Preoperative Evaluation

1. Which of the following characteristics correlate with the potential for a difficult intubation?
   a. Mallampati Class 4
   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 emergence 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 moderate doses of ketamine?
   a. Analgesia
   b. Sympathetic activation
   c. Hallucinations
   d. Respiratory depression

8. Which is a common side-effect of volatile anesthetics in a healthy patient?
   a. Mild bronchodilation
   b. Hypertension
   c. Apnea
   d. PVCs

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. Pseudocholinesterase deficiency
    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. Tinnitus
    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. Which maneuver can help with difficult mask ventilation?
   a. Oral airway
   b. Nasal trumpet
   c. Two-handed ventilation
   d. LMA placement
   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 needs 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?
   a. Severe aortic stenosis
   b. Infection at the injection site
   c. Coagulopathy
   d. Scoliosis
   e. Patient refusal

21. Which is not a common side effect of an interscalene brachial plexus block?
   a. Ipsilateral hemidiaphragmatic paresis
   b. Hoarseness
   c. Tinnitus
   d. Ipsilateral miosis
   e. Ipsilateral ptosis

22. Of the five nerves anesthetized during a typical ankle block, which one is not derived from the sciatic nerve?
   a. Common peroneal
   b. Superficial peroneal
   c. Tibial
   d. Saphenous
   e. Sural

Intraoperative Monitoring

23. What is the best way to diagnose myocardial ischemia intraoperatively?
   a. Regional wall motion abnormalities on echocardiogram
   b. ST segment changes
   c. Elevation of troponin
   d. Increased CVP
   e. Decreased SVO2

24. Which is not a standard ASA intraoperative monitor?
   a. EKG
   b. SpO2
   c. Blood pressure
   d. Processed EEG
   e. Inspired gas concentration

25. The maintenance rate for IV fluids in a 3 year old boy weighing 24kg is which of the following?
   a. 24cc/hr
   b. 48cc/hr
   c. 64cc/hr
   d. 72cc/hr
   e. 96cc/hr
Complications of Anesthesia

26. Which antiemetic is effective for rescue therapy (after the patient has symptoms)?
   a. Ondansetron
   b. Dexamethasone
   c. Scopolamine
   d. Aprepitant

27. Which is the most common nerve to be injured during anesthesia?
   a. Optic
   b. Common peroneal
   c. Obturator
   d. Ulnar
   e. Femoral

28. Which medication is not a trigger for malignant hyperthermia?
   a. Succinylcholine
   b. Nitrous oxide
   c. Sevoflurane
   d. Desflurane

29. Which would not be a usual finding during an episode of malignant hyperthermia?
   a. Decreased ETCO2
   b. Metabolic acidosis
   c. Muscle rigidity
   d. Trismus
   e. Elevated core temperature