SAWA UNIVERSITY

جامعة ساوة الاهلية
كلية التقنيات الصحية والطبية
قسم التخدير - اللجنة العلمية

Preanesthetic assessment

Sawa University	جامعـــــة ســـــــاوة الاهلية
College of health and medical techniques	كليـــــة التقنيـــات الصحيـة والطبيـة
Department of Anesthesia	قسم تقنيـــات التخديـــــــر
3rd Stage	المرحلـــــــــــة الثالثة

الجانب العملي محاضرة رقم ....2...

Practical Lecture No. 2

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(INTRODUCTION)

- Process of clinical assessment that precedes the delivery of anesthesia care for surgery
- Patient's medical records, interview, physical examination & investigations

- GOALS

1. Evaluation of patient's general health
   (+ optimisation if necessary)

2. Anticipation of possible complications
   (+ planning to avoid them)

STEPS OF PREOPERATIVE VISIT

- HISTORY

1.Identification of the Patient

Name: Age: Sex:

Pre operative Diagnosis: Planned Operation :

Mode of anesthesia : RA/LA/GA

2.History of previous anaesthesia .

- Allergy to drugs
- PONV
- Difficult intubation
- Delayed emergence

3.Past Medical history : DM, HTN,COPD,CAD,thyroid disorder….

- Regular medications Previous surgeries ; type of anesthesia:

4.Personal History: smoking, alcohol, drug abuse

5.Family history: Problems with anesthesia in family

(Pseudocholinesterase deficieny and malignant hyperpyrexia)

EXAMINATION

A.General Examination

Weight : BMI:

VITAL SIGNS:SPO2 ~ Pulse ~ B.P ~

B.Systemic Examination

- **Chest**
- **CVS**
- **CNS**

C.Local examination

- **Spine :** deformity

- **Nasal cavity:**

deformity,obstruction

- **Oral cavity :**

teeth,dentures

- **Peripheral venous access**

AIRWAY ASSESSMENT:

- AIRWAY ASSESSMENT IN ANESTHESIA IS A CRUCIAL PRE-OPERATIVE EVALUATION TO IDENTIFY PATIENTS WITH A "DIFFICULT AIRWAY" AND PLAN FOR APPROPRIATE MANAGEMENT.
- THE GOAL IS TO PREPARE FOR POTENTIALLY CHALLENGING VENTILATION OR INTUBATION, ENSURING PATIENT SAFETY AND THE SUCCESSFUL MANAGEMENT OF THE AIRWAY, EVEN IN EMERGENCY SITUATIONS.

MMMMASK	
M	Male gender
M	Mask seal which is affected by beard or being edentulous
M	Mallampati grade 3 or 4
M	Mandibular protrusion
A	Age
S	Snoring and obstructive sleep apnoea
K	Kilograms (weight)

OBESE	
O	Obese (BMI>26kg/m^2)
B	Bearded
E	Edentulous
S	Snoring
E	Elderly (>55 years)

“LEMON” SCORING

EVALUATION CRITERIA	POINTS
L = Look externally	
Facial trauma	1
Large incisors	1
Beard or moustache	1
Large tongue	1
E = Evaluate the 3-3-2 rule	
Incisor distance-3 finger breadths	1
Hyoid-mental distance-3 finger breadths	1
Thyroid-to-mouth distance-2 finger breadths	1
M = Mallampati (Mallampati score > 3)	1
O = Obstruction (presence of any condition like epiglottitis, peritonsillar abscess, trauma)	1
N = Neck mobility (limited neck mobility)	1
Total	**10**

9 cm | 8 cm | 7 cm | 6 cm | 5 cm | 4 cm | 3 cm | 2 cm | 1 cm

TM distance **> 7.5 cm** | **TM 6-7.5 cm** | **TM**, Thyro-mental distance Thyroid cart. to Mentis **< 6 cm (Warning)**

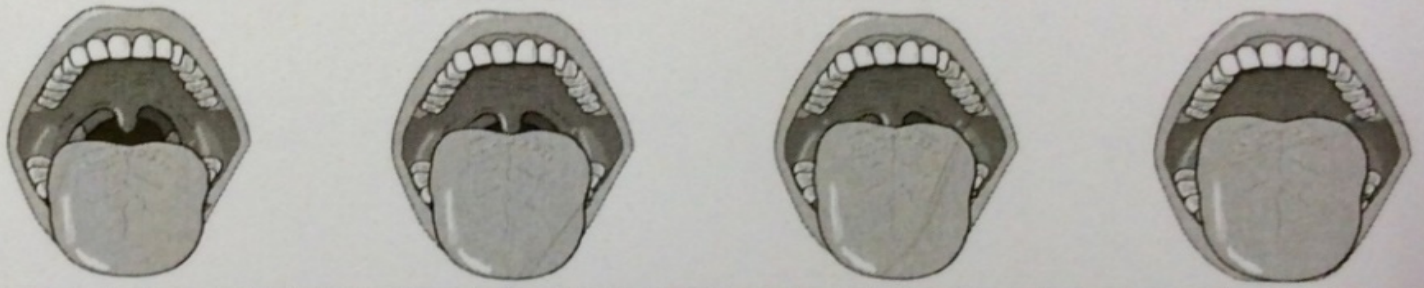
Mouth opening (MO) **> 4 cm** Inter incisive distance | **MO 3-4 cm** | **MO < 3 cm** (Warning)

Neck extension:	>30°		10°-30°	<10°
Upper-Lip-Bite-Test:	Grade I (yes)	Grade II (yes)	Grade III (yes)	Grade III (no)
Instruments:	Direct Laryngoscopy		Videolaryngoscopy	Intubation Fiberscope and/or BONFILS

Mallampati Class I-IV

At class III-IV, 50% are difficult to intubate

Class I | Class II | Class III | Class IV



Cormack & Lehane Grade I-IV

At grade III-IV it is difficult or impossible to intubate

Grade I | Grade II | Grade III | Grade IV

What was difficult last time? If the patient once had a difficult airway, the risk is high that this will happen again.

UPPER LIP BITE TEST

- class I : lower incisors can bite the upper lip above the vermilion line
- class II : lower incisors can bite the upper lip below the vermilion line
- class III : lower incisors cannot bite the upper lip

MALLAMPATI SCORE

class	Structures identified when pt seated
1	Tonsilar pillars, uvula , soft & hard palate
2	Uvula ,soft & hard palate
3	Base of uvula ,soft & hard palate
4	Only hard palate is can be seen

Medication Management

	Day before OT	OT day
Levothyroxine	Continue	Continue
Beta Blockers	Continue	Continue
ACEi/ARB	Continue	Hold
Metformin	Hold	Hold
Inhaled bronchodilators	Continue	Continue

ASA GRADING

American Society of Anaesthesiology (ASA) has assigned a Physical Status (PS) classification based on multiple factors. There are 6 grades: ASA I to ASA VI. Physical Status classification is done initially at various times during preoperative assessment, the final Physical Status classification is done on the day of anaesthesia.

ASA I	ASA II	ASA III	ASA IV	ASA V	ASA VI
A normal healthy patient	A patient with mild systemic disease	A patient with severe systemic disease	A patient with severe systemic disease that is constant threat to life	A moribund patient who is not expected to survive without the operation	A declared brain-dead patient whose organs are being removed for donor purposes
Healthy, non-smoking, no or minimal alcohol use, normal BMI	Mild disease without substantial functional limitations, smoker, social alcohol drinker, obesity (BMI 30 to 40), pregnancy, well controlled gestational hypertension, pre-eclampsia or diet controlled - gestational DM.	Substantial functional limitation. One or more moderate to severe disease, poorly controlled comorbidities, morbid obesity (BMI > 40), alcohol dependence or abuse, CKD on dialysis, Pre-eclampsia with severe feature, GDM on high insulin.	Recent (<3 months) MI, CVA, TIA, CAD. Severe valve dysfunction. Severe reduction of EF, Shock, Sepsis, Ongoing cardiac ischemia, HELLP Syndrome, Cardiomyopathy.	Ruptured abdominal / thoracic aneurysm, massive trauma, intracranial bleed with mass effect, decompensated congestive heart failure, uterine rupture	

USES OF ASA GRADING

- Biggest advantage: Universally used grading.
- To assess degree of patient's physical state prior to anaesthesia.
- Simple to use.
- For record keeping.
- For communication between colleagues.

LIMITATIONS AND DISADVANTAGES

- Age is not included in the classification.
- No specific grade if patient has 2 or more systemic illness.
- Local disease is not included in the classification.
- Difficult airway is not considered.
- Type of surgery is not considered.
- NPO status is not considered.

INVESTIGATIONS

Basic Investigations

- CBC: Hb,
- ABO Rh typing
- RBS
- Urea , Creatinine , Na+ ,K+
- PT/INR
- CXR
- ECG

Other (if needed)

- Echocardiography
- TFT
- HbA1c
- LFT
- ……..

ASA Fasting Guidelines

, Water Fruit juice without pulp carbonated beverages, clear tea ,black coffee	**hours 2**	**Clear fluid**
		Milk
	hours 4	**Human**
	hours 6	**Infant formula**
,Fruits , juice with pulp Vegetables	**hours 6**	**Light Foods**
Fatty meals , meats	**hours 8**	**Heavy foods**

Any questions?