Preoperative concerns Important points in the history Relevant points in Examination of patients Bedside tests Laboratory Investigations Clinical investigations **PRE-OPERATIVE PROBLEMS**

Elderly

Chronically Debilitated Patients

Malnourished

Smoking with repiratory effects

Smoking with repiratory effects

Steps of the preoperative visit :

I. Problem Identification

II. Risk Assessment

III. Preoperative Preparation

IV. Plan of Anesthetic Technique

I. Problem Identification

- *Cardiovascular :* hypertension ; ischemic , valvular or congenital heart disease; CHF or cardiomyopathy, , arrhythmias
- **Respiratory :** smoking; COPD; restrictive lung disease; altered control of breathing (obstructive sleep apnea, CNS disorders, etc.)
- **Neuromuscular :** raised ICP ; TIA's or CVA's; seizures; spinal cord Injury; disorders of NM junction e.g myasthenia gravis, muscular dystrophies ,MH
- *Endocrine :* DM; thyroid disease; pheochromocytoma; steroid therapy
- *GI Hepatic :* hepatic disease; gastresophageal reflux
- *Renal :* renal failure
- *Hematologic :* anemias; coagulopathies
- Elderly , Children, Pregnancy
- Medications and Allergies
- Prior Anesthetics
- *Related to Surgery :* significant blood loss; respiratory compromise; positioning

Predictors of difficult intubation (4 M)

Mallampati

Measurements 3-3-2-1 or 1-2-3-3 Patient 's fingers

Movement of the Neck

Malformations of the Skull Teeth Obstruction Pathology



Measurements 3-3-2-1



Fingers Mouth Opening

- **3** Fingers Hypomental Distance. (3 Fingers between the tip of the jaw and the beginning of the neck (under the chin)
- 2 Fingers between the thyroid notch and the floor of the mandible (top of the neck)



1 Finger Lower Jaw Anterior sublaxation





III. Preoperative Preparation

Anesthetic indications:

-Anxiolysis, sedation and amnesia. e.g. benzodiazepine(diazepam ,lorazepam) -Analgesia e.g narcotics

-Drying of airway secretions e.g atropine,glycopyrrolate,scopolamine

-Reduction of anesthetic requirements ,Facilitation of smooth induction

-Patients at risk for GE reflux :ranitidine ,metoclopramide , sodium citrate

• Surgical indications:

-Antibiotic prophylaxis for infective endocarditis.

-Prophylaxis against DVT for high risk patients : low-dose heparin or aspirin intermittent calf compression, or warfarin.

Co-existing Disease indications:

Some medications should be continued on the day of surgery e,g B blockers, thyroxine. Others are stopped e.g oral hypoglycemics and antidepressants . Steroids within the last six months may require supplemental steroids



IV. Plan of Anesthetic Technique

- 1. Is the patient's condition optimal?
- 2. Are there any problems which require consultation or special tests? *"Please assess and advise "*
- 3. Is there an alternative procedure which may be more appropriate?
- 4. What are the plans for postoperative management of the patient?
- 5. What premedication if any is appropriate?



HISTORY

PAST ILLNESS:

Previous surgery (type of anesthesia)

Any complication?



HISTORY

DRUG HISTORY: why?

Type of Medications

Allergy



FAMILY HISTORY: of medical diseases bleeding tendency why?



What are the effects of smoking?

Affects oxygen heamoglobine Affects pulmonary function Predisposes to cardiac diseases Affects healing

• Systemic review



Bronchial Asthma

chronic obstructive air way disease

Emphysema



Ischemic Heart Diseas

Hypertension



EXAMINATION GENERAL:

Built= obesityPallor= AneamiaJaundice= liverCyanosis= respiratoryHydrationstate = nutritionOedema= cardiac or renal

Physical Examination

Malampati

Evaluate 3,3 rule



Look

Obesity / Obstruction

Neck mobility







Class I: soft palat ,uvula, and tonsillar pillors

Class II: soft palat ,uvula

Class III soft palat

Class IV: no thing

Evaluate 3,3 rule

How do we perform the test

AIRWAY EXAM: Look

TEETH, JAWS, NECK (INTUBATION HAZARDS)

The ASA physical status classification system is a system for assessing the fitness of patients before surgery.

Class I: A normal healthy patient.

Class II: A patient with mild systemic disease.

Class III: A patient with severe systemic disease with no threats

Class IV: A patient with severe systemic disease that is a constant threat to life.

Class V: A moribund patient who is not expected to survive without the operation.

Class VI: A declared brain-dead patient whose organs are being removed for donor purposes.

If the surgery is an emergency, the physical status classification is followed by "E" (for emergency (



SIMPLE RESPIRATORY FUNCTION TESTS: 1- BREATH HOLDING: NORMAL > 25 SEC.



2- Match test : Can blow up a flame from15 cm



What do you expect the malampati score Suppose you see the tonsil pillar

Labarotary investigations

BASIC INVESTIGATIONS FOR ALL1- BLOOD GROUP, Hb.2- F.B.S, B.UREA.3- G.U.E.

Clinical investigations







This is the pre- final slide



Keep your heart healthy

A patient with hypertension, living normal life,

what is his ASA status