- PREGNANCY
- Pain and stress
- Depressed level of consciousness
- Morbid obesity
- Difficulty airway
- Poor motor control
- DM.

PREVENTIVE MEASURES

- FASTING
- Reduce gastric volume ,Increase gastric pH
 - H₂ receptor antagonist
 - Proton pump inhibitor
 - Antacid
- Increase gastric motility
 - Prokinetic drugs

ANTISIALOGOGUES

Decreases salivary gland and mucosal gland secretion .

-  GLYCOPYROLATE potent antisecretory
- ATROPINE
- SCOPOLAMINE

ANTIEMESIS PROPHYLAXIS

Risk factor for Nausea vomiting ???



Drugs

- Metaclopramide
- Ondansetron
- Dexamethasone.

Antiemetics

- ▶ *Metoclopramide 10 mg used as antiemetic and prokinetic agent prior to surgery*
- ▶ *Domperidone 10 mg oral more preferred*
- ▶ *Ondansetron 4-8 mg 1v found effective in preventing post anesthetic nausea and vomiting*

Drugs reducing acid secretion

- ▶ *Ranitidine 150 -300 mg oral given night and in the morning reduces risk of gastric regurgitation and aspiration pneumonia*
- ▶ *Proton pump inhibitors like omeprazole are preferred nowadays*

CONTINUATION AND DISCONTINUATION OF DRUGS

CONTINUATION

- Beta blocker
- Bronchodilators
- Anti-epileptics

DISCONTINUATION

- MAO-inhibitors
- Anti-coagulants
- Oral hypoglycemic
- ACE inhibitors ??
- AT 2 antagonists.