Telegram: http://t.me/ethiolibrary1

1. The most beneficial effect of continuous positive airway pressure (CPAP) in a newborn with respiratory distress syndrome is:

A. Increased functional residual capacity & decreased airway resistance

B. Promotion of surfactant formation

C. Increased alveolar PO2

D. Maintenance of functional closure of the foramen ovale

2. A patient sustains a severe head injury in a motorbike accident. His presenting Glasgow Coma Score is 10/15. A head CT reveals a subarachnoid hemorrhage with malignant cerebral edema. Which of the following drugs may worsen the patient's neurological status?

A. Mannitol

B. Phenytoin

C. Prednisone

D. Morphine

3. A 20-kg, 6-year-old boy is undergoing strabismus surgery under anesthesia with sevoflurane, nitrous oxide, and oxygen. The heart rate suddenly decreases from 85 to 40 bpm. Which of the following is the most appropriate first step in management?

A. Decrease the depth of anesthesia

B. Increase the depth of anesthesia

C. Hyperventilate the patient

D. Stop the surgical procedure

---

4. A full-term newborn has marked respiratory distress in the delivery room. Breath sounds are asymmetric and the abdomen is scaphoid. Which of the following maneuvers is most appropriate?

A. Hyperventilation with bag and mask

B. Intubation and ventilation with positive end-expiratory pressure

C. Intubation and ventilation with zero end-expiratory pressure

D. Bronchoscopy

---

5. The principal rationale for the use of warmed humidified inspired anesthetic gases in children is to:

A. Decrease postoperative respiratory complications

B. Decrease postoperative shivering

C. Preserve ciliary function

D. Prevent evaporative heat loss

---

6. A full-term neonate has physical findings suggestive of congenital diaphragmatic hernia. Initial Apgar score is 2. Which of the following is the most appropriate initial management?

A. Placement of an orogastric tube

B. Insertion of a chest tube

C. Controlled ventilation by face mask

D. Controlled ventilation through an endotracheal tube

---

7. At the time of cesarean delivery, thick dark meconium is noted and the newborn is flaccid, apneic, bradycardic, and cyanotic. The most appropriate initial action is:

A. Atropine administration

B. Sodium bicarbonate administration

C. Naloxone administration

D. Tracheal suctioning

---

8. Which of the following features is characteristic of the airway in a neonate?

A. Glottis that is located at the level of the C6 vertebral body

B. Larger tongue relative to the head than in an adult

C. Laryngeal mucosa that is densely adherent to the cartilages

D. More posterior glottis than that of an adult

---

9. Which of the following is suggestive of epiglottitis rather than croup?

A. A 2-year-old child with a harsh, barking cough

B. A 4-year-old child who insists on sitting up and leaning forward

C. Leukocyte count of 10,000/mm3 with marked lymphocytosis

D. Rectal temperature of 38.5°C

---

10. Which of the following would be the LEAST useful to use as an analgesic adjunct with the goal of reducing opioid consumption in the ICU?

A. Dexmedetomidine

B. Ketamine

C. Acetaminophen

D. Midazolam

---

11. A patient in your ICU has rapid deterioration of their respiratory status and needs emergent intubation. You would like to use succinylcholine for neuromuscular blockade after your induction agent. Administering succinylcholine would be most appropriate in which of the following scenarios?

A. The patient has a family history of malignant hyperthermia

B. The patient has septic shock complicated by anuria, metabolic acidosis, and has a potassium of 6.7 mEq/L

C. The patient was admitted to the ICU 3 hours ago immediately after sustaining severe burns to the entire lower half of body

D. The patient has been in the ICU for three weeks

---

12. You have just intubated a patient for respiratory failure and will be initiating a sedation regimen. Which of the following would be the LEAST preferred choice for sedation?

A. Propofol

B. Fentanyl

C. Diazepam

D. Morphine

---

13. Which of the following medications is recommended to use as a sleep aid for ICU patients?

A. Propofol

B. Dexmedetomidine

C. Midazolam

D. All of the above

---

14. A 76-year-old female is admitted after falling on her stairs and fracturing multiple ribs. She is transferred to the intensive care unit (ICU) for increased oxygen requirement. She reports that her pain is very severe. Her breathing is rapid and shallow. Which of the following would be the MOST effective method of controlling her pain?

A. Epidural catheter with infusion of local anesthetic

B. Intravenous narcotic patient-controlled analgesia

C. Lidocaine patch over fracture area

D. Acetaminophen

---

15. Which of the following condition is not associated with delirium in the ICU?

A. Immobilization & Orthopedic surgery

B. Multisystem organ failure & Pain

C. Number of drugs prescribed

D. Mechanical ventilation

---

16. The most significant risk of intensive insulin therapy (goal blood glucose 80–100 mg/dL) when compared to moderate glucose control (goal blood glucose <180 mg/dL) is:

A. Myocardial infarction

B. Seizure

C. Patient dissatisfaction

D. Hypoglycemia

---

17. A 65-year-old man is admitted to the ICU after laparotomy secondary to complicated abdominal mass. He is known type 2 diabetes mellitus and on metformin. On admission to the ICU, his blood glucose is 250 mg/dL. After 1 hour, it is 400 mg/dL. What is the immediate appropriate step to manage this patient?

A. Start IV insulin therapy with a goal glucose < 250 mg/dL

B. Restart oral metformin with a goal glucose < 250 mg/dL

C. Start IV insulin therapy with a goal glucose < 180 mg/dL

D. Start IV insulin therapy with a goal glucose < 120 mg/dL

---

18. A 70-year-old man is admitted from surgical ward to ICU for respiratory distress. He is postoperative day 2 from laparotomy secondary to small bowel obstruction. His vital signs: HR = 120 bpm, BP = 100/60 mmHg, SpO2 is 75% on mask breathing at 15 L/min of oxygen, and respirations are 42/min. Also, he is unresponsive to commands and to sternal rub. The anesthetist will intubate the patient and put on mechanical ventilation. Why does the anesthetist prefer intubation rather than noninvasive positive pressure ventilation (NIPPV)?

A. Unresponsive patients are poor candidates for NIPPV

B. The patient with small bowel obstruction is incapable of protecting his airway

C. NIPPV is incapable of improving significantly low oxygen saturations

D. NIPPV is not helpful in patients with pulmonary edema

---

19. In pressure-support ventilation (PSV), inspiration ends (and expiration begins) when:

A. A preset tidal volume has been achieved

B. A preset airway pressure is maintained throughout inspiration

C. A flow increases to a preset level

D. A preset amount of time has passed

---

20. Which of the following simple maneuvers result in the fastest time to weaning from mechanical ventilation?

A. Daily spontaneous breathing trials

B. Synchronized intermittent mandatory ventilation (SIMV)

C. Administration of bronchodilating medications around the clock

D. Daily bronchoscopy

---

21. Synchronized intermittent mandatory ventilation (SIMV) was an improvement on intermittent mandatory ventilation (IMV) because SIMV:

A. Can provide full ventilation support to an apneic patient

B. Can utilize volume-preset or pressure-preset ventilation

C. Allows the patient to breathe spontaneously

D. Reduces the likelihood of breath loading and volume trauma

---

22. A 25-year-old male patient with ARDS on mechanical ventilator since 18 days ago with no sign of weaning. What is the best next airway management strategy?

A. Risk for tracheal stenosis is common within 5 days of intubation

B. Tracheostomy to reduce the risk of subglottic stenosis below 10 days intubation

C. Tracheostomy to reduce the risk of subglottic stenosis in 2-3 weeks of intubation

D. Decrease endotracheal tube and reintubate until 8-10 weeks of intubation

---

23. A 50-year-old female, known HIV patient, came to the operating room to undergo thyroidectomy with general anesthesia. She was on ritonavir (antiviral therapy) for 3 years. Which one of the following anesthesia drug doses should be decreased in this patient?

A. Ketamine

B. Diazepam

C. Thiopental

D. All

---

24. A patient with retro viral infection (RVI) for 10 years is scheduled for elective cesarean section to proceed with surgery under general anesthesia. The patient had spinal cord involvement of virus or myopathy. Which anesthesia drug should be taken cautiously in this patient?

A. Suxamethonium

B. Pancuronium

C. Propofol

D. Ketamine

---

25. During preoperative evaluation, which one of the following investigations is not important for patients with HIV?

A. CBC

B. Echocardiography

C. CX-ray

D. None

---

26. A 30-year-old male patient undergoing surgery in the operating room. Meanwhile surgery is underway, the anesthetist is injured with a needlestick with blood from an infected patient. Which one of the following is FALSE about prophylaxis?

A. The prophylaxis should be started within 1-2 hours

B. Earlier tests are reliable

C. Combination of the drugs is recommended

D. ART is continued for 4 weeks

---

27. A known RVI patient with autonomic neuropathy needs the following monitoring intraoperatively EXCEPT:

A. ECG

B. Arterial line

C. Pulmonary artery catheter

D. None

---

28. Which one is/are not disadvantages of general anesthesia as compared to regional anesthesia during surgery in a patient taking antiretroviral therapy?

A. Immunosuppressant

B. Decreased drug clearance

C. Increase drug metabolism

D. Decreased thromboembolic events

---

29. A 34-year-old male was taking nevirapine as part of ART for a long time. This patient is scheduled to undergo ORIF for right upper arm fracture. Which one of the following is false?

A. The dose of benzodiazepine will increase

B. The metabolism of ketamine will increase

C. The dose of thiopental will increase

D. The half-life of fentanyl will increase

---

30. A 38-year-old woman is scheduled for elective cesarean delivery. The preoperative ECG shows left axis deviation, flattened T wave and Q wave in lead III, PR interval of 0.1 second that was not present 10 months ago. The most appropriate next step is to:

A. Postpone the procedure and consult a cardiologist

B. Postpone the procedure and obtain an echocardiogram

C. Proceed with the procedure after administration of digitalis

D. Proceed without intervention since this is a normal finding in pregnancy

---

31. A 32-year-old parturient with a history of severe asthma and pregnancy-induced hypertension is brought to the operating room. She has wheezing on auscultation and needs an emergency cesarean section under general anesthesia. Which of the following induction agents would be most appropriate for this induction?

A. Etomidate

B. Ketamine

C. Thiopental

D. Propofol

---

32. Which one of the following that we target to eliminate involuntary expulsive effort with contraction in the second stage of labor, a nerve block must include at least?

A. Upper thoracic (T1-T6)

B. Lower thoracic (T10-L1)

C. Lumbar (L2-L4)

D. Sacral (S2-S4)

---

33. A 35-year-old, multipara parturient admitted to the obstetrics ward with the diagnosis of hypertensive disorders of pregnancy at 32 weeks gestation. She was optimized and monitored at the obstetrics ward for better blood pressure management and viability of the fetus commencing steroids. Which one of the following anti-hypertensive medications is appropriate to control her hypertension?

A. Enalapril

B. Atenolol

C. Nicardipine

D. Hydrochlorothiazide

---

34. During the second stage of labor at 38 weeks gestation, fetal heart late decelerations are noted. Meconium-stained fluid is identified upon delivery. The newborn is breathing spontaneously, is vigorous, and has a heart rate of 130. What is the most appropriate management of this newborn?

A. Immediate intubation with endotracheal suctioning

B. Positive pressure ventilation with 100% oxygenation

C. ETT suctioning followed by radiographic films once suctioning is cleared

D. Routine oral/nasal suctioning with expectant management

---

35. A 50-year-old man with Parkinson's disease is suffering from severe postoperative nausea and vomiting following an inguinal hernia repair under general anesthesia. What will be the most suitable choice of antiemetic for this patient?

A. Intravenous metoclopramide 10 mg

B. Intramuscular prochlorperazine 12.5 mg

C. Intravenous dexamethasone 8 mg

D. Intravenous ondansetron 4 mg

---

36. A 44-year-old female patient with the diagnosis of cholelithiasis is scheduled for cholecystectomy. She is taking prednisone 20 mg/day for rheumatoid arthritis for the last two months. Otherwise, she has no positive findings on history and physical examination. What is the specific concern of this patient regarding her medication history?

A. Omit the morning dose of prednisone

B. Consider supplemental dose of hydrocortisone

C. Change morning dose of prednisone to dexamethasone

D. Reduce morning dose of prednisone by half

---

37. A 40-year-old patient underwent a surgery following femoral fracture of his left leg. Physical diagnosis on the second postoperative day indicated petechiae and mental status change. The patient's

blood pressure is 100/85 mmHg, heart rate 120/min, respiration rate 28/min, temperature 38 degrees centigrade and oxygen saturation 85 percent. Chest x-ray shows diffuse lung infiltration. What is the most likely diagnosis of this patient?

A. Pulmonary embolism

B. Hemothorax

C. Pulmonary edema

D. Fat embolism

---

38. A 65-year-old male patient is undergoing laser excision of a laryngeal papilloma. The airway is secured with a 'Laser-flex' endotracheal tube. During the procedure the proximal cuff is burst by a laser beam and a small flame of fire appears in the surgical field. The most appropriate immediate measure should be:

A. Increasing the inspired oxygen concentration

B. Changing the endotracheal tube immediately

C. Flooding the field with normal saline

D. Increasing the nitrous oxide concentration in order to reduce the inspired oxygen concentration

---

39. A 48-year-old female patient involved in a road traffic accident about 36 hours ago is scheduled for an open reduction of bilateral mandibular fractures. She complains of neck pain and cervical spine injury is suspected. The best possible investigation to exclude cervical spine injury is:

A. Cervical spine X-ray lateral view

B. Cervical spine X-ray anteroposterior view

C. MRI scan of the cervical spine

D. Dynamic fluoroscopy

---

40. A 3-year-old child has had an adenotonsillectomy. The operation itself was uneventful with minimal blood loss. Four hours after the procedure the child is found to be very irritable, pale, tachycardic and is spitting blood. Which of the following would be the next step in the management of this child?

A. Administration of I.V. morphine

B. Suction of the mouth and pharynx

C. Administration of I.V. fluids and/or blood prior to induction of anaesthesia

D. The child should be returned to theatre and intubated immediately

---

41. A 2-year-old child is brought to the emergency department with acute onset of respiratory distress, cough and stridor. The chest appears hyperinflated on the right side with reduced movements and breath sounds. The child is irritable with an oxygen saturation of 90% on air and a heart rate of 120/minute. What is the most likely diagnosis?

A. Acute severe asthma

B. Acute epiglottitis

C. Aspiration pneumonia

D. Foreign body aspiration

---

42. A 25-year-old woman with a history of chronic otitis media and conductive hearing loss is scheduled for tympanoplasty surgery to repair a large perforation in her right eardrum. She has no other comorbidities and takes no medications. On examination, she has a Mallampati score of 2 and a normal neck range of motion. What is the most appropriate anesthesia management for this patient?

A. Administer intravenous sedation and topical lidocaine and perform tympanoplasty under monitored anesthesia care (MAC)

B. Administer intravenous induction agents and muscle relaxants and perform endotracheal intubation and tympanoplasty under general anesthesia

C. Administer inhalational induction agents and muscle relaxants and perform laryngeal mask airway insertion and tympanoplasty under general anesthesia

D. Administer intravenous induction agents and muscle relaxants and perform tympanoplasty under general anesthesia with spontaneous ventilation

---

43. A 45-year-old female patient is scheduled to undergo a tympanoplasty for chronic otitis media under general anesthesia. She has a history of motion sickness and postoperative nausea and vomiting (PONV) after previous surgeries. Which of the following is the most appropriate management to reduce risk of PONV?

A. Administer ondansetron 4 mg IV

B. Administer metoclopramide 10 mg IV

C. Administer dexamethasone 8 mg IV

D. Administer scopolamine patch

---

44. A 78-year-old man with a 125-pack-year smoking history is brought to the ICU after total laryngectomy for treatment of his laryngeal squamous cell carcinoma. In the ICU his tracheostomy tube becomes totally occluded and cannot be cleared with suctioning. The most appropriate course of action while waiting for the ENT surgeon would be:

A. Bag mask or laryngeal mask airway until help arrives

B. Attempt to intubate with Glide Scope or direct laryngoscopy

C. Oral or nasal fiberoptic intubation

D. Remove tracheostomy tube and intubate laryngectomy stoma with an endotracheal tube

---

45. A 30-year-old man is admitted to the ICU after exploratory laparotomy and repair of multiple bowel injuries. After 6 hours of ICU admission, the ICU nurse reports to the anesthetist that the patient's peak airway pressures read 50 mmHg, his BP is not maintained without vasopressor, and urine output is not significant. On examination, his abdomen is tense with wound dressing intact, and clear & equal breath sounds bilaterally. What is the most likely cause of the mentioned problems?

A. Acute lung injury from trapping higher air volume

B. Respiratory failure from pneumothorax

C. Hemorrhage from an unrecognized injury

D. Abdominal compartment syndrome from hemorrhage

---

46. A 24-year-old gravida 2, para 1 parturient is anesthetized for emergency cesarean section. On emergence from general anesthesia, the endotracheal tube is removed and the patient becomes cyanotic. Oxygen is administered by positive-pressure bag and mask ventilation. High airway pressures are necessary to ventilate the patient, and wheezing is noted over both lung fields, along with hypoxemia. The patient's blood pressure falls from 120/80 to 90/60 mm Hg, and heart rate increases from 105 to 150 beats/min. The MOST likely cause of these manifestations is:

A. Amniotic fluid embolus (AFE)

B. Mucus plugs in trachea

C. Tension pneumothorax

D. Aspiration

---

47. A 110-kg (242-lb), gravida 1, para 0 woman has a blood pressure of 180/95 during an office visit at the 16th week of gestation and 175/90 1 week later. She has some ankle but no facial edema, and no protein detected in her urine. Her serum creatinine is 1.2. These findings would be classified as:

A. Preeclampsia

B. Chronic hypertension

C. Chronic hypertension with superimposed preeclampsia

D. Gestational hypertension

---

48. A 4-week-old male infant is brought to the emergency room with projectile vomiting. At the time of admission, the patient is lethargic, with a respiratory rate of 16 breaths/min and has had no urine output in the preceding 3 hours. A diagnosis of pyloric stenosis is made, and the infant is brought emergently to the operating room (OR) for pyloromyotomy. The MOST appropriate anesthetic management would be:

A. Awake intubation after placing an oral gastric tube

B. Inhalation induction with sevoflurane with cricoid pressure after placing an oral gastric tube

C. Awake IV catheter or an intraosseous needle placement followed by a rapid-sequence induction with ketamine, atropine, and rocuronium after placing an oral gastric tube

D. Postpone surgery

---

49. In a patient undergoing thoracotomy, at the onset of one lung ventilation, end tidal CO_2 of the dependent lung will show:

A. An initial transient fall in $ETCO_2$ followed by an increase

B. An initial transient increase in $ETCO_2$ followed by a fall

C. A decrease in end tidal CO_2 with increased $PaCO_2$-$ETCO_2$

D. Increase in $PaCO_2$ is greater than the increase in $ETCO_2$

---

50. A 13-year-old female child has been anesthetized for ophthalmic surgery. She has been treated for increased ocular pressure. The surgeon and anesthetist have discussed to decrease IOP preoperatively as much as possible. What intervention most likely will help to address their concern?

A. 30-degree head down position

B. Hyperventilation

C. Hypoventilation

D. Light anesthesia

---

51. An 84-year-old woman scheduled to undergo surgery for a fractured neck of femur develops atrial fibrillation at a rate of 140 beats/minute following induction of general anesthesia. Her blood pressure is 60/40 mmHg and there is no improvement following a rapid transfusion of 500 ml of colloid. What would be the most appropriate next intervention?

A. Incremental doses of adenosine

B. Bolus dose of amiodarone over 30 minutes

C. Intravenous infusion of esmolol

D. DC cardioversion

---

52. A 50-year-old man with Crohn's disease requires an urgent laparotomy for small bowel obstruction. He has a body mass index (BMI) of 24 kg/m2 and his airway assessment is normal. However, at previous laparotomy, he was noted to be a grade 2 to grade 3 intubation. What is the most appropriate anesthetic management for this patient?

A. Perform a rapid sequence induction with propofol and rocuronium

B. Inhalational induction with sevoflurane prior to laryngoscopy

C. Awake fiberoptic intubation before induction of general anesthesia

D. Perform a rapid sequence induction with propofol and succinylcholine

---

53. A previously fit 78-year-old man has a transurethral resection of the prostate (TURP) performed under general anesthesia taking 90 minutes to complete. Half an hour after arrival in the recovery room he has not regained consciousness. Respiratory effort is adequate and vital signs are stable. Which of the following deranged investigations is most likely to account for his current clinical condition?

A. Hemoglobin 7.1 g/dl

B. Serum sodium 114 mmol/L

C. Serum glucose 2.8 mmol/L

D. PaO2 8.9 kPa (FiO2 = 0.35)

---

54. You are asked to review a 22-year-old man in the recovery area following a tonsillectomy. He was anesthetized by a colleague and is now awake and comfortable but complains that his upper right incisor tooth has been broken off during the procedure. Which of the following should take priority?

A. Apologize to the patient and document this in the notes

B. Arrange an urgent chest x-ray to identify the location of the tooth

C. Complete an incident form and inform your clinical director

D. Examine the patient to assess damage and possible location of the tooth

---

55. An 84-year-old lady with advanced dementia is admitted with a fractured neck of femur. A Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) order is in place. After discussion with her family, it is agreed that the fracture should be fixed for pain relief. You proceed with a spinal anesthetic and a single dose of 1 mg midazolam. Just after positioning her for surgery, you notice she has stopped breathing and you cannot feel her carotid pulse. The most appropriate action now is:

A. Administer boluses of flumazenil and adrenaline

B. Ask a senior colleague for a second opinion

C. Commence cardiopulmonary resuscitation

D. Respect the DNACPR order

---

56. A 22-year-old parturient is anesthetized for an emergency laparoscopic cholecystectomy. She is in the twenty-fourth week of gestation and receives general sevoflurane anesthesia and has received rocuronium for muscle relaxation. Just before emergence, muscle relaxation is reversed with

glycopyrrolate and neostigmine. Three minutes later, the fetal heart rate falls to 88 beats/min. The MOST likely cause of this is:

A. Fetal head compression

B. Uteroplacental insufficiency

C. Fetal hypoxia

D. Reversal agents

---

57. A 32-year-old patient is anesthetized for resection of a supratentorial tumor. Preoperatively, the patient is lethargic and disoriented. Which of the following is MOST likely to adversely alter ICP?

A. 5% Dextrose in water

B. Normal saline

C. Lactated Ringer solution

D. 5% Albumin

---

58. A 22-year-old patient is anesthetized for resection of a temporal lobe tumor. Preoperatively, he is lethargic and confused. After induction of general anesthesia, which of the following would be the MOST appropriate drug to control systemic arterial BP (160/100) during direct laryngoscopy and tracheal intubation?

A. Esmolol

B. Nitroprusside

C. Hydralazine

D. Isoflurane

---

59. A 25-year-old woman with a body mass index (BMI) 42 kg/m2 is to be anesthetized for laparoscopic bariatric surgery. She has a history of knee pain while walking. She has no medication allergies and takes multivitamins and an oral contraceptive. Her American Society of Anesthesiologists designation should be:

A. ASA I

B. ASA II

C. ASA III

D. ASA IV

---

60. Which of the following is LEAST likely predictor among the screening criteria of obstructive sleep apnea (OSA)?

A. Neck circumference ≥ 16 inches/40 cm

B. Awake hypercapnia ($PaCO_2$ > 45 mm Hg)

C. Systemic Hypertension (150/100 mmHg)

D. BMI > 35 kg/m2

---

61. A 4-year-old male patient is scheduled for elective tonsillectomy. During your preanesthetic examination, you find fever and a grayish-white coating (exudate) in hypertrophied tonsils. All are true about this case scenario EXCEPT?

A. Postponed the surgery

B. Proceed the surgery with administration of antibiotics

C. Acute bacterial tonsillitis is the top differential diagnosis

D. Viral tonsillitis can be relieved with supportive management

---

62. Which of the following radiological "signs" is MOST likely to be present in a child with acute epiglottitis?

A. Thumb sign

B. Hampton hump

C. Steeple sign

---

63. A 74-year-old female with a history of atrial fibrillation and on chronic warfarin therapy is scheduled for emergency surgery for correction of a small bowel obstruction. What is the BEST therapy to urgently reverse the effects of warfarin?

A. Administer vitamin K

B. Administer protamine

C. Administer fresh frozen plasma

D. Administer cryoprecipitate

64. Which of the following clinical situations will be contraindications to the use of metoclopramide as a premedication?

A. Intestinal obstruction, tremors, hepatic dysfunction

B. Diabetic gastroparesis, esophageal reflux

C. Chemotherapy induced emesis

D. Patients on digoxin and insulin

65. A 43-year-old patient with untreated hyperthyroidism and tachycardia presents for emergency surgery. What is the best intervention at this time?

A. Administer propylthiouracil

B. Administer amiodarone

C. Administer esmolol

D. Delay surgery until a euthyroid state is achieved

66. Two days after thyroidectomy under general anesthesia a 27-year-old woman is found confused and disoriented. Her neck is extended with jaw rigidity, inspiratory stridor and thread pulse. What should be the next MOST appropriate course of action in the management of this patient?

A. Paralyze and intubate the patient

B. Return the patient to the operating room for re-exploration of her neck

C. Administer oxygen and intravenous calcium gluconate

D. Face mask her with oxygen and order stat electrolytes and CBC

67. A 32-year-old female had a total thyroidectomy two days ago. Since her surgery she has complained of hoarseness in her voice. Endoscopic exam of her vocal cords showed her left vocal cord in the paramedian position. This is consistent with which type of nerve injury?

A. Unilateral recurrent laryngeal nerve injury

B. Bilateral recurrent laryngeal nerve injury

C. Unilateral superior laryngeal nerve injury

D. Bilateral superior laryngeal nerve injury

---

68. Six hours following parathyroidectomy a 30-year-old woman has changes in the quality of her voice. There is no inspiratory stridor. Serum level of calcium is 9 mg/dl. What is the MOST appropriate management?

A. Re-intubate the patient

B. Administer calcium gluconate

C. Consider tracheostomy

D. Observe in ICU for 24 hours

69. A 65-year-old man had a lumbar epidural placed for transurethral resection of the prostate (TURP). One hour into the procedure, he starts complaining of shortness of breath with associated abdominal pain. He is nauseated, tachycardic and hypertensive. What is the appropriate next step?

A. Inform the surgeon of possible bladder perforation and ask for termination of the procedure as soon as possible

B. Determine blood sodium concentration

C. Correct the hypertension with labetalol and ask the surgeon to use normal saline

D. Treat the patient symptomatically and continue the surgery

70. The following statement(s) is/are TRUE concerning the influence of severe renal failure on the pharmacology of nondepolarizing muscle relaxants:

A. The duration of mivacurium may be shortened due to decrease in plasma cholinesterase activity

B. The elimination half-life of vecuronium is unchanged

C. The duration of action of atracurium is not affected by renal failure

D. The volume of distribution of rocuronium is decreased in renal failure

71. A 20-year-old man has sustained abdominal and anterior chest wall trauma. A left pneumothorax has been controlled by a chest tube. Immediate laparotomy is planned for bleeding from an unknown site. What will be the next most appropriate action in the management of this patient?

A. The chest tube should be clamped during general anesthesia

B. High concentration of nitrous oxide with volatile anesthetics can be used

C. PPV with high tidal volume and low rate should be used

D. Avoid nitrous oxide because it will increase intrapleural pressure and the size of pneumothorax

---

72. A 32-year-old parturient with a history of spinal fusion, severe asthma, and hypertension (blood pressure 180/110) is brought to the operating room wheezing. She needs an emergency cesarean section under general anesthesia for a prolapsed umbilical cord. Which of the following induction agents would be MOST appropriate for her induction?

A. Sevoflurane

B. Midazolam

C. Ketamine

D. Propofol

---

73. In an emergency when there is a limited supply of type O-negative RBCs, type O-positive RBCs are preferable for transfusion for each of the following patients EXCEPT?

A. A 60-year-old woman with diabetes who was involved in an MVA

B. A 23-year-old man who sustained a gunshot wound to the upper abdomen

C. An 84-year-old man with a ruptured abdominal aortic aneurysm

D. A 21-year-old, gravida 2, para 1 woman with placenta previa who is bleeding profusely

74. A 32-year-old man is found unconscious by the fire department in a room where he has inhaled 0.1% carbon monoxide for a prolonged period. His respiratory rate is 42 breaths/min, but he is not cyanotic. Carbon monoxide has increased this patient's minute ventilation by which of the following mechanisms?

A. Shifting the O2 hemoglobin dissociation curve to the left

B. Increasing CO2 production

C. Causing lactic acidosis

75. In the context of increased ICP management, which of the following agents can be used to reduce cerebral metabolic demand and minimize the risk of secondary brain injury?

A. Naloxone

B. Barbiturates

C. Dexmedetomidine

D. Fentanyl

---

76. Which of the following represents an advantage gained by using an uncuffed rather than a cuffed endotracheal tube in a pediatric patient less than 8 years old?

A. Ability to use lower fresh gas flow

B. Decreased OR contamination

C. Less likely to change tube size to achieve appropriate fit

D. Relatively larger internal diameter may be used

---

77. A sensory level of T2 is achieved after administration of spinal anesthesia. Which of the following lung volumes is LEAST likely to be affected?

A. Tidal volume

B. Inspiratory reserve volume

C. Inspiratory capacity

D. Expiratory reserve volume

---

78. A 20-year-old male (status post car accident) sustained a right femur and pelvic fracture 2 days prior. In the last 24 hours, he has become progressively more short of breath, requiring 100 percent FiO2 to maintain an oxygen saturation in the high 80s and is now becoming more confused and disoriented. Physical exam reveals petechiae on the anterior chest wall, arms, and conjunctiva along with decreased breath sounds to auscultation. The most likely diagnosis is:

A. Undiagnosed pneumothorax

B. Cognitive dysfunction

C. Pulmonary fat embolism

D. Congestive heart failure

---

79. The spinal cord of newborns extends to the:

A. L2-L3 vertebrae

B. S1 vertebra

C. L1 vertebra

D. L4-L5 vertebrae

---

80. A 4-year-old boy with midshaft hypospadias is scheduled for repair. As part of the anesthetic, a single-shot caudal will be administered after induction, but prior to incision. Which of the following is most accurate with respect to this neuraxial block?

A. The cephalad extent of the block is influenced primarily by local anesthetic concentration.

B. Significant hypotension is likely in the absence of fluid loading.

C. The sacrococcygeal ligament must be punctured.

D. Test dosing with epinephrine is highly sensitive for intravascular placement.

---

81. One of the following is not a physiological problem associated with untreated pain in a 4-year-old child?

A. Increased risk of pneumonia

B. Decreased appetite

C. Decreased oxygen consumption

D. Impaired wound healing

---

82. A healthy 24-year-old woman is undergoing knee arthroscopy with spinal anesthesia to a level of T4. Which of the following findings is LEAST likely?

A. Decreased heart rate

B. Decreased hepatic blood flow

C. Decreased mean arterial pressure

D. Decreased tidal volume

---

83. A 3-day-old, 3-kg neonate with type C tracheoesophageal fistula (TEF) presents to the OR for primary repair. After suctioning the upper esophageal pouch and placing the patient in a semi-upright position, which of the following induction techniques is most appropriate?

A. Inhalation induction with sevoflurane

B. Awake fiberoptic intubation

C. Rapid-sequence intubation with propofol and succinylcholine

D. Awake tracheostomy under local anesthesia

---

84. On postoperative day 1, an orthopedic surgeon has consulted you about his total knee arthroplasty patient who is in severe pain and has failed a regimen of patient-controlled analgesia using morphine. He is now consulting you for an epidural catheter placement for postoperative pain control, and would like to know for what time interval once-daily prophylactic low-molecular-weight heparin (LMWH) should be held prior to performing the epidural procedure:

A. 6 hours and a relative contraindication to place a catheter

B. 4 hours and no absolute contraindication to placement of a catheter

C. 12 hours and no absolute contraindication to placement of a catheter

D. 24 hours and absolute contraindication to place a catheter

---

85. The patient is scheduled for cholecystectomy and the circulating nurse is preparing antibiotics to administer for a client. The purpose of giving prophylaxis for infectious disease process primarily because antibiotics:

A. Block growth of essential components of the bacterial cell.

B. Reduce the inflammatory response.

C. Enhance the body's natural immune function.

D. Immobilize bacteria and allow them to be eliminated from the body.

---

86. Spinal anesthesia given for lower leg below knee amputation. The depth of block is adequate for the surgery. The orthopedic surgeon uses an above-knee tourniquet to decrease bleeding and facilitate surgery. The patient starts to complain of pain and vital signs are changed after one hour of the application of the tourniquet. What is the more probable cause of pain?

A. Unblocked myelinated fiber A

B. Unblocked unmyelinated fiber C

C. Wear of the anesthesia drug

D. Failed spinal anesthesia

---

87. When intracranial hypertension exists, the main compensatory mechanism from the body is:

A. Shifting of CSF from intracranial to spinal subarachnoid space

B. Reduction of cerebral blood volume due to compression of intracranial arteries

C. Increased absorption of cerebrospinal fluid (CSF) at the intracranial arachnoid villi

D. Increased absorption of CSF in the spinal arachnoid villi

---

88. Which of the following is not a criteria for effective CPR?

A. Place at midway between left nipple and sternum

B. Rate of 80 to 120 per minute

C. Rotate compressor every 2 minutes

D. Depth 1/3 of anteroposterior chest diameter

---

89. Which of the following is the purpose of the check valve on the anesthesia machine?

A. To prevent hypoxic gas mixtures

B. To prevent gas flow from the common gas outlet to the vaporizers

C. To prevent overly high flows of oxygen

D. To ensure adequate ratios of oxygen to nitrogen

---

90. During neurosurgery, intraoperative positioning is crucial to provide optimal surgical exposure and minimize complications. Which position is commonly used for supratentorial procedures to facilitate venous drainage and reduce cerebral edema?

A. Semi-sitting position

B. Lateral decubitus position

C. Reverse Trendelenburg position

D. Prone position

---

91. Tingling in the fifth finger during spinal anesthesia is associated with anesthesia at which of the following dermatomes?

A. C6

B. T2

C. C8

D. C4

---

[i]92. A subarachnoid block to a sensory level of the second thoracic dermatome is associated with each of the following EXCEPT:

A. Bradycardia

B. Total sympathetic block

C. Decreased gastrointestinal smooth muscle tone

D. Relaxation of gastrointestinal sphincters

---

93. Which of the following is not an advantage of treating a high-risk OSA patient with a CPAP or bi-level for a few days before surgery?

A. Increases the amount of pulmonary hypertension

B. Decrease carbon dioxide levels

C. Improves breathing

D. Prepare for difficult airway plan

---

94. A 55-year-old female patient with recurrent nephrolithiasis is treated with extracorporeal shock wave lithotripsy. The shock wave during extracorporeal shock wave lithotripsy is timed to coincide with a particular point in the ECG occurs at the:

A. 20 microseconds after the peak of R wave

B. Peak of the P-wave

C. 200 microseconds after the peak of the R wave

D. 100 microseconds after the peak of the P-wave

---

95. Which of the following cardiac rhythms is shockable?

A. PEA

B. VTAC with pulse

C. Asystole

D. VF

---

96. All of the following can be used to assist in reducing the amount of perioperative surgical blood loss in orthopedic procedures, EXCEPT:

A. Aprotinin

B. Hemodilution

C. Controlled hypotension

D. Tranexamic acid

---

97. Which one of the following is more harmful in the event of an airway fire?

A. Saline-filled cuff ETT

B. Minimal oxygen (21%) and nitrous oxide

C. Immediate extubation after airway fire noticed

D. Removing electrocautery from surgical field

---

98. Incorrect statement regarding neuraxial anesthesia and deep-vein thrombosis/pulmonary embolism (DVT/PE) in orthopedic surgical procedures is:

A. Neuraxial anesthesia may increase activity of both factor VIII and von Willebrand factor

B. Neuraxial anesthesia may reduce thromboembolic complications

C. Neuraxial anesthesia may reduce blood loss

D. Neuraxial anesthesia may decrease platelet reactivity

---

99. Which of the following statements is false about the pediatric airway?

A. High and posteriorly located larynx

B. Large tongue proportion to oral cavity

C. Obligate nasal breather

D. Cricoid cartilage is narrower than vocal cord

---

100. A 70-year-old woman came for a thyroidectomy. She has a history of myocardial infarction and hypertension for one year duration. She is on medication. Otherwise, she is healthy looking, vital signs were stable preoperatively. She was induced with fentanyl, propofol, suxamethonium, maintained with halothane 1% MAC and vecuronium depending on fluctuating vital signs. Meanwhile during operation, the patient's vitals dropped serially to 75/45, HR 140 bpm, SpO2 92%. No significant blood loss noted intraoperatively. Possible complication is:

A. Neurogenic shock

B. Cardiogenic shock

C. Obstructive shock

D. Septic shock

---

101. Which inhalational anesthetic agent is preferred for anesthesia maintenance in patients with cerebral edema due to its minimal impact on intracranial pressure (ICP)?

A. Nitrous oxide

B. Sevoflurane

C. Isoflurane

---

102. How much of the administered dose of Suxamethonium reaches the neuromuscular junction?

A. 75% of administered dose

B. 10% of administered dose

C. 25% of administered dose

D. 15% of administered dose

---

103. In an Axillary brachial plexus block, which nerve is farthest from the artery, often requiring a second needle pass to block?

A. Radial

B. Median

C. Musculocutaneous

D. Ulnar

---

104. Mr. X is 60 years old, 70 kg, male scheduled for herniorrhaphy, has a preoperative hemoglobin value of 13 g/dl and he was NPO for 10 hours. The procedure took 2 hours with a total of 200 ml blood loss in the first hour. So, which of the following would not be the recommended fluid management plan?

A. The maintenance fluid could be 100 ml/minute

B. The patient had a fluid deficit of 1 liter

C. Third space loss can be from 0 to 140 ml/kg/hr

D. The total amount of fluid needed in the first hour could be 1340 ml

---

105. Incorrect statement about acute epiglottitis:

A. Sore throat, drooling, fever and tachypnoea are classic signs

B. If acute epiglottitis is suspected, then the airway should be secured early

C. Haemophilus influenzae B is one of causative agents

D. Often the child diagnosed with epiglottitis will be more comfortable in supine position

---

106. Succinylcholine when administered to patients will increase serum potassium level by approximately:

A. 1 meq/L

B. 0.5 meq/L

C. 1.5 meq/L

D. 2.5 meq/L

---

107. In patients with blunt head trauma, cerebral perfusion pressure is determined by the gradient between:

A. Systolic pressure and intracranial pressure

B. Mean arterial pressure and central venous pressure

C. Intracranial pressure and central venous pressure

D. Mean arterial pressure and intracranial pressure

E. Diastolic pressure and central venous pressure

---

108. Following a head-on motor vehicle collision, a 21-year-old unrestrained passenger presents to the ER with dyspnea and respiratory distress. She is intubated and physical examination reveals subcutaneous emphysema and decreased breath sounds. Chest x-ray reveals cervical emphysema, pneumomediastinum, and a right-sided pneumothorax. What is the most likely diagnosis?

A. Tracheobronchial injury

B. Open pneumothorax

C. Tension pneumothorax

D. Esophageal injury

---

109. During general anesthesia, Jackson Rees modification (Mapleson-F) is widely used in children weighing less than 25 kg. Which of the following is different?

A. It needs high flow oxygen

B. It delivers dry oxygen

C. Risk of ambient pollution

D. It avoids bulkiness

---

110. Induction will be the most rapid with which of the following anesthetic agents?

A. Halothane

B. Sevoflurane

C. Desflurane

D. Isoflurane

---

111. Fetal circulation is characterized by right to left shunting across the ductus arteriosus and the foramen ovale. Fetal circulation progresses to transitional circulation with birth that is characterized by which one of the following?

A. Decreased pulmonary vascular resistance

B. Decreased systemic vascular resistance

C. Complete closure of the foramen ovale

D. Complete closure of the ductus arteriosus

---

112. Anesthetist X did a wrist block for distal finger amputation with 1% lidocaine local anesthetic. Then he noticed that the patient was tingling in the lip and complained of metallic tongue taste. What is the most likely diagnosis for this case scenario?

A. A complication of lidocaine on the endocrine system

B. A complication of lidocaine on the cardiovascular system

C. A complication of lidocaine on the central nervous system

D. A complication of lidocaine on the respiratory system

---

113. All of the following are potential complications of use of a pneumatic tourniquet, EXCEPT:

A. Pulmonary embolism

B. A compression nerve injury

C. Development of arterial thromboembolism

D. Decrease serum potassium levels

---

114. At 20 mmHg of $PaCO_2$, the cerebral blood flow is expected to be:

A. Doubled and arterioles will be maximally dilated

B. Halved and arterioles are maximally constricted

C. Halved and arterioles will be maximally dilated

D. Has no clinically evident effect on the CBF

---

115. Depression of cerebral oxygen requirements below the level required to create an isoelectric EEG can be achieved by:

A. Administration of isoflurane

B. Hyperventilation

C. Barbiturate coma

D. Hypothermia

---

116. All of the following are recommended for placing patients undergoing orthopedic surgery in a prone position, EXCEPT:

A. The eyes must be free of pressure and checked periodically

B. The neck should be in neutral position

C. The abdomen must always be supported

D. The arms are kept at less than 90 degrees of extension and flexion

---

117. An otherwise healthy 26-year-old woman is undergoing posterior spinal fusion for thoracolumbar scoliosis. During the procedure, the most likely cause of a marked decrease in the amplitude of the somatosensory evoked potentials after stimulation of the posterior tibial nerve is:

A. Administration of fentanyl 30 mcg/kg for induction

B. A decrease in body temperature from 37 to 35°C

C. Administration of vecuronium 0.15 mg/kg

D. Administration of isoflurane 1.3 MAC for maintenance

---

118. All are true regarding vasoconstrictors when added to local anesthetics EXCEPT:

A. Prolongs the duration of action of LAs

B. Enhances the quality of analgesia of LAs

C. Limits toxic side effects of LAs

D. Decreases neuronal uptake of LAs

---

119. CBF is directly proportionate to $PaCO_2$ between tensions of:

A. 50-150 mmHg

B. 80-100 mmHg

C. 20-80 mmHg

D. Less than 50 mmHg

---

120. Acute liver failure:

A. Primary liver failure occurs when acute illness causes decompensation in pre-existing chronic liver disease

B. Results from massive damage to liver cells leading to severe liver dysfunction and encephalopathy

C. Secondary liver failure is due to potentially reversible liver injury with hepatic encephalopathy, coagulopathy and jaundice developing within 4 weeks in a previously healthy person

D. The most common causes are viral hepatitis

---

121. All are recommended strategies to prevent increase in IOP for a penetrating eye injury patient EXCEPT:

A. Prevent coughing during induction and intubation

B. Deep level of anesthesia and relaxation

C. Deep extubation

D. Patch eye with fox shield

---

122. Abrupt and large increase in the delivered concentration of which of the following inhalational anesthetics may produce a transient increase in systemic blood pressure and heart rate?

A. Isoflurane

B. Halothane

C. Desflurane

D. Sevoflurane

---

123. A newborn infant born at 33 weeks gestational age presents for gastroschisis repair. In preparing medications for this patient, all of the following are considerations that will affect your medication selection, EXCEPT?

A. Immature enzyme systems for drug metabolism

B. Immature blood-brain barrier

C. Lower protein availability for drug binding

D. Increased ventilatory depression from maternally administered opioids

E. Increased sensitivity to CNS toxicity of lidocaine

---

124. Which one of the following is not part of the management of hypoxemia during one-lung ventilation (OLV)?

A. Positive End Expiratory Pressure for dependent lung

B. Intermittent two-lung ventilation

C. Increase FiO2

D. Continuous positive airway pressure for ventilated lung

---

125. Why is atropine contraindicated in closed-angle glaucoma?

A. Increases IOP by increasing BP

B. Increases IOP by complete obstruction of the outflow of aqueous humor

C. Increases IOP by constricting extraocular muscles

D. Increases IOP by enhancing production of aqueous humor

---

126. While you preoxygenate a head injury patient with suspected cervical spinal cord injury by face mask, the patient becomes hypoxic. So, which one of the following is not an appropriate action you can take?

A. Increase FiO2 to 100%

B. Chin lift and head tilt

C. Insertion of oropharyngeal airway

D. Jaw thrust

---

127. A comatose 40-year-old man is to undergo evacuation of an acute subdural hematoma. His left pupil is dilated and blood is present behind the left tympanic membrane. All of the following are acceptable interventions EXCEPT:

A. Application of 5 cm H2O positive end-expiratory pressure

B. Blind nasotracheal intubation

C. Use of nitrous oxide

D. Use of succinylcholine

E. Use of isoflurane

---

128. A 30-year-old man has a chest injury. Immediately after the accident his blood pressure drops to 50/30 mmHg, SpO2 to 25%. On physical examination the chest is hyperresonant to percussion. What is the most likely diagnosis for this patient?

A. Pulmonary embolism

B. Tension pneumothorax

C. Cardiac tamponade

D. Pulmonary edema

---

129. A newborn has Apgar scores of 4 and 5 at 1 and 5 minutes, respectively, and requires resuscitation, including intubation, after birth. Which one of the following is the most significant factor associated with lack of closure of the ductus arteriosus in this patient?

A. Increased PaCO2

B. Decreased PaO2

C. Increased pulmonary artery pressure

D. Increased PaO2

E. Decreased PaCO2

---

130. Which of the following isn't a major objective of anesthesia preoperative evaluation?

A. Devise an appropriate anesthetic plan

B. To postpone the surgical procedure

C. Determine which patients will benefit from further testing

D. Identify patients who will benefit from intervention therapy

---

131. Which of the following drugs increases cerebral blood flow while concomitantly decreasing cerebral metabolic rate?

A. Midazolam

B. Isoflurane

C. Etomidate

D. Fentanyl

---

132. What percentage of burns does a 12 kg, 2-year-old male patient have who has suffered burns to the anterior one leg, posterior one arm, anterior trunk, posterior head, and the right palm?

A. 32.5

B. 39.5

C. 35.5

D. 45.5

---

133. Which of the following organs does not have autoregulation?

A. Uterus

B. Kidney

C. Cardiac

D. Brain

---

134. Which of the following nerves is typically spared during performance of an interscalene brachial plexus block?

A. Musculocutaneous

B. Ulnar

C. Axillary

D. Median

---

135. Which one of the following does not increase the incidence of venous air embolism (VAE) during sitting craniotomy?

A. Right-to-left shunt

B. Ventricular-peritoneal shunt

C. Ventriculo-atrial shunt

D. Patent foramen ovale

---

136. Which of the following cardiac pathologies can proceed with elective surgery prior to cardiologist intervention based on the ACC/AHA guidelines?

A. Severe angina

B. NYHA class III

C. Mobitz type II AV block

D. Newly recognized ventricular tachycardia

---

137. Which anesthetic agents are expected to have minimal effect on the CBF?

A. Use of ketamine for induction of anesthesia

B. Use of morphine as an analgesic agent during induction

C. Use of etomidate for induction of anesthesia

D. Use of isoflurane for maintenance of anesthesia

---

138. The left ventricular pressure-volume loop shown below depicts (note: diagram referenced but not visible in text):

A. Aortic stenosis

B. Aortic regurgitation

C. Mitral stenosis

D. Mitral regurgitation

---

139. The following fluid should be avoided in a patient undergoing craniotomy:

A. Dextrose 5% in normal saline

B. Lactated Ringer's

C. Hetastarch

D. Normal saline

---

140. The oculocardiac reflex:

A. Precipitates sinus dysrhythmias

B. May be obtunded by local anesthetic infiltration of ocular muscles

C. Occurs on traction of the lateral rectus

D. Does not occur with retrobulbar block

---

141. The primary determinants of myocardial O2 consumption, from most to least important, are:

A. Heart rate > preload > afterload

B. Afterload > preload > heart rate

C. Preload > afterload > heart rate

D. Heart rate > afterload > preload

---

142. The rate of induction of anesthesia with isoflurane would be slower than expected in patients with:

A. A right-to-left intracardiac shunt

B. Shock

C. Chronic renal failure

D. Anemia

---

143. Treatment of a patient with mannitol can lead to all of the following EXCEPT:

A. Hypotension

B. Oliguria

C. Hypokalemia

D. Hypervolemia

---

144. The most likely reason for dyspnea in a patient experiencing the effects of a high neuraxial blockade is:

A. Phrenic nerve palsy when the neuraxial level reaches T3-T5

B. Congestive heart failure

C. Medullary hypotension

D. Patient experiencing an anxiety attack

---

145. Orthopedic surgeon has consulted you about his total knee arthroplasty patient who is in severe pain and has failed a regimen of patient-controlled analgesia using morphine. He is now consulting you for an epidural catheter placement for postoperative pain control, and would like to know for what time interval once-daily prophylactic LMWH should be held prior to performing the epidural procedure:

A. 6 hours and a relative contraindication to place a catheter

B. 24 hours and absolute contraindication to place a catheter

C. 4 hours and no absolute contraindication to placement of a catheter

D. 12 hours and no absolute contraindication to placement of a catheter

---

146. The most sensitive method to detect air embolism in a patient who undergoes craniotomy in the sitting position is:

A. Mill wheel murmur

B. Decreased end-tidal carbon dioxide

C. Increased end-tidal nitrogen

D. Transesophageal echocardiogram (TEE)

---

147. Risk factors for post-operative nausea and vomiting include all of the following, EXCEPT:

A. Long procedure

B. Intra-operative opioids

C. Smoker

D. Female

---

148. A 30-year-old patient comes to TGSH for the indication of right anterior femoral fracture; during transfer the patient complains of severe pain and the resident called you to give analgesia. During assessment his BP = 90/60 mmHg, PR = 100 bpm. Which one of the following is the preferred pain management?

A. Giving epidural block

B. Giving fascia iliaca compartment block

C. Giving sciatic nerve block

D. Giving non-steroidal anti-inflammatory drug

---

149. A 2-week-old baby scheduled for IHPS diagnosis and planned surgery pyloromyotomy. It was delivered at 32 weeks gestational age. Based on this information, which of the following is incorrect?

A. One of the preoperative goals is obtaining consent for anesthesia and agreeing on a mode of induction

B. Premedication to relieve anxiety is one strategy

C. Hypothermia is our perioperative concern

D. Apnea monitoring and pulse oximetry are recommended for 24 hours after surgery

---

150. A 27-year-old man presents to the ER after a high-speed motor vehicle collision with chest pain and marked respiratory distress. On physical examination, he is hypotensive with distended neck veins and absence of breath sounds in the left chest. Which of the following is the proper initial treatment?

A. Intubation

B. Chest decompression with a needle

C. Chest x-ray

D. Pericardiocentesis

---

151. A 21-year-old woman sustains a stab wound to the middle of the chest. Upon arrival to the ER she has equal breath sounds, blood pressure of 85/46 mm Hg, distended neck veins, and pulsus paradoxus. Which of the following is the most appropriate management of this patient?

A. Emergent pericardiocentesis or subxiphoid pericardial drainage after anesthetic induction in the operating room

B. Emergent intubation and mechanical ventilation in the ER

C. Emergent thoracotomy in the ER

D. Emergent pericardiocentesis or subxiphoid pericardial drainage under local anesthesia

---

152. A 40-year-old patient admitted with the diagnosis of thoracoabdominal injury. After 1 day of admission, the patient ends up with cardiopulmonary arrest with the ECG showing ventricular tachycardia, absent pulse, and cessation of breathing. Which one of the following is false about cardiac life support management?

A. Start defibrillation

B. Administer adrenaline

C. Start CPR immediately and reassess

D. Administer amiodarone before the 3rd shock

---

153. A 1-day-old child presents with coughing and choking at his first feed. Following investigation, a diagnosis of tracheoesophageal fistula (TEF) is made. Which one of the following statements is true?

A. Air leak through the fistula is minimized with paralysis

B. Postoperative intubation is necessary to protect the airway from aspiration

C. Esophageal atresia is associated with tracheoesophageal fistula in 10% of cases

D. Sump suction is maintained in the esophageal pouch to lessen the risk of aspiration

E. 10% of infants with TEF have the associated anomalies of VATER syndrome

---

154. A 48-year-old mother is worried about a big mass at her back near the tip of the scapula. In the long run, she may have a chance for surgical intervention. She also has a history of peptic ulcer disease with a current complaint of heartburn. Which analgesic drug could possibly be avoided for intraoperative pain management?

A. Diclofenac

B. Fentanyl

C. Pethidine

D. Morphine

---

155. A 56-year-old woman with a malignant ovarian tumor is switched from oral morphine 60 mg every eight hours to 1 mg morphine daily via intrathecal catheter because of excessive sedation. Seventy-two hours later, she developed confusion, diaphoresis, and tachycardia. Which of the following is the most likely cause of this case scenario?

A. Opioid withdrawal

B. Increased intracranial pressure

C. Metabolic abnormalities

D. Meningitis

---

156. A 55-year-old man has quadriplegia after undergoing suboccipital craniotomy in the sitting position for treatment of acoustic neuroma. Which of the following is the most likely cause?

A. Compression of the cervical cord related to neck flexion

B. Sustained elevation of cerebral perfusion pressure

C. Jugular venous obstruction

D. Air embolism with the presence of a probe-patent foramen ovale

E. Postoperative tension pneumocephalus

---

157. A 5-year-old female patient is scheduled for inoculation. She took a cup of tea at 2:00 AM local time orally. The ophthalmologist requests to start the procedure at 4:00 AM local time. What is your response?

A. It is better to wait at least 8 hours NPO time, so we will start at 10:00 AM local time

B. Yes, we can proceed with our procedure at 4:00 AM local time, sir

C. It is better to wait at least 6 hours NPO time, so we will start at 8:00 AM local time

D. It is better to wait at least 4 hours NPO time, so we will start at 6:00 AM local time

---

158. A 45-year-old male patient is seen in the surgical referral clinic for a pituitary adenoma resection surgery. All of the following would be expected if this adenoma was causing acromegaly EXCEPT:

A. Difficult airway

B. Hyperglycemia

C. Obstructive sleep apnea

D. Hypotension

---

159. A 65-year-old male patient scheduled for TURBT; on preoperative assessment you find that the patient has a history of squeezing pain in the pericardial or substernal area of the chest, sometimes radiating to the arms, jaw, or thorax, unrelieved by rest but usually disappears in about 5 minutes. The most likely diagnosis could be:

A. Silent MI

B. Variant angina

C. Stable angina

D. Unstable angina

---

160. A 65-year-old man was prepared for closure of an end colostomy. He has a history of vomiting and severe pain from his previous surgery. What would be the best approach for postoperative pain management?

A. Iliohypogastric nerve block

B. Intercostal nerve block

C. Ilioinguinal nerve block

D. TAP block

---

161. A 7-year-old girl is scheduled for a caudal injection for postoperative analgesia after groin surgery. Which of the following ligaments will be traversed by the needle immediately before entering the caudal canal?

A. Sacrococcygeal

B. Sacroanal

C. Sacrospinous

D. Interspinous

-

[i] Compiled by Jemal Ahmed 2018E.C Anesthesia Graduate, Dire Dawa University