

Preoperative Evaluation

1. Which of the following characteristics correlate with the potential for a difficult intubation?
 - a. Mallampati Class 3
 - b. Poor neck extension
 - c. Overbite
 - d. Thyromental distance less than 4cm
 - e. All of the above
2. Which medication should be held the morning of surgery?
 - a. Clonidine
 - b. Metoprolol
 - c. Hydrocodone
 - d. Albuterol
 - e. Glyburide
3. A 55 year old male presents for cholecystectomy. He is an alcoholic with a dilated cardiomyopathy and an EF of 35%. He has no signs of alcohol withdrawal. He denies shortness of breath. Exam demonstrates clear lungs with no ascites or pedal edema. His ASA class would be
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
4. Which scenario is a violation of NPO guidelines?
 - a. Water 2 hours ago
 - b. Gatorade 4 hours ago
 - c. Breast milk 4 hours ago
 - d. Infant formula 4 hours ago
 - e. Cheeseburger 8 hours ago

Anesthetic Agents

5. What effect is responsible for the rapid recovery after a single bolus dose of propofol?
 - a. Rapid metabolism by the liver
 - b. Extrahepatic metabolism by the lungs
 - c. Brief context-sensitive half-time
 - d. Redistribution from highly-perfused areas to poorly-perfused areas
6. Which effect is not typically associated with propofol?
 - a. Potent analgesia
 - b. Mild antiemetic effect
 - c. Venous irritation
 - d. Vasodilatation

7. Which effect is not typically associated with ketamine?
 - a. Potent analgesia
 - b. Decreases seizure threshold
 - c. Hallucinations
 - d. Respiratory depression
8. Which inhaled agent is appropriate for a mask-induction?
 - a. Sevoflurane
 - b. Desflurane
 - c. Enflurane
 - d. Isoflurane
9. A 22-year-old female is brought emergently to the OR for a ruptured ectopic pregnancy. HR is 110 and BP is 88/50. Which induction agent is most appropriate?
 - a. Propofol
 - b. Etomidate
 - c. Thiopental
 - d. Sevoflurane
10. Succinylcholine is contraindicated in all of the following scenarios except...
 - a. History severe burns
 - b. Hyperkalemia
 - c. History of malignant hyperthermia
 - d. Brain tumor with increased ICP
 - e. History of severe post-op nausea and vomiting

Local Anesthetics

11. What is the mechanism of action of local anesthetics?
 - a. Disrupts lipid bilayer of neurons
 - b. Inactivates muscarinic acetylcholine receptor
 - c. Activates calcium channels at motor end-plate
 - d. Inactivates sodium channels inside neuron lipid membrane
12. How many mg of bupivacaine are there in 20cc of a 0.25% solution?
 - a. 5mg
 - b. 25mg
 - c. 50mg
 - d. 250mg
 - e. 500mg
13. What is one of the first signs/symptoms of local anesthetic toxicity?
 - a. ST-segment changes on EKG
 - b. Convulsions
 - c. Respiratory depression
 - d. Perioral numbness
 - e. Cardiovascular collapse

Airway Management

14. What is the appropriate sized ETT for a normal 4 year old child?
 - a. 3.0 uncuffed
 - b. 4.5 cuffed
 - c. 5.5 cuffed
 - d. 6.0 uncuffed
15. Approximately how deep should a 6.0 endotracheal tube be secured in a pediatric patient?
 - a. 13cm at the lips
 - b. 15cm at the lips
 - c. 18cm at the lips
 - d. 21cm at the lips
16. Which of the following would be an acceptable indication for an awake fiberoptic intubation?
 - a. Known history of difficult intubation
 - b. Full stomach
 - c. Abnormal airway anatomy
 - d. Severe sleep apnea
 - e. All of the above
17. When having difficulty with mask ventilation, which next step may be helpful?
 - a. Oral airway
 - b. Nasal trumpet
 - c. Two-handed ventilation
 - d. LMA
 - e. All of the above
18. In which scenario is an LMA absolutely contraindicated?
 - a. The patient is diabetic
 - b. NPO guidelines have not been followed
 - c. The patient is obese
 - d. Surgery on the eye
 - e. The patient has sleep apnea

Regional Anesthesia

19. Which nerve roots need to be anesthetized to produce analgesia during the 1st stage of labor?
 - a. T6-T10
 - b. T10-L1
 - c. L1-L4
 - d. L4-S1
 - e. S2-S4

20. Which is not a contraindication for spinal anesthesia?
- Severe aortic stenosis
 - Infection at the injection site
 - Coagulopathy
 - Scoliosis
 - Patient refusal
21. Which is not a common side effect of an interscalene brachial plexus block?
- Ipsilateral hemidiaphragmatic paresis
 - Ipsilateral vocal cord palsy
 - Ipsilateral pneumothorax
 - Ipsilateral miosis
 - Ipsilateral ptosis
22. Of the five nerves anesthetized during a typical ankle block, which one is not derived from the sciatic nerve?
- Common peroneal
 - Superficial peroneal
 - Tibial
 - Saphenous
 - Sural

Intraoperative Monitoring

23. Which is the most sensitive (i.e. earliest) indicator of myocardial ischemia?
- Regional wall motion abnormalities on echocardiogram
 - ST segment changes
 - Elevation of troponin
 - Increased CVP
 - Decreased SVO₂
24. Which is not a standard ASA intraoperative monitor?
- EKG
 - SpO₂
 - Blood pressure
 - Processed EEG
 - Inspired gas concentration
25. The maintenance rate for IV fluids in a 3 year old boy weighing 24kg is which of the following?
- 24cc/hr
 - 48cc/hr
 - 64cc/hr
 - 72cc/hr
 - 96cc/hr

Complications of Anesthesia

26. Which antiemetic is most effective if administered near the conclusion of anesthesia?
- Ondansetron
 - Dexamethasone
 - Scopolamine
 - Aprepitant
27. Which is the most common nerve to be damaged from malpositioning during anesthesia?
- Optic
 - Common peroneal
 - Obturator
 - Ulnar
 - Femoral
28. Which medication is not a trigger for malignant hyperthermia?
- Succinylcholine
 - Nitrous oxide
 - Sevoflurane
 - Desflurane
29. Which would not be a usual finding during an episode of malignant hyperthermia?
- Decreased ETCO₂
 - Metabolic acidosis
 - Muscle rigidity
 - Trismus
 - Elevated core temperature