



# ANESTHESIA

## F1 & F2 Revision

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Wish you all the best \^^/

## **Revision F1 :**

### **Pre operative care:**

1- History:

Including allergy medications past family anesthesia history

2- History of MI you have to postpone the surgery 6 months after the onset of the attack  
So we could get question about patient had MI 5 months ago and you calculate when to do the surgery

3- important to adjust the current medications especially if cardiac disease

1- continue b blockers

2- hold lasix

3- ACEI continue for cardiac patient but with small dose

4- Hyperkalemic patient never give him suxamethonium

5- Ideal (non depolarize get agent) for renal failure patient is cisatracurium

### **General anesthesia technique:**

1- able to tell the difference between general and regional anesthesia

2- most common inhalational agent for induction is sevoflurane

3- propofol is IV anesthetics used for maintenance and day care surgery

4- ketamine is contraindicated in hypertension, increase ICP and increase in intraocular pressure

### **Airway management:**

1- pre op assessment for airway. First step is to ask the patient about previous difficult intubation or in anesthesia

2- understand the concept of aspirations so if the patient is with full stomach or hiatus hernia ( do rapid sequence)

3- be able to manage airway obstruction and know the equipments

4- if the patient has rheumatoid arthritis you have to check the joints and spine in pre op assessment

5- important to know mallambti grades

6- thyromental distance ( if shorter more difficult in intubation ) it give smaller space for laryngoscope

7- you remove the cricoid pressure after conforming the endotracheal intubation is on place

8- LMA size 1 for neonates

LMA size 3 for female

Endotracheal

8,5 for male

7,5 for female

4 for child less than 1 year old

4,5 for 1 year old child

3,5 for neonates

### **Vascular access:**

1- we don't use subclavian because the risk of thoracic injury ( pneumothorax)

### **Regional anesthesia:**

1- know the difference between spinal and epidural anesthesia

2- know for what type of surgeries spinal anesthesia is done ( e.g. C/ section )

3- the drug used for spinal anesthesia is heavy bupivacain

4- complications of spinal

Intra op --- hypotension

Post op --- headache

5- cause of intra op hypotension of patient on spinal anesthesia for c/ section is compressed IVC

and what to do is to tilt the bed

6- pregnant lady go to c section because of fetal distress - you have to do general anesthesia not spinal also you have to conduct rapid sequence

### **Pain management**

#### **IV fluid**

30 year old man weighing 80 kg is admitted to elective surgery

The ward nurse wants to start intravenous maintenance fluid during the fasting period

So we give 1 ml/ kg

So we give 80 ml / hr

But pediatrics we go with 4 2 1 rule

But on the exam they could put the formula we should use

## **Rivision F2:**

Any patient with hyperkalemia = avoid suxamethonium  
Pediatrics with no IV canula induction by = sevoflurane

### **Airway:**

Chronic hypoxia patient which type u will use = venture

How to avoid aspiration ? By rapid sequence induction

If u r see airway obstruction for example by tongue and jaw thrust failed, the first thing u do is ( Oropharyngeal or nasopharyngeal )

### **OSCE:**

1- ETT u have to check ETT its size and inflate it:

for female = 7 -7.5

Male= 8-8.5

for pediatrics 1 y\o = 4.5

below1 y\o = 4

newborn = 3.5

premature = 3 .

- Check the light of laryngoscope,

- For pt. :

evaluate the air way properly, including thyromental and malampatti score, jaw movement. And position the head. Then intubate. If you insert it you have document it that's properly insert it by visualization , end tidal volume, chest movement.

2- LMA:

use cross finger opening mouth , and use the same techniques above.

The most important indication: when you have difficult intubation.

If you have difficult intubation difficult ventilation: 1<sup>st</sup>: call for help , 2<sup>nd</sup> : LMA , if failed = surgical.

3- Vascular access: see pre-operative evaluation , see what is the indication, position the patient.

Malampati :

Class 1 : soft palate , pillars , Uvula

Class 2 : soft palate, pillars , part of uvula

Class 3: soft palate , base of uvula

Class4: soft palate not visible at all

By dr, and emedicine website.

### **Vascular:**

What is the most common complication when u used the left jugular vein? Thoracic duct injury.

How to rule out u r not in artery? By ABG \ Xray

How to know u r in? by aspirating and visible blood,

How to know u r in atrium? Arrhythmia

## Regional anesthesia:

- How to prevent hypotension following regional anesthesia? Preload pt. If pregnant ? tilt the bed.
- Pregnant and received spinal anesthesia and found to have hypotension? Change position , fluid , vasopressor.
- Spinal anesthesia most common complication intra op : hypotension , Post op: headache
- 37 is the ideal size for spinal needle, then 25, to reduce the incidence of headache,

- Anticoagulant it's absolute contraindication:

For heparin we stop it and wait 4 hrs

For warfarin we wait 5 days.

Plavex = 5 days to 1 weeks

LMW heparin therapeutic = 24 hrs stop it.

LMW Prophylactic = 12 hrs.

Multiple anticoagulant= contraindicated.

- Spinal anesthesia= for C-section , perineum surgery , open hernia ,

- expected events if Level blocked: T10 = hypotension , T1= bradycardia,

- Epidural anesthesia:

Size of Touhy needle size = 16 or 18 .

- Surgeries can be done :

C-section, knee replacement ( continue for 5 days due to post op pain, and it can be combined with spinal)

- Emergency CS due to fetal distress:

Fetal distress + pt. fit for GA = GA with rapid sequence induction

If can wait = Spinal ..

- In emergency CS= Iv anesthesia induction + suxamethonium

- Phentanyl only after cord clamp and baby put to avoid baby's respiratory depression.

- In rapid sequence induction ,We have to apply cricoid pressure till the ETT inside and u inflate it.