

Preoperativ assessment

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Introduction

- Safer anaesthesia
- Poor preoperative assessment results in delayed op schedules
- Short notice cancellations
- Possibility to optimize child's condition
- Possibility to optimize the anaesthesia
- decrease distress in the child and parents

Introduction

Difference adult - children:

- Medical history from Parents/adult carer
- Different medical spectrum, malformations/syndromes
- Upper airway infections
- Less lab results etc.

Assessment

History

- 1) Medical history
- 2) Anesthetic history
- 3) Drug history
- 4) Family history
- 5) Social, cultural and religious history

Physical examination

Special investigations

History

1) Medical history

- Coexisting medical diseases must be identified

”Most relevant” tend to be:

- Respiratory (A + B)
- Infections
- Malformations
- Allergy, nb Latex!
- Prematurity
- Weight

History

2) Anesthetic history

- Previous anesthetic records
- Difficult intubation
- Postoperative pain
- Sore throat, headache or PONV

History

3) Drug history

- Insulin?
- Asthma medication?
- Antibiotics?
- NSAID?
- Herbal preparations?
- Immunisation?

History

4) Family history

- Malignant hyperthermia
- Metabolic disorders
- Muscular dystrophies

History

5) Social, cultural and religious history, ex
Jehovah's witnesses

- Alcohol
- Smoking
- Pregnancy

Physical examination

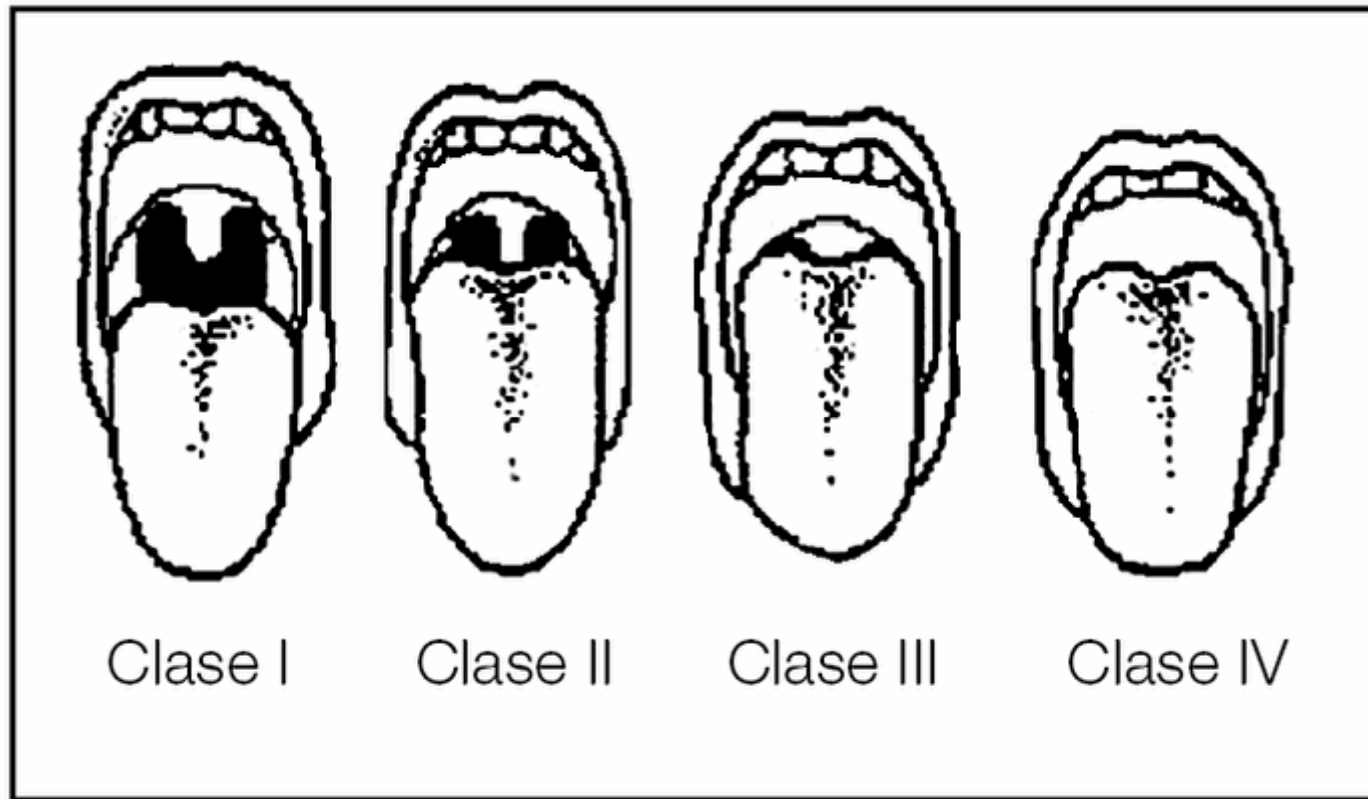
- Goal: to be performed on every patient admitted for surgery
- **Airway**
- Cardiovascular
- Nervous
- Potential location for venous access

Airways

Assess airway:

- Mouth opening, dentition
- Mallampati
- Temporomandibular joint mobility
- Neck mobility
- Short neck/small mandible/malformations
- Teeth

Airway Mallampati



Special investigations

- Depends on the facilities that are available

Two questions:

- 1) Will the investigation give information not revealed by clinical assessment?
- 2) Will the results alter the management of the patient?

Special investigations

- Healthy child + minor surgery = no routine preoperative investigations
- Others: Chest X-ray, ultrasound, lab? etc

Safety first!

Two Questions:

- 1) Optimal physical condition?
- 2) Benefit from surgery – risk with anesthesia?

ASA-classification

- 1) A normal healthy patient
- 2) A patient with mild systemic diseases
- 3) A patient with severe systemic disease
- 4) A patient with severe systemic disease that is a constant threat to life
- 5) A moribund patient who is not expected to survive without the operation
- 6) A declared brain-dead patient whose organs are being removed for donor purposes.

Preoperative preparations, General

- Preoperative fasting
- Consent
- Information/questions?

Preoperative preparation, specific

Respiratory disease

Upper respiratory tract infection

Asthma

Preoperative preparation, specific

Upper respiratory tract infection

- Benefit from surgery – risk with anesthesia
- History
- Investigations? - No
- Comorbidity? asthma, prematurity
- Social factors

Preoperative preparation, specific

Upper respiratory tract infection

- If no, how long should the cancellation period be?
- Cold, 4 weeks?
- Whooping cough, 6 months
- Pneumonia, 6 weeks
- Viral croup, 6 weeks

Preoperative preparation, specific

Asthma

- Sharp rise in prevalence
- Not a single clinical entity
- Assessed by the amount of medication required
- Careful history and examination
- If not correct medication – no elective surgery
- Emergency surgery during asthma exacerbation is dangerous

Preoperative preparation, specific

Asthma

- Investigations are not of great benefit.
- NSAID?

Preoperative preparation, specific

Cardiovascular

- Heart murmur
- Innocent? – Pathological?
- Children – Neonates, Nb! history
- Syndromes ↑risk
- Impossible on clinical ground to differentiate innocent from pathological
- Echocardiography!
- Prophylactic antibiotics?

Preoperative preparation, specific

- **Diabetes**

Preoperative preparation, specific

- Fluid imbalance
- Treat dehydration

Preoperative preparation, Specific

Anemia

- Mild – no perioperative morbidity
- Neonates/ex pretermatures, hematocrite < 30%
→ post op apnoea

Health declaration?

- No objections = ASA 1 – Directly to op.
- Minor problems = assessment by nurse
- Significant problems = assessment by anesthesiologist
- Future – preop clinic

The end