1. A patient complains of dizziness, feeling weaker over the past week, and a fainting episode this morning. Initial vital signs are BP 174/92 mmHg, HR 34 beats/minute, RR 18 breaths/minute, and T 98.4°F (36.8°C). What is the priority intervention for this patient?
   A. Administer oxygen via non-rebreather mask.
   B. Prepare patient for a STAT computed tomography (CT) scan.
   C. Activate the rapid response team.
   D. Initiate IV access with a saline lock.

2. An analysis of chest pain using the mnemonic “PQRST” represents the assessment of:
   A. Pain, Palliates, Quality, Response, Strength, Tightness
   B. Pain, Provoke, Quality, Release, Severity, Time
   C. Provoke, Palliates, Quality, Radiation, Severity, Time
   D. Provoke, Palliates, Quality, Radiates, Strength, Tightness

3. Which assessment technique could contribute to making a diagnosis in a patient with a sudden onset of “tearing” chest pain?
   A. Perform a right-sided 12-lead electrocardiogram (ECG)
   B. Assess for pedal edema
   C. Auscultate heart sounds for a friction rub
   D. Obtain blood pressure readings in both arms

4. A patient arrives in the ED with complaints of sudden onset of chest pain and shortness of breath. The electrocardiogram reveals normal sinus rhythm with ST-segment elevation in leads V2 through V4. What area of the heart has sustained injury?
   A. Lateral
   B. Anterior
   C. Posterior
   D. Inferior

5. Which cardiac syndrome displays T-wave changes plus a history of anginal chest pain without serum marker abnormalities?
   A. Wolff-Parkinson-White (WPW) syndrome
   B. Wellens’ syndrome
   C. ST-elevation myocardial infarction (STEMI)
   D. Ludwig’s angina
6. A primary goal of therapy for a patient with acute coronary syndrome (ACS) is:
   A. identification of criteria for early reperfusion therapy.
   B. prevention of unstable ventricular dysrhythmias.
   C. removal of unstable plaques.
   D. administration of beta (β)-blockers.

7. A patient diagnosed with ST-elevation myocardial infarction (STEMI) suddenly becomes bradycardic with a heart rate of 41 beats/minute. Blood pressure is 60/38 mmHg. Skin is cool, pale, and moist. After ensuring a patent airway and adequate ventilation, the nurse should first anticipate an order for:
   A. application of a transcutaneous pacemaker.
   B. administration of atropine (Atropine Sulfate) 1.0 mg IV push.
   C. set up for transvenous pacemaker insertion.
   D. administration of dopamine (Intropin) 2 to 10 mcg/kg/minute.

8. A patient with an implantable cardioverter defibrillator (ICD) becomes unresponsive with the monitor showing a wide complex tachycardia. After beginning CPR, which of the following interventions is most appropriate to manage this patient?
   A. Administer amiodarone (Cordarone) intravenously.
   B. Place a magnet over the skin surface of the patient’s ICD.
   C. Give the patient a precordial thump.
   D. Proceed with external defibrillation.

9. What elevated lab value supports the diagnosis of congestive heart failure?
   A. Lactic acid
   B. Troponin
   C. B-type natriuretic peptide (BNP)
   D. Creatine kinase (CK)

10. A patient presents to the ED in atrial fibrillation with a rate of 120 beats/minute. All other vital signs are within normal limits. The initial treatment goal for this patient includes:
    A. rhythm conversion with medication.
    B. synchronized cardioversion.
    C. unsynchronized defibrillation.
    D. rate control with medication.

11. A patient with a permanent pacemaker complains of fatigue and has a heart rate of 32 beats/minute. Which of the following interventions is the physician likely to order to determine if the pacemaker battery needs to be changed?
    A. Cardiac monitor
    B. Pacemaker pads
    C. A magnet
    D. 12-lead electrocardiogram

12. The primary sign of instability associated with a tachydysrhythmia in the pediatric population is:
    A. respiratory distress or failure.
    B. hypertension.
    C. ST-elevation in leads II, III, AVF.
    D. hypovolemia.
13. A 15-lead electrocardiogram indicates a right ventricular myocardial infarction (RVMI). The nurse knows that administration of nitrates may lead to:
   A. resolution of the elevated ST segments.
   B. severe hypotension.
   C. preservation of right ventricular function.
   D. dissolution of the thrombus in the coronary artery.

14. Which sign or symptom of acute coronary syndrome is often reported by elderly patients?
   A. Relief of chest pain by sitting up and leaning forward
   B. Radiation of pain down both arms
   C. A feeling of dyspnea
   D. Pericardial friction rub

15. What cardiac biomarker is most commonly utilized to measure cardiac damage?
   A. Albumin cobalt binding
   B. Creatine kinase (CK)
   C. Troponin I
   D. AST/ALT (SGOT/SGPT)

16. A patient’s blood pressure is being monitored via a radial arterial line. The waveform is dampened and the reading does not correlate with the patient’s condition. Which action can the nurse take to assure accuracy of the arterial pressure reading?
   A. Observe the system for air bubbles and flush out through the closest port.
   B. Decrease the pressure in the pressure bag to 50 mmHg.
   C. Force-flush the arterial catheter using a small, high-pressure syringe.
   D. Position the transducer at the level of the radial catheter insertion site.

17. A patient with chest pain has an electrocardiogram that reveals ST-segment elevation in diffuse leads, and no reciprocal changes. The patient feels better sitting forward. Which is the most likely condition this patient is experiencing?
   A. Pulmonary embolism
   B. Endocarditis
   C. ST-segment elevation myocardial infarction (STEMI)
   D. Pericarditis

18. Which of the following consequences is implied by the term “loss of atrial kick”?
   A. Decreased heart rate
   B. Increased stroke volume
   C. Decreased cardiac output
   D. Increased response to vagal maneuvers

19. A patient with a recent diagnosis of myocardial infarction presents to the ED with complaints of severe chest pain that increases with inspiration and increased activity, fever, chills, and dyspnea. Which of the following conditions is the likely cause of the current signs and symptoms?
   A. Pericarditis
   B. Papillary muscle rupture
   C. Pleurisy
   D. Coronary thrombosis
20. Which of the following treatments would be indicated for an emergency department patient with a plasma digoxin (Lanoxin) level of 5.2 ng/mL (normal level < 2.6 ng/mL)?
   A. Syrup of ipecac
   B. Digoxin immune fab (Digibind)
   C. Hemodialysis
   D. Atropine (Atropine Sulfate)

21. After administering tenecteplase (TNK-ase) to a patient having an acute ST-segment elevation myocardial infarction (STEMI), which of the following should the nurse assess to indicate that the medication has been effective?
   A. Appearance of a Q-wave on the 12-lead electrocardiogram and pink-tinged urine
   B. Immediate reduction in troponin level and appearance of sinus tachycardia
   C. Resolution of ST-segment elevation and possible appearance of dysrhythmias
   D. Appearance of ST-segment depression and occasional premature ventricular contractions (PVCs)

22. A 10-week-old infant with a history of projectile vomiting, poor weight gain, and continual hunger has a mobile, “olive-shaped” mass in the abdominal area on palpation. Which of the following is suspected?
   A. Intussusception
   B. Appendicitis
   C. Pancreatitis
   D. Pyloric stenosis

23. A middle-aged patient diagnosed with an upper gastrointestinal (GI) bleed is tachycardic and hypotensive and is vomiting blood. After stabilizing the ABCs, what other intervention is anticipated?
   A. Administering proton pump inhibitors
   B. Performing iced normal saline lavage
   C. Inserting a balloon tamponade tube
   D. Initiating a dopamine (Intropin) drip

24. After being involved in a motor vehicle crash, a patient complains of abdominal pain. Which diagnostic test should the emergency nurse anticipate to rapidly detect the presence of hemoperitoneum?
   A. Focused assessment sonography for trauma (FAST exam)
   B. Computed tomography (CT) scan
   C. Intravenous pyelogram (IVP)
   D. Upright abdominal radiographic studies

25. Diagnostic laboratory testing for a patient suspected of having acute pancreatitis includes:
   A. albumin.
   B. lactic acid.
   C. B-type natriuretic peptide.
   D. amylase.
26. Which of the following alterations in dietary intake is recommended for a patient with irritable bowel syndrome (IBS)?
   A. High-fiber diet
   B. Small frequent meals
   C. Avoidance of caffeine, alcohol, and chocolate
   D. Low-fat diet

27. A patient involved in a motor vehicle crash complains of right-sided abdominal pain. During palpation of the abdomen, there is rigidity in the right upper quadrant (RUQ). The nurse suspects injury to what organ?
   A. Spleen
   B. Liver
   C. Pancreas
   D. Small bowel

28. Patients diagnosed with a common bile duct blockage will most likely describe their stools as:
   A. black.
   B. brown.
   C. gray.
   D. yellow.

29. The most precise radiographic diagnostic tool to assist in the diagnosis of appendicitis is a(n):
   A. abdominal helical computed tomography (CT) scan.
   B. abdominal sonography.
   C. kidney, ureter, bladder (KUB) images.
   D. hepatobiliary iminodiacetic acid (HIDA) scan (cholescystography).

30. Which of the following complications would be most concerning following emergent placement of an esophagogastric balloon tamponade tube?
   A. Cardiac dysrhythmias
   B. Esophageal erosions
   C. Pulmonary edema
   D. Airway obstruction

31. The emergency nurse is giving discharge instructions to a patient diagnosed with epididymitis. These instructions should include:
   A. information that the fever and abdominal pain will continue for at least another 48 hours.
   B. instructions to take the antibiotics until the penile pain is completely gone.
   C. advise to return to his construction work as soon as he is feeling better.
   D. information about safe sex practices and use of condoms.

32. An 8-pound (3.6 kg) baby was just emergently delivered in the ED. The nurse is assessing vital signs on the newborn. Which of the following respiratory rates is considered to be within normal limits for this infant?
   A. 30 breaths/minute
   B. 50 breaths/minute
   C. 80 breaths/minute
   D. 20 breaths/minute
33. A 2-year-old female presents to the ED with fever, decreased appetite, and complains of a stomachache. The provider orders a urine specimen. The best way to obtain a urine specimen from this female patient is:
   A. clean catch.
   B. bladder catheterization.
   C. midstream.
   D. adhesive urine collection bag.

34. A young adult female presents to triage complaining of right lower-quadrant pain. Which of the following conditions is **MOST** life threatening and should be ruled out first?
   A. Urinary tract infection
   B. Ectopic pregnancy
   C. Premature labor
   D. Appendicitis

35. A female patient has right lower quadrant pain 8/10 (on the 0 to 10 pain scale), is afebrile, and her last menses was 2 weeks ago. The nurse would be concerned that this patient needs immediate intervention for:
   A. ovarian cyst.
   B. ectopic pregnancy.
   C. diverticulitis.
   D. volvulus.

36. The physician is performing a vaginal examination on a patient. The physician suspects the patient has *Neisseria gonorrhoea* and is taking laboratory specimens. Which sexually transmitted disease often occurs concurrently with *Neisseria gonorrhoea*?
   A. *Trichomonas vaginalis*
   B. *Treponema pallidum* (Syphilis)
   C. *Chlamydia trachomatis*
   D. *Candida albicans*

37. A woman presents to the ED in active labor at 38-weeks gestation. Exam shows a loop of umbilical cord protruding from the patient’s vagina. Along with administering 100% oxygen, the best position in which to place the patient is:
   A. semi-Fowlers position.
   B. on her right side.
   C. lying supine.
   D. on her left side.

38. Pregnancy-induced hypertension (PIH) may be manifested by all of the following subjective signs **EXCEPT**:
   A. visual changes.
   B. right-sided abdominal pain.
   C. increased urine output.
   D. headache.
39. An abnormal finding in a patient in the third trimester of pregnancy would be:
   A. hypertension.
   B. increased heart rate.
   C. decreased arterial pressure of carbon dioxide.
   D. anemia.

40. Which of the following conditions should prompt the emergency nurse to observe for signs
    and symptoms of disseminated intravascular coagulation (DIC)?
   A. Preterm labor
   B. Placenta abruption
   C. Mild preeclampsia
   D. Spontaneous abortion

41. An altercation results in multiple facial injuries in which the upper teeth and maxillary arch
    are movable when grasped. CT scan of the face reveals a triangular midfacial fracture. This
    type of fracture is called:
   A. a tripod fracture of the zygoma.
   B. Le Fort I.
   C. Le Fort III.
   D. Le Fort II.

42. The term for blood in the anterior chamber of the eye is:
   A. anterior uveitis.
   B. hyphema.
   C. detached retina.
   D. chemosis.

43. Malocclusion, trismus, and ruptured tympanic membrane are associated with which of the
    following facial injuries?
   A. Zygoma fracture
   B. Mandible fracture
   C. Maxillary fracture
   D. Temporomandibular dislocation

44. After being struck in the eye with a baseball, a patient has a limited upward gaze. The nurse
    suspects:
   A. blow-out orbital fracture with entrapment.
   B. hyphema.
   C. retinal detachment.
   D. ruptured globe.

45. Trauma resulting in hoarseness, pain with swallowing, stridor, or hemoptysis most likely
    indicates which of the following?
   A. Ludwig’s angina
   B. Tracheobronchial injury
   C. Fractured larynx
   D. Pneumomediastinum
46. The most appropriate aftercare instructions for a patient following the reduction of a temporomandibular joint (TMJ) dislocation is to:
A. return to regular diet as tolerated.
B. rest with head of the bed elevated.
C. consult an otolaryngologist within 24 hours.
D. avoid yawning or opening the mouth widely.

47. Treatment for a patient with thrombocytopenia purpura is considered effective by which of the following laboratory findings?
A. Platelet count of 300,000 cells/mm³
B. Hemoglobin count of 5.6 g/dL
C. Quantitative D-Dimer of 120 ng/mL
D. Prothrombin time (PT) of 55.5 seconds

48. A middle-aged male patient presents to the ED with complaint of fever. He is awake, alert, and in no acute distress.
   - Vital signs on arrival: HR: 112 beats/minute, RR: 20 breaths/minute, SaO₂: 95%, BP: 118/58 mmHg, T: 101.9°F (38.8°C)
   - Medical history: HIV(+), taking antiviral medications
   Using a 5-level triage system, this patient should be triaged as which acuity level?
A. Acuity Level 3 (Urgent)
B. Acuity Level 1 (Resuscitation or life-threatening situation)
C. Acuity Level 2 (High risk and/or emergent)
D. Acuity Level 4 (Nonurgent)

49. Which of the following would indicate a positive tuberculin skin test (PPD) for a patient WITHOUT human immunodeficiency virus (HIV) infection?
A. Induration of 10 mm
B. Redness >10 mm
C. Itching
D. Induration of 5 mm

50. An elderly patient presents with a chief complaint of “not feeling well.” The patient has been taking digoxin (Lanoxin) for 4 months as prescribed along with a potassium supplement. The nurse suspects the patient may be digoxin (Lanoxin) toxic due to:
A. decreased renal function.
B. overdosage.
C. hyperkalemia.
D. decreased cardiac output.

51. An age-specific consideration for the pediatric patient with sickle cell disease is that:
A. prophylactic splenectomy should be scheduled.
B. the frequency of attacks decreases with age.
C. vaccinations are not routinely recommended.
D. the incidence of ischemic stroke is increased.
52. A fear of which of the following should be anticipated in a 4-year-old needing sutures after falling down the stairs:
   A. changes in body image.
   B. separation from parents.
   C. being handled by strangers.
   D. body mutilation.

53. A middle-aged woman being discharged with the diagnosis of fibromyalgia is given a prescription for amitryptyline (Elavil). Which of the following statements by the nurse is correct regarding proper medication administration?
   A. “You may not see improvement of symptoms for 2 to 3 weeks.”
   B. “Initially you may need to increase your dosage to achieve adequate pain relief.”
   C. “You should see results within 2 to 3 days.”
   D. “You need to take your medication every morning.”

54. A semiresponsive, elderly patient is admitted to the ED with the following findings: finger stick glucose is 380 mg/dL, serum osmolality is 330 mOsm/kg, and the pH is 7.2. Kussmaul respirations are noted. The nurse would suspect:
   A. syndrome of inappropriate antidiuretic hormone (SIADH).
   B. diabetic ketoacidosis (DKA).
   C. thyroid storm.
   D. hyperosmolar hyperglycemic nonketotic coma (HHNC).

55. Which of the following electrolyte abnormalities would you expect to find in a patient in adrenal crisis?
   A. Hyperglycemia
   B. Hypernatremia
   C. Hyperkalemia
   D. Hypocalcemia

56. An elderly patient with known hyperthyroidism arrives in the ED with confusion, restlessness, and fever. Vital signs are BP 180/100 mmHg, HR 130 beats/minute (irregular), RR 32 breaths/minute, T 103°F (39.4°C). Which of the following diagnostic values would be expected to be decreased?
   A. Serum alkaline phosphatase (ALP)
   B. Serum calcium
   C. Thyroxine (T4)
   D. Thyroid-stimulating hormone (TSH)

57. A 3-year-old child presents with a 1-week history of fever, rash, loss of appetite, cough, and runny nose. The nurse notes a red rash to the forehead, eyes, ears, and trunk with tiny bluish white spots to the mouth and throat. The nurse suspects:
   A. Rubeola (red measles).
   B. Rubella (German measles).
   C. Roseola infantum.
   D. Varicella.
58. An elderly patient with a history of Alzheimer’s presents to the emergency department with complaints of excessive salivation, severe nausea, diaphoresis, flushed skin, bradycardia, and hypotension. The emergency nurse would suspect an adverse drug effect from which medication that the patient currently takes?
A. Carbidopa/levadopa (Sinemet)
B. Memantine (Namenda)
C. Selegiline (Eldepryl)
D. Donepezil (Aricept)

59. Which of the following statements would suggest to the nurse that a patient diagnosed with mononucleosis has an understanding of the disease?
A. “If my parents had allowed me to take my immunizations, this would have been avoided.”
B. “Kissing would be OK as long as there is no fever.”
C. “Weight lifting and contact sports should be avoided for at least 4 weeks.”
D. “I inherited the gene for this from my parents.”

60. Which nursing action is of greatest priority for a patient with bone pain related to leukemia?
A. Administer pain medication.
B. Place patient in private room.
C. Administer oxygen.
D. Discuss advanced directives.

61. Which of the following patient statements would lead the nurse to determine that the patient understands hypokalemia and dietary discharge instructions?
A. “I should drink 8 glasses of water every day.”
B. “I should limit my use of table salt.”
C. “I should eat only lean meats.”
D. “I should eat more bananas.”

62. Which cranial nerve is NOT responsible for eye movement?
A. Cranial nerve II—Optic nerve
B. Cranial nerve III—Oculomotor
C. Cranial nerve IV—Trochlear
D. Cranial nerve VI—Abducens

63. All of the following are associated with neurogenic shock EXCEPT:
A. flaccid paralysis.
B. tachycardia.
C. loss of sphincter tone.
D. hypotension.

64. When preparing a patient with a suspected spinal cord injury for transport to another facility, the nurse should anticipate:
A. administering prophylactic anticonvulsants.
B. assisting with endotracheal intubation.
C. placing the patient in spinal immobilization.
D. elevating the head of the bed to 30 degrees.
65. When administering phenytoin (Dilantin) intravenously, the following recommendation should always be followed:
   A. administer the phenytoin (Dilantin) by rapid IV push.
   B. flush the IV with dextrose solution immediately after administration of phenytoin (Dilantin).
   C. monitor the patient for hypertension after intravenous administration of phenytoin (Dilantin).
   D. mix the phenytoin (Dilantin) in normal saline.

66. After being hit in the head, a patient experiences an initial loss of consciousness followed by a Glasgow Coma Scale (GCS) of 15, and no motor or sensory deficits. Fifteen minutes later, the GCS drops to 11 (the patient opens eyes to pain only, is verbally confused, and localizes to pain only). The most likely etiology of these findings is a(n):
   A. diffuse axonal injury.
   B. subdural hematoma.
   C. subarachnoid hemorrhage.
   D. epidural hematoma.

67. Which of the following is an early sign of increasing intracranial pressure in a patient with a head injury?
   A. Bradycardia and premature ventricular escape beats
   B. Unilateral fixed and dilated pupil
   C. Nausea and vomiting
   D. Extension of upper extremities with stimuli

68. Which type of headache is associated with having an aura, signaling the start of the headache?
   A. Cluster
   B. Migraine
   C. Tension
   D. Temporal arteritis

69. Which of the following drugs is used as a diagnostic test for myasthenia gravis?
   A. Edrophonium (Tensilon)
   B. Flumazenil (Romazicon)
   C. Vitamin K (Aqua-Mephyton)
   D. Naloxone (Narcan)

70. When caring for a patient during a clonic-tonic seizure, which nursing action has the first priority?
   A. Establish and maintain a patent airway.
   B. Insert a padded tongue blade between the patient’s teeth.
   C. Pad the side rails.
   D. Administer 100% oxygen by mask.
71. An elderly patient with some gait instability, sudden onset of combative behavior, ecchymosis over the mastoid process, and a hemotympanum may have sustained a(n):
   A. subarachnoid hemorrhage.
   B. subdural hematoma.
   C. epidural hematoma.
   D. basilar skull fracture.

72. When a child presents with an altered mental status, the first intervention priority should be:
   A. screening for child abuse and neglect.
   B. assessing for trauma, especially head trauma.
   C. ensuring a patent airway for ventilation.
   D. assessing response to painful stimulus.

73. Autonomic dysreflexia in spinal cord injury (SCI) is characterized by which of the following symptoms?
   A. Pupillary constriction
   B. Tachycardia
   C. Hypertension
   D. Sweating below the level of the lesion

74. An elderly patient has a history of falling at home and a decline in mentation over the last 2 weeks. The patient is confused to time and location. Blood glucose is 104 mg/dL. The nurse would suspect a(n):
   A. diffuse axonal injury.
   B. subarachnoid hemorrhage.
   C. epidural hematoma.
   D. subdural hematoma.

75. One of the anatomic differences that places the younger child at a greater risk for sustaining a head injury than an adult is:
   A. thickly myelinated brain cells.
   B. rigid skull.
   C. larger head size.
   D. shorter range of neck motion.

76. A patient with a gunshot wound to the back is awake and reports that he has feeling on the right side of his body, but not the left, and can move his left side, but not the right. This condition is called:
   A. anterior cord syndrome.
   B. Brown-Séquard syndrome.
   C. central cord syndrome.
   D. autonomic dysreflexia.

77. Which of the following procedures is likely to be performed on a patient who complains about a recently applied cast that is too tight?
   A. Padding the cast
   B. Bivalving the cast
   C. Sending the patient to an orthopedic physician immediately
   D. Removing the cast
78. A boxer’s fracture is a fracture of the:
   A. distal 5th metacarpal.
   B. distal 5th phalanx.
   C. proximal 5th metacarpal.
   D. proximal 5th phalanx.

79. Which of the following foreign bodies is most likely to cause a tissue reaction leading to infection?
   A. Bullets
   B. Wooden splinters
   C. Glass shards
   D. Metal needles

80. What type of immobilization is indicated for toe (metatarsal) fractures?
   A. Thumb spica splint
   B. Posterior splint
   C. Sugar tong splint
   D. Buddy taping

81. Assessment of a patient with a Colles’ fracture should include evaluation of which of the following nerves?
   A. Peroneal
   B. Ulna
   C. Radial
   D. Median

82. Proper fitting of a walker results in the elbows being bent at:
   A. forty-five degrees.
   B. ten degrees.
   C. twenty degrees.
   D. thirty degrees.

83. Which of the following procedures would be indicated to evaluate for compartment syndrome?
   A. Automatic pressure infuser
   B. Blood pressure cuff with needle
   C. Intracompartmental pressure monitor
   D. Manual measurement of extremity circumference

84. Which of the following complications is a consequence of landing on the pavement after a motorcycle crash?
   A. Tattooing
   B. Contusions
   C. Avulsion
   D. Laceration

85. Patients with gas gangrene infections due to Clostridium perfringens often have:
   A. thick, yellow drainage from the wound.
   B. mild soft tissue swelling.
   C. complaints of moderate pain.
   D. a history of intestinal or gallbladder surgery.
36 Chapter 6

86. A patient who complains of left shoulder pain with swelling and obvious deformity is unable to raise the left arm or bring it across the chest. The nurse suspects the patient has a:
   A. sphenoid fracture.
   B. subluxation of the humerus.
   C. shoulder dislocation.
   D. arthritis of the shoulder.

87. The sensory component of the radial nerve includes testing the feeling on the:
   A. tip of the index finger.
   B. dorsum of the hand.
   C. tip of the middle finger.
   D. palmar surface of the hand.

88. What instructions are given to patients with a diagnosis of methicillin-resistant *Staphylococcus aureus* (MRSA) organism?
   A. MRSA does not require special precautions by health care workers.
   B. Keep the wound uncovered to promote healing.
   C. MRSA cannot be transmitted to another individual unless they are immunocompromised.
   D. Methicillin-resistant *Staphylococcus aureus* (MRSA) can be on the skin without causing illness.

89. Sutures placed on the face should be removed within:
   A. 7 to 10 days.
   B. 5 to 7 days.
   C. 3 to 5 days.
   D. 10 to 14 days.

90. A clinical indication for the immediate intubation of a trauma patient may include a(n):
   A. flail chest.
   B. Glasgow Coma Scale (GCS) score of 10.
   C. upper airway protection.
   D. tachypnea.

91. If a trauma patient suddenly becomes restless and cyanotic, the nurse should:
   A. prepare for rapid sequence endotracheal intubation.
   B. evaluate and open the patient’s airway.
   C. insert two large-caliber intravenous catheters.
   D. prepare for chest tube insertion.

92. While providing patient education for migraine headache, a patient asks about taking herbal remedies. The most appropriate response is:
   A. “Herbal remedies have been shown to be safe and effective because they are natural. Be sure to buy them at a reputable health food store.”
   B. “You should check with your physician or pharmacist. Some herbs interact with prescribed medications, and some may actually trigger migraines.”
   C. “Herbal remedies are not recommended. There is no evidence that herbal remedies or supplements have any benefit for migraine headaches.”
   D. “You should not use them. They are ineffective, expensive, and not covered by your insurance.”
93. Which of the following is an appropriate response to a patient who asks about the use of an aromatherapy essential oil as an adjunct in the management of his or her illness symptoms?
A. “They can be toxic when ingested or applied topically.”
B. “They are nontoxic and are safe for all ages.”
C. “They can be safely used to treat pregnant patients.”
D. “They are contraindicated in the presence of nausea.”

94. The lab has just released an INR value of 2.3 in a patient on warfarin (Coumadin) for chronic atrial fibrillation. The nurse should:
A. prepare to administer protamine sulfate if stool guaiac is positive.
B. recognize this as an elevated value and notify the physician immediately.
C. prepare to administer factor VII (NovoSeven) and vitamin K (Aqua-Mephyton).
D. recognize this as a therapeutic value in a patient on warfarin (Coumadin).

95. Which of the following is the most important reason to obtain an accurate triage severity rating?
A. Accurate triage severity ratings facilitate movement of patients through the emergency department.
B. Overtriaged patients divert valuable resources from those who need them.
C. Undertriaged patients receive delayed care and risk deterioration.
D. Accurate triage severity ratings allow triage nurses to initiate appropriate treatment.

96. Important triage findings that indicate a biological agent may have been released in the community include:
A. multiple family members presenting with headaches, nausea, shortness of breath, and cherry-red skin.
B. a patient suffering from symmetric cranial neuropathies, blurred vision, and symmetric descending weakness.
C. many patients presenting to the emergency department with similar signs and symptoms.
D. the report of restlessness, dizziness, tachycardia, and the odor of bitter almonds in a presenting patient.

97. Which of the following concepts is a crucial component of discharge teaching for an adolescent who has sustained multiple abrasions and lacerations from a bicycle crash?
A. The risks and dangers involved when participating in cycling sports
B. Specifics about his wound care to facilitate autonomy and personal self-confidence
C. Need for assistance from family members to perform his wound care regimen
D. The benefits of using personal safety equipment, such as a bike helmet, when participating in sports

98. When assessing patient knowledge of type 2 diabetes management, the nurse recognizes the patient has adequate understanding of illness management when the patient states:
A. “I check my blood sugar and take my pills before meals.”
B. “When I am sick, I double my pills if my blood sugar levels are high.”
C. “If my blood sugar is high a half hour after taking my insulin, I give myself another dose.”
D. “I skip my evening insulin dose if I don’t eat a big dinner.”
99. Under regulations of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), individuals are entitled to all the following **EXCEPT**:
   A. having errors in the medical record changed within one year.
   B. objecting to or restricting the use of their medical records.
   C. accessing their personal medical records.
   D. authorizing the use of their medical records.

100. The Emergency Medical Treatment and Active Labor Act (EMTALA) requires that all patients presenting to the emergency department must:
   A. meet the hospital’s admission criteria.
   B. show proof of ability to pay before services are rendered.
   C. present to an emergency department capable of handling their emergency.
   D. have a medical screening exam.

101. A 4-year-old child brought to the ED after falling out of a tree is awake, but fearful. Past medical records indicate the child has experienced multiple instances of injury. An appropriate first action for the nurse would be to:
   A. tell the parents that abuse is suspected.
   B. immediately report the suspicion of physical abuse to the proper authorities.
   C. discuss with the ED physician the possibility of child neglect.
   D. recognize that all children are accident prone.

102. Monitoring the physical and psychological well-being of the patient who is restrained or secluded includes an assessment of:
   A. neurological status and psychosocial status.
   B. respiratory and circulatory status.
   C. muscle tone and respiratory status.
   D. skin turgor and circulatory status.

103. Research that examines whether the use of a five-level triage acuity categorization system increases the triage nurse’s confidence when assigning triage acuities is described as which type of research?
   A. Quasi-experimental
   B. Descriptive
   C. Experimental
   D. Qualitative

104. Collecting trace evidence in the ED from a crime victim includes:
   A. separating scrapings or clippings or taking swabs of skin cells or debris by extremity.
   B. flooding the area with water if unable to lift dry pieces of evidence.
   C. vigorously scraping debris evidence onto a clean slide.
   D. clipping all of the patient’s fingernails and placing the clippings on a piece of clean paper.

105. The claim of battery against an emergency nurse might result from which of the following actions?
   A. Starting intravenous access on a patient who declines treatment
   B. Forgetting to remove an IV catheter before discharging the patient
   C. Threatening the patient
   D. Failing to obtain informed consent prior to sending the patient to surgery
106. Which of the following is the most important question in determining the disposition of a mental health patient?
   A. “Does the patient understand his or her mental health problem?”
   B. “Are follow-up resources indicated for this patient?”
   C. “Is the patient free of sadness and disturbed thought processes?”
   D. “Does the patient require hospitalization?”

107. The priority for a patient who verbalizes suicidal thoughts is to:
   A. determine if the patient has a past medical history of depression.
   B. determine if the patient has a supportive spouse.
   C. ascertain if the patient has a plan to kill himself.
   D. identify recent diagnosis of a chronic condition.

108. A patient is diaphoretic, anxious, pacing the floor, and disoriented. The patient has noticeable hand tremors, complains of aching all over, and has a temperature of 100°F (37.8°C). The nurse suspects the client may be experiencing:
   A. lithium (Eskalith, Lithobid) overdose.
   B. withdrawal from benzodiazepines.
   C. neuroleptic malignant syndrome.
   D. tricyclic antidepressant overdose.

109. A psychiatric patient admits to hearing voices telling him to hang himself. The nurse documents that the patient is at risk for suicide based on:
   A. an intolerable feeling of hopelessness.
   B. command hallucinations.
   C. overwhelming anxiety.
   D. specific visual hallucinations.

110. Which of the following would be indicative of Alzheimer’s disease?
    A. Acute onset of dysarthria and ataxia
    B. Sudden onset of mood swings and repetitive behavior
    C. Gradual onset of memory loss and cognitive function
    D. Diplopia or gradual loss of visual fields

111. During an assessment of a patient who presents to the ED after a work-related back injury, the patient admits to a pattern of promiscuous sexual behavior, repeated substance use/abuse, and a history of sleeping only 2 hours in the past 48 hours. The patient describes having episodes of lethargy, lack of motivation, decreased energy, and no appetite. The emergency nurse suspects that this patient has the following condition:
    A. schizoaffective disorder.
    B. disorganized schizophrenia.
    C. major depressive disorder.
    D. bipolar disorder.
112. After intubation, auscultation of the lung fields reveals breath sounds louder in the upper-right anterior aspect and decreased on the left side. The nurse anticipates the need for the practitioner to:
A. pull back on the endotracheal tube.
B. advance the endotracheal tube.
C. remove the endotracheal tube.
D. secure the endotracheal tube.

113. Which of the following arterial blood gas results would be indicative of acute respiratory failure?
A. PaCO₂ level of 65 mmHg
B. PaO₂ level of 82 mmHg
C. Bicarbonate level of 24 mEq/L
D. Base excess (BE) of +3

114. Biphasic positive airway pressure (BiPAP) can be an ideal therapy to use in a respiratory failure patient with:
A. excessive oral secretions.
B. nasal deformity and bleeding.
C. an absent gag reflex.
D. crackles and distended neck veins.

115. Following patient teaching for metered dose inhaler (MDI) therapy, the nurse determines the patient can correctly use the MDI when the patient:
A. rinses his or her mouth before puffing.
B. compresses the MDI chamber on exhalation.
C. compresses the MDI chamber mid-inspiration.
D. takes two puffs in rapid sequence.

116. One of the most important factors to consider when assessing the respiratory status of a geriatric patient is:
A. that skin cushioning increases due to loss of skin elasticity.
B. that there is a gradual increase in physiologic reserve.
C. that the loss of bone density increases elasticity of the chest.
D. the age-related loss of pulmonary reserve.

117. A patient with a stab wound to the right anterior axillary line, 6th intercostal space is pale, restless, tachypneic, tachycardic, and hypotensive. Oxygen is provided and two large-caliber intravenous lines have been established with an isotonic crystalloid solution infusing at a fast rate. The nurse should immediately prepare for:
A. endotracheal intubation.
B. needle decompression.
C. chest tube insertion.
D. blood transfusion.
118. A patient who was a restrained driver involved in a motor vehicle crash (MVC) has some respiratory distress, and bowel sounds are auscultated in the chest. What injury is suspected?
   A. Ruptured diaphragm
   B. Pneumothorax
   C. Myocardial contusion
   D. Pulmonary contusion

119. Which of the following is more likely to occur after a recent history of a routine abdominal hysterectomy?
   A. Urosepsis
   B. Bowel perforation
   C. Anemia
   D. Pulmonary embolism

120. Colorimetric exhaled CO₂ detectors will display high CO₂ levels as:
   A. blue.
   B. purple.
   C. yellow.
   D. beige.

121. When using a bulb syringe to suction an infant, the nurse should:
   A. suction the back of the throat and then the mouth.
   B. suction the mouth before the nose.
   C. depress the bulb syringe while in the nose.
   D. limit suctioning to 20-second intervals.

122. Which of the following conditions would be suspected in a patient with the following presentation: RR 34 breaths/minute and very labored, cyanosis, no breath sounds on the right side, and jugular venous distension?
   A. Tension pneumothorax
   B. Aspiration
   C. Flail chest
   D. Cardiac tamponade

123. While assessing a patient, the nurse notices a significant decrease in systolic blood pressure and weakening of pulse during inspiration. This finding is significant and is occasionally found in which one of the following conditions?
   A. Pneumonia
   B. Mild asthma exacerbation
   C. Tuberculosis
   D. Chronic obstructive pulmonary disease (COPD)

124. Which of the following would be expected in a patient with a past medical history of chronic obstructive pulmonary disease (COPD) who has received a nebulized albuterol (Ventolin HFA) treatment?
   A. Increased pulse
   B. Decreased temperature
   C. Increased salivation
   D. Decreased blood pressure
125. A patient developed dyspnea after receiving blunt trauma to the neck. The patient is in obvious respiratory distress, with hemoptysis and subcutaneous emphysema in the anterior neck. The nurse suspects a:
A. ruptured diaphragm.
B. pneumothorax.
C. tracheobronchial injury.
D. pulmonary contusion.

126. A patient with a tracheostomy has a sudden drop in oxygen saturations. The first intervention should be to:
A. insert a bite block in the mouth.
B. increase the oxygen concentration (FiO₂).
C. instill saline into the tracheostomy.
D. suction the tracheostomy.

127. When assessing the pediatric respiratory system, it is important to remember that:
A. the intercostal muscles are used primarily for breathing.
B. small amounts of edema or secretions can increase airway resistance.
C. tracheal and bronchial cartilaginous support rings are O-shaped.
D. the larynx is positioned more posteriorly and cephalad than in adults.

128. Which of the following statements made by a patient would lead the nurse to conclude that the patient understands risk factors for pulmonary embolism?
A. “Resuming my birth control pills not only lowers my risk of cancer but can also lower my risk of another clot.”
B. “As long as I drink plenty of water while driving on a long trip, this shouldn’t happen again.”
C. “Stopping the car to get out and stretch every hour when I’m on a long trip is important.”
D. “Switching from my regular cigarettes to the ultra light kind can reduce my risk.”

129. Which statement made by a patient indicates an understanding of discharge instructions for asthma exacerbation?
A. “Most asthma attacks occur suddenly and without warning; usually in the morning.”
B. “The physiologic changes seen in asthma are not reversible.”
C. “Exacerbations are most often seen as a result of a bacterial infection.”
D. “Asthma is primarily caused by swelling of the airway and hypersensitivity to allergens.”

130. A patient with a penetrating wound to the chest has a patent airway and equal breath sounds. The patient is pale, cold, and diaphoretic with decreased peripheral pulses. Vital signs are BP 90/40 mmHg, HR 132 beats/minute, RR 28 breaths/minute, and oxygen saturation is 90%. Which type of shock is associated with these findings?
A. Hypovolemic
B. Distributive
C. Obstructive
D. Cardiogenic
131. Which of the following findings are associated with septic shock?
   A. Tachycardia, jugular venous distention, and dyspnea
   B. Fever, hypertension, and petechial hemorrhage
   C. Flushing, generalized urticaria, and pruritus
   D. Hypotension, tachycardia, and hypothermia

132. An elderly patient who takes warfarin (Coumadin) for atrial fibrillation loses consciousness after falling and striking their head. Computerized tomography (CT) scan reveals a subdural hematoma. The emergency nurse anticipates the administration of:
   A. packed red blood cells.
   B. protamine sulfate.
   C. fresh frozen plasma.
   D. platelets.

133. Which form of shock results from anaphylaxis?
   A. Cardiogenic
   B. Distributive
   C. Hemorrhagic
   D. Obstructive

134. Which of the following measures ensures that an intraosseous (IO) needle has been properly placed?
   A. Normal saline can be flushed easily into the needle.
   B. The needle appears stable and immovable.
   C. Blood is aspirated into a syringe.
   D. The tissue surrounding the needle is not swollen.

135. Which of the following blood products must be ABO compatible to decrease the risk of transfusion reaction?
   A. Leukocyte-poor red blood cells
   B. Fresh frozen plasma
   C. Platelets
   D. Albumin

136. Which form of shock occurs due to pump failure?
   A. Distributive
   B. Obstructive
   C. Hypovolemic
   D. Cardiogenic

137. An older adult enters the ED with a chief complaint of confusion, unsteady gait, and incontinence. There is a small bruise to the forehead. History reveals that the patient is taking warfarin (Coumadin). This patient may be experiencing which of the following?
   A. Intracranial hemorrhage
   B. Dementia
   C. Overmedication
   D. Parkinson’s disease
138. Which of the following findings would be the best indicator of shock in the pediatric patient?
A. Tachycardia
B. Hypotension
C. Increased respiratory rate
D. Decreased capillary refill time

139. According to the Surviving Sepsis Campaign guidelines (2004), which of the following therapies has the strongest research-based support in sepsis survival?
A. Transfuse blood products to maintain a hemoglobin level of 10 g/dL.
B. Administer initial fluid resuscitation to attain a central venous pressure (CVP) of 15 mmHg.
C. Initiate prophylactic measures against deep vein thrombosis and stress ulcer.
D. Administer recombinant human activated protein C (Xigris).

140. All the following are examples of a primary blast injury EXCEPT:
A. cerebral air embolism.
B. tympanic membrane rupture.
C. pneumothorax.
D. thermal burn.

141. The geriatric population is at increased risk for hyperthermia and hypothermia related to a(n):
A. immature nervous system.
B. larger ratio of body surface area to body weight.
C. decreased ability to vasodilate or vasoconstrict blood vessels.
D. increased sweat response.

142. Which of the following substances may produce potentially hazardous bodily fluids after a patient comes in contact with them?
A. Organophosphates (fertilizers)
B. Acetaminophen (Tylenol)
C. Household bleach (Clorox)
D. Ferrous sulfate (iron)

143. A patient presents to the ED having sustained a bee sting. Which of the following would indicate the need for emergent management?
A. Erythema
B. Increased respiratory rate
C. Diffuse rash
D. Angioedema

144. High altitude illness/acute mountain syndrome (AMS) is a collection of symptoms usually caused by which of the following?
A. Skydiving from heights greater than 10,000 feet
B. Flying in an unpressurized aircraft to 8,000 feet
C. Rapid ascent of an unacclimatized person to 8,000 feet or higher from altitudes below 5,000 feet
D. A rapid decompression on an aircraft above 15,000 feet
145. Whole bowel irrigation (WBI) involving administration of polyethylene glycol electrolyte solution (GoLytely or Colyte) may be used as a treatment to enhance elimination of which of the following substances?
A. Hydrocarbons or petroleum distillates
B. Ingested bags of cocaine or methamphetamine
C. Diazepam (Valium)
D. Acetaminophen (Tylenol)

146. Signs and symptoms of acetaminophen (Tylenol) overdose that occur within the first 24 hours after ingestion include:
A. mild gastric upset including nausea and vomiting.
B. vomiting with hypoglycemia.
C. enlarged and painful liver upon palpation.
D. abnormal liver and renal function tests.

147. According to the American Association of Poison Control Centers, the largest number of unintentional poisonings occurs in which age group?
A. Seniors over 60 years of age
B. Adolescents aged 13 to 19
C. Adults aged 21 to 35
D. Children under 6 years old

148. A patient experiences facial edema, stridor, and urticaria after an insect sting. Appropriate interventions include all of the following EXCEPT:
A. administration of intravenous atropine (Atropine Sulfate).
B. securing the airway and providing supplemental oxygen.
C. administration of subcutaneous epinephrine (Adrenaline).
D. administration of intravenous diphenhydramine (Benadryl).

149. In addition to loss of consciousness, respiratory depression, or in extreme cases, sudden sniffing death, inhalation abuse from chlorofluorocarbon (Freon) may result in which clinical finding?
A. Thermal burns
B. Nausea and vomiting
C. Skin rash
D. Blood in urine

150. Naloxone (Narcan) 2 mg IV push is ordered for an unconscious patient following an overdose of Gamma-hydroxybutyrate (GHB) in a suspected suicide attempt. What is the expected outcome in this setting?
A. The patient becomes apneic and all muscles relax.
B. The respiratory rate will increase.
C. Complete or partial reversal of the effects of the GHB.
D. No response.
1. A patient complains of dizziness, feeling weaker over the past week, and a fainting episode this morning. Initial vital signs are BP 174/92 mmHg, HR 34 beats/minute, RR 18 breaths/minute, and T 98.4°F (36.8°C). What is the priority intervention for this patient?
   A. Administer oxygen via non-rebreather mask.
   B. Prepare patient for a STAT computed tomography (CT) scan.
   C. Activate the rapid response team.
   D. Initiate IV access with a saline lock.

   **Rationale**
   A. The patient is at risk for falling due to the chief complaint of dizziness and is also at risk for cardiovascular collapse related to slow pulse. Providing oxygen is indicated given the patient’s heart rate and the need to maintain adequate oxygenation.
   B. A STAT CT scan is not indicated until a determination is made related to the patient's neurological status.
   C. Activating a rapid response team is not indicated in an emergency department. Emergency department staff has the capability and skills to intervene in life-threatening patient events.
   D. IV access is an important intervention; however, putting the patient on a gurney in a recumbent position to alleviate any potential risk for collapse from dizziness or bradycardia needs to be addressed first. Airway and breathing come before circulation; therefore, putting oxygen on the patient should occur before IV access is established.

   **Content Category:** Cardiovascular Tasks

   **References**

2. An analysis of chest pain using the mnemonic “PQRST” represents the assessment of:
   A. Pain, Palliates, Quality, Response, Strength, Tightness
   B. Pain, Provoke, Quality, Release, Severity, Time
   C. Provoke, Palliates, Quality, Radiation, Severity, Time
   D. Provoke, Palliates, Quality, Radiates, Strength, Tightness
Rationale
A. “Pain” is what the mnemonic is trying to describe and “response” would be describing the reaction to an intervention. “Strength” is similar to severity but is not the same, and not all chest pain is described as “tight.”
B. “Pain” is what the mnemonic is trying to describe and “release” is not a descriptor of chest pain.
C. This mnemonic describes what assessments need to be made in relation to the chief complaint of chest pain. It needs to be established what makes the pain worse (“provokes”), what makes the pain better (“palliates”), a description of what the pain feels like (“quality”), the extent of the pain (“severity”), and when the pain started (“time”).
D. “Strength,” although similar, is not severity. Not all chest pain is described as “tight.”

Content Category: Cardiovascular Tasks

Reference

3. Which assessment technique could contribute to making a diagnosis in a patient with a sudden onset of “tearing” chest pain?
A. Perform a right-sided 12-lead electrocardiogram (ECG)
B. Assess for pedal edema
C. Auscultate heart sounds for a friction rub
D. Obtain blood pressure readings in both arms

Rationale
A. Sudden onset of tearing chest pain could indicate an aortic dissection. There are no specific right-sided ECG findings associated with aortic dissection. Ischemic changes noted on a right-sided ECG, particularly in lead V4R, are indicative of right ventricular ischemia or infarct.
B. Sudden onset of tearing chest pain could indicate an aortic dissection. Pedal edema is suggestive of heart failure or peripheral vascular disease, but not of aortic dissection.
C. Sudden onset of tearing chest pain could indicate an aortic dissection. A pericardial friction rub may be auscultated in a patient with pericarditis. A possible finding in the patient with aortic dissection could include auscultating a systolic or diastolic murmur.
D. Sudden onset of tearing chest pain could indicate an aortic dissection. Patients with aortic dissection frequently have unequal upper extremity blood pressure readings, with a difference of 20 mmHg or more systolic. This occurs because of turbulent blood flow through the disrupted aorta during systole, resulting in higher readings in the left arm compared to the right arm.

Content Category: Cardiovascular Tasks

Reference
4. A patient arrives in the ED with complaints of sudden onset of chest pain and shortness of breath. The electrocardiogram reveals normal sinus rhythm with ST-segment elevation in leads V2 through V4. What area of the heart has sustained injury?

A. Lateral  
B. Anterior  
C. Posterior  
D. Inferior

**Rationale**

A. Lead changes are exhibited in leads I, AVL, V5, and V6 with lateral myocardial infarction.  
B. **Lead changes are exhibited in V1, 2, 3, and 4 with anterior myocardial infarction.**  
C. Reciprocal changes are exhibited in leads V1 and V2 with posterior myocardial infarction.  
D. Lead changes are exhibited in II, III, and AVF with inferior myocardial infarction.

**Content Category:** Cardiovascular Tasks

**Reference**


5. Which cardiac syndrome displays T-wave changes plus a history of anginal chest pain without serum marker abnormalities?

A. Wolff-Parkinson-White (WPW) syndrome  
B. **Wellens’ syndrome**  
C. ST-elevation myocardial infarction (STEMI)  
D. Ludwig’s angina

**Rationale**

A. Wolff-Parkinson-White syndrome occurs when there is an extra electrical conduction pathway in the heart causing the electrical signal to arrive at the ventricle too soon. These patients typically present with tachycardias and other cardiac symptoms.  
B. This is a classic definition of Wellens’ syndrome. Electrocardiograms of patients with Wellens’ syndrome lack Q waves and significant ST-segment elevation. This is associated with critical, proximal left anterior descending (LAD) artery stenosis.  
C. The primary electrocardiogram change in ST-elevation myocardial infarction is elevated ST-segments in the affected leads.  
D. Ludwig’s angina, which usually results from a secondary dental infection, can lead to airway problems, but it does not affect the electrocardiogram.

**Content Category:** Cardiovascular Tasks

**Reference**

6. A primary goal of therapy for a patient with acute coronary syndrome (ACS) is:
   A. **identification of criteria for early reperfusion therapy.**
   B. prevention of unstable ventricular dysrhythmias.
   C. removal of unstable plaques.
   D. administration of beta (β)-blockers.

   **Rationale**
   A. Reperfusion therapy opens an occluded coronary artery with either a drug or via mechanical means. It is imperative that ST-elevation myocardial infarction (STEMI) is identified as soon as possible after patient presentation so that triage can be done for early reperfusion therapy.
   B. Reperfusion of cardiac muscle may prevent VF and pulseless VT. It is imperative that STEMI is identified as soon as possible after patient presentation so that triage can be done for early reperfusion therapy.
   C. Unstable plaques are the most common cause of ACS. Their removal is not a goal of therapy.
   D. β-blockers are an adjunct to initial therapy and not a primary goal.

   **Content Category:** Cardiovascular Tasks

   **Reference**

7. A patient diagnosed with ST-elevation myocardial infarction (STEMI) suddenly becomes bradycardic with a heart rate of 41 beats/minute. Blood pressure is 60/38 mmHg. Skin is cool, pale, and moist. After ensuring a patent airway and adequate ventilation, the nurse should first anticipate an order for:
   A. application of a transcutaneous pacemaker.
   B. administration of atropine (Atropine Sulfate) 1.0 mg IV push.
   C. set up for transvenous pacemaker insertion.
   D. administration of dopamine (Intropin) 2 to 10 mcg/kg/minute.

   **Rationale**
   A. Transcutaneous pacing is the preferred treatment for symptomatic bradycardia, especially in patients with acute myocardial infarction.
   B. Atropine should be used with caution in acute myocardial infarction because the resulting increase in heart rate may worsen the ischemia.
   C. A transvenous pacemaker may be indicated; however, the most efficient intervention is application of a transcutaneous pacer, which can be done immediately.
   D. Dopamine should be considered only if pacing is delayed and the bradycardia is refractory to atropine.

   **Content Category:** Cardiovascular Tasks

   **Reference**
8. A patient with an implantable cardioverter defibrillator (ICD) becomes unresponsive with the monitor showing a wide complex tachycardia. After beginning CPR, which of the following interventions is most appropriate to manage this patient?

A. Administer amiodarone (Cordarone) intravenously.
B. Place a magnet over the skin surface of the patient’s ICD.
C. Give the patient a precordial thump.
D. Proceed with external defibrillation.

**Rationale**

A. Amiodarone (Cordarone) is not considered first-line therapy in the presence of a witnessed cardiac arrest. External cardiac defibrillation is indicated.

B. Certainly magnets may disable an ICD device. However, this is **NOT** recommended, and resuscitation efforts should proceed using an external cardiac defibrillator if indicated.

C. The use of a precordial thump is no longer recommended as part of resuscitation efforts.

D. **This is an emergent situation. It is recommended that health care providers proceed with external defibrillation, rather than delaying treatment waiting for the patient’s ICD to “fire.”**

**Content Category:** Cardiovascular Tasks

**References**


9. What elevated lab value supports the diagnosis of congestive heart failure?

A. Lactic acid
B. Troponin
C. **B-type natriuretic peptide (BNP)**
D. Creatine kinase (CK)

**Rationale**

A. Lactic acid is not a specific indicator of congestive heart failure.

B. Elevated troponin levels indicate myocardial damage, and they are not a specific indicator of congestive heart failure.

C. **BNP blood levels become elevated in response to ventricular volume expansion, which occurs in congestive heart failure.**

D. CK levels indicate myocardial damage, and they are not a specific indicator for congestive heart failure.

**Content Category:** Cardiovascular Tasks

**Reference**

10. A patient presents to the ED in atrial fibrillation with a rate of 120 beats/minute. All other vital signs are within normal limits. The initial treatment goal for this patient includes:
A. rhythm conversion with medication.
B. synchronized cardioversion.
C. unsynchronized defibrillation.
D. rate control with medication.

**Rationale**
A. Rhythm conversion may or may not occur. Rate control is the primary goal in patients with atrial fibrillation.
B. Synchronized cardioversion is not recommended for use in stable patients with atrial fibrillation.
C. There is no indication for the use of electrical therapy in a stable patient. Defibrillation would never be used to convert a patient with atrial fibrillation.
D. **If the patient is stable, rate control should be attempted with medication. This is the current recommendation of the American Heart Association.** It is critical to identify the time of onset of atrial fibrillation as recommendations vary depending upon this.

**Content Category:** Cardiovascular Tasks

**Reference**

11. A patient with a permanent pacemaker complains of fatigue and has a heart rate of 32 beats/minute. Which of the following is the physician likely to order to determine if the pacemaker battery needs to be changed?
A. Cardiac monitor
B. Pacemaker pads
C. A magnet
D. 12-lead electrocardiogram

**Rationale**
A. A cardiac monitor will monitor only the patient’s current condition, but it will not have any impact or influence on the pacemaker.
B. Pacemaker pads will be used to temporarily pace the patient if the permanent pacemaker has failed.
C. **Each pacemaker type has a unique asynchronous rate for beginning-of-life (BOL), elective replacement indicator (ERI), and end-of-life (EOL). Application of a magnet will put the pacemaker into a fixed rate (asynchronous mode) and can help determine if the pacemaker’s battery needs to be replaced.**
D. A 12-lead electrocardiogram will monitor only the patient’s current condition, but it cannot diagnose problems with the pacemaker.

**Content Category:** Cardiovascular Tasks

**Reference**
12. The primary sign of instability associated with a tachydysrhythmia in the pediatric population is:
   A. respiratory distress or failure.
   B. hypertension.
   C. ST-elevation in leads II, III, AVF.
   D. hypovolemia.

   **Rationale**
   A. A tachydysrhythmia is unstable if it causes signs or symptoms of poor tissue perfusion.
   B. Extremely rapid heart rates can produce a fall in cardiac output with insufficient time for diastolic filling and a decrease in stroke volume. This would not result in hypertension.
   C. Changes in the 12-lead electrocardiogram are not primarily associated with a tachydysrhythmias.
   D. Hypovolemia is not associated with tachydysrhythmias.

**Content Category:** Cardiovascular Tasks—Pediatric

**Reference**

13. A 15-lead electrocardiogram indicates a right ventricular myocardial infarction (RVMI). The nurse knows that administration of nitrates may lead to:
   A. resolution of the elevated ST segments.
   B. severe hypotension.
   C. preservation of right ventricular function.
   D. dissolution of the thrombus in the coronary artery.

   **Rationale**
   A. Resolution of the ST segments is typically seen after reperfusion—not in the presence of acute MI.
   B. In RVMI, there is right ventricular dilation and decreased contractility, which results in decreased preload and cardiac output.
   C. Right ventricular function is already impaired with RVMI. The preload-reducing effects of nitrates will further worsen the patient’s condition.
   D. Nitrates cause coronary artery dilation but have no fibrinolytic effects.

**Content Category:** Cardiovascular Tasks

**References**
14. Which sign or symptom of acute coronary syndrome is often reported by elderly patients?
   A. Relief of chest pain by sitting up and leaning forward
   B. Radiation of pain down both arms
   C. A feeling of dyspnea
   D. Pericardial friction rub

   **Rationale**
   A. Chest pain associated with acute coronary syndrome is not typically improved by position changes. Chest pain will persist regardless of the age of the patient experiencing it.
   B. Radiation of pain down both arms is not typically experienced by patients, young or old, with acute coronary syndrome.
   C. In elderly patients, chest pain accompanies acute coronary syndrome less frequently than in younger patients. In elderly patients ages 85 or older, dyspnea, not chest pain, is the single most common presenting symptom of angina. In addition, elderly patients present more frequently with complaints of fatigue, lightheadedness, worsening congestive heart failure, altered mental status, and syncope.
   D. A pericardial friction rub is not indicative of acute coronary syndrome, regardless of the patient’s age.

   **Content Category:** Cardiovascular Tasks—Geriatric

   **References**

15. What cardiac biomarker is most commonly utilized to measure cardiac damage?
   A. Albumin cobalt binding
   B. Creatine kinase (CK)
   C. Troponin I
   D. AST/ALT (SGOT/SGPT)

   **Rationale**
   A. Albumin cobalt binding is not a commonly used marker to measure myocardial tissue damage; however, it is a promising new cardiac marker.
   B. CK is a general marker that measures all muscle tissue destruction.
   C. Troponin I is commonly used to measure myocardial tissue damage because it has high specificity and sensitivity.
   D. AST/ALT are liver enzymes that are elevated with liver and pancreatic tissue damage. They may be drawn with the cardiac enzymes to rule out other etiologies for pain.

   **Content Category:** Cardiovascular Tasks

   **Reference**
16. A patient’s blood pressure is being monitored via a radial arterial line. The waveform is dampened and the reading does not correlate with the patient’s condition. Which action can the nurse take to assure accuracy of the arterial pressure reading?

A. Observe the system for air bubbles and flush out through the closest port.
B. Decrease the pressure in the pressure bag to 50 mmHg.
C. Force-flush the arterial catheter using a small, high-pressure syringe.
D. Position the transducer at the level of the radial catheter insertion site.

**Rationale**

A. The most common cause of a dampened waveform is air within the system. If air bubbles are present in the tubing, check all connections, and check the flush device and stopcocks for cracks. If there are faulty parts in the system, replace those parts. Then, turn the stopcock off to the patient, remove the end cap at the closest port, and flush the air out of the system. Replace the end cap and turn the stopcock back to the open position.
B. The pressure bag should be inflated to 300 mmHg. Inadequate pressure will result in a dampened waveform and backup of blood into the system.
C. The arterial line should never be force-flushed; this can cause dislodgment of a clot or an air embolism.
D. Transducer malposition is a common cause of inaccurate readings. The transducer should be positioned at the phlebostatic axis (fourth intercostal space and mid-axillary line, or the level of the right atrium). If the transducer is below the level of the right atrium, the reading will be artificially high; if the transducer is above the level of the right atrium, the reading will be artificially low.

**Content Category:** Cardiovascular Tasks

**Reference**


17. A patient with chest pain has an electrocardiogram that reveals ST-segment elevation in diffuse leads, and no reciprocal changes. The patient feels better sitting forward. Which is the most likely condition this patient is experiencing?

A. Pulmonary embolism
B. Endocarditis
C. ST-segment elevation myocardial infarction (STEMI)
D. Pericarditis

**Rationale**

A. Less than 12% of patients with a pulmonary embolism can have an S wave in lead I and Q wave with inverted T waves in lead III. These patients do not have ST-segment elevation in diffuse leads, nor does their pain improve with positioning.
B. No specific ST-segment elevation is present in endocarditis.
C. Focal ST-segment elevation in specific leads with reciprocal changes is characteristic of STEMI.
D. **Diffuse ST-segment elevation on the electrocardiogram and symptomatology are characteristic of pericarditis.**

**Content Category:** Cardiovascular Tasks
18. Which of the following consequences is implied by the term “loss of atrial kick”?
A. Decreased heart rate
B. Increased stroke volume
C. Decreased cardiac output
D. Increased response to vagal maneuvers

**Rationale**
A. New onset atrial fibrillation, one of the primary causes of loss of atrial kick, is associated with a rapid ventricular heart rate.
B. The term “atrial kick” refers to the enhanced cardiac output that occurs when both the atria beat simultaneously. Loss of atrial kick will decrease the stroke volume.
C. **The term “atrial kick” refers to the enhanced cardiac output that occurs when both the atria beat simultaneously. Atrial kick contributes 20% to 30% more blood volume to cardiac output.**
D. Atrial fibrillation is one of the most common causes of the loss of atrial kick. Vagal maneuvers are not usually utilized to treat atrial fibrillation.

**Content Category:** Cardiovascular Tasks

**References**

19. A patient with a recent diagnosis of myocardial infarction presents to the ED with complaints of severe chest pain that increases with inspiration and increased activity, fever, chills, and dyspnea. Which of the following conditions is the likely cause of the current signs and symptoms?
A. Pericarditis
B. Papillary muscle rupture
C. Pleurisy
D. Coronary thrombosis

**Rationale**
A. Fever, chills, dyspnea, and chest pain are typical symptoms of pericarditis.
B. Dyspnea may be present in patients with papillary muscle rupture, but the other symptoms typically are not.
C. These symptoms are not consistent with a diagnosis of pleurisy.
D. These symptoms are not consistent with a diagnosis of coronary thrombosis.
Content Category: Cardiovascular Tasks

Reference

20. Which of the following treatments would be indicated for an emergency department patient with a plasma digoxin (Lanoxin) level of 5.2 ng/mL (normal level < 2.6 ng/mL)?
A. Syrup of ipecac
B. Digoxin immune fab (Digibind)
C. Hemodialysis
D. Atropine (Atropine Sulfate)

Rationale
A. Induction of vomiting is not indicated; however, use of gastric lavage with activated charcoal may be indicated to reduce absorption in an acute overdose of digoxin. Symptomatic treatment and use of a binding agent (such as digoxin immune fab [digibind]) is indicated.
B. Digoxin immune fab is an immunoglobulin fragment with specific and high affinity for both digoxin and digitoxin molecules. It removes digoxin or digitoxin molecules from tissue-binding sites and is effective in lowering the active serum digoxin level.
C. Use of hemodialysis is not indicated for digitalis toxicity. Initially, symptomatic treatment and use of a binding agent (such as digoxin immune fab [Digibind]) is indicated.
D. Although elevated digoxin levels may cause bradycardia, atropine usually is not effective for digitalis-induced bradycardias. The necessary treatment is to bind the digitalis until the kidneys are able to remove it, so it is unable to cause ongoing bradycardia.

Content Category: Cardiovascular Tasks

Reference

21. After administering tenecteplase (TNK-ase) to a patient having an acute ST-segment elevation myocardial infarction (STEMI), which of the following should the nurse assess to indicate that the medication has been effective?
A. Appearance of a Q-wave on the 12-lead electrocardiogram and pink-tinged urine
B. Immediate reduction in troponin level and appearance of sinus tachycardia
C. Resolution of ST-segment elevation and possible appearance of dysrhythmias
D. Appearance of ST-segment depression and occasional premature ventricular contractions (PVCs)
Rationale
A. A pathologic Q-wave is seen on a 12-lead electrocardiogram days after a patient has suffered a myocardial infarction with irreversible cardiac cell death. Hematuria is a possible complication associated with fibrinolytic therapy and has no relation to cardiac reperfusion.
B. Troponin levels measure cardiac cell death that occurred at least 4 to 6 hours previously. When cell death occurs, troponin may remain elevated for about one week.
C. As the occlusive thrombus is lysed and perfusion is restored, the acute ST-segment elevation injury pattern on the electrocardiogram and chest pain should resolve. Dysrhythmias are not a desired effect, but they commonly occur when blood flow is restored to hypoperfused areas of the heart.
D. ST-segment depression indicates cardiac ischemia, which can be intermittent or sustained and is not an expected finding for this patient.

Content Category: Cardiovascular Tasks

Reference

22. A 10-week-old infant with a history of projectile vomiting, poor weight gain, and continual hunger has a mobile, “olive-shaped” mass in the abdominal area on palpation. Which of the following is suspected?
A. Intussusception
B. Appendicitis
C. Pancreatitis
D. Pyloric stenosis

Rationale
A. Intussusception occurs when a segment of bowel telescopes within itself. These children present with vomiting, colicky abdominal pain, and red currant jelly stools.
B. Appendicitis is an inflammation or obstruction of the appendix. Incidence peaks in the late teen years, and it is usually associated with right lower-quadrant pain.
C. Pancreatitis is an inflammation of the pancreas causing sharp epigastric pain that radiates to the back and is aggravated by eating or alcohol intake. It is not generally seen in infants.
D. Pyloric stenosis is the most common cause of intestinal obstruction in infancy. It is usually diagnosed in the first 3 to 12 weeks of life. On palpation of the abdomen, there is a mobile, hard pylorus that is “olive-shaped.” Delays in treatment or diagnosis can lead to dehydration, shock, and death.

Content Category: Gastrointestinal Tasks

Reference
23. A middle-aged patient diagnosed with an upper gastrointestinal (GI) bleed is tachycardic and hypotensive and is vomiting blood. After stabilizing the ABCs, what other intervention is anticipated?
A. Administering proton pump inhibitors
B. Performing iced normal saline lavage
C. Inserting a balloon tamponade tube
D. Initiating a dopamine (Intropin) drip

Rationale
A. Patients with acute upper GI bleeding are often treated with acid suppression therapy (such as proton pump inhibitors) to decrease the risk of recurrent bleeding.
B. Iced lavage should be avoided because it fails to control bleeding, causes cardiac dysrhythmias, and can significantly decrease core temperature, which can lead to coagulopathies.
C. Balloon tamponade is occasionally used for variceal bleeding that is unresponsive to endoscopic therapy. However, this measure is only temporary because rebleeding often occurs after balloon deflation and the balloon can cause gastric ischemia.
D. Vasoactive drips are not used until fluid balance is reestablished.

Content Category: Gastrointestinal Tasks

References

24. After being involved in a motor vehicle crash, a patient complains of abdominal pain. Which diagnostic test should the emergency nurse anticipate to rapidly detect the presence of hemoperitoneum?
A. Focused assessment sonography for trauma (FAST exam)
B. Computed tomography (CT) scan
C. Intravenous pyelogram (IVP)
D. Upright abdominal radiographic studies

Rationale
A. The FAST exam is a bedside, rapid, accurate, and highly sensitive diagnostic modality that is used to detect the presence of hemoperitoneum in patients with blunt abdominal trauma.
B. CT scan may be performed to identify and grade solid organ injuries and hematomas or to estimate the amount of free fluid or air in the abdominal cavity. However, the FAST exam can be done rapidly at the bedside and provides an early diagnosis.
C. IVP should only be used as an alternative when CT scan is unavailable. Extravasation of the contrast media into surrounding tissues indicates a disruption in the integrity of the kidneys, ureters, or bladder. It has significant limitations in the assessment of intra-abdominal injuries.
D. Flat plate, lateral, or upright abdominal radiographic studies should not be routinely used unless CT scan is unavailable. Plain films may be used to visualize foreign bodies and associated visceral damage, visualize free air in the abdomen, and diagnose diaphragmatic rupture.
25. Diagnostic laboratory testing for a patient suspected of having acute pancreatitis includes:
   A. albumin.
   B. lactic acid.
   C. B-type natriuretic peptide.
   D. amylase.

   **Rationale**
   A. Albumin is a protein formed in the liver that transports drugs, hormones, and enzymes. Abnormal albumin results would indicate hepatic disease.
   B. When there is a diminished oxygen supply, the body goes into anaerobic metabolism of glucose, which creates an increase in lactic acid. An increase in lactic acid is a reliable indicator of tissue hypoxia, but not pancreatic disease.
   C. Brain natriuretic peptide (BNP) is a substance released in response to ventricular stretch. This stretch causes vasorelaxation and inhibition of aldosterone from the adrenal gland and renin from the kidney. BNP is a marker of congestive heart failure.
   D. Pancreatitis, an inflammation of the pancreas with accumulation of digestive enzymes into the surrounding tissues, would result in an elevated serum amylase. Other abnormal results would be an elevated white blood count, elevated lipase, elevated glucose, decreased calcium, and possible elevation of liver enzymes.

26. Which of the following alterations in dietary intake is recommended for a patient with irritable bowel syndrome (IBS)?
   A. High-fiber diet
   B. Small frequent meals
   C. Avoidance of caffeine, alcohol, and chocolate
   D. Low-fat diet
Rationale
A. Education for the patient and family of a patient who has been diagnosed with IBS will include a high-fiber diet to decrease cramping and bloating. Keeping a journal may help the patient determine possible factors that exacerbate the symptoms.
B. Education for the patient and family of a patient who has been diagnosed with esophagitis should include a diet of small frequent meals. Small frequent feedings are not usually necessary for patients with IBS.
C. The education for the patient and family of a patient with gastroesophageal reflux disease (GERD) should include eating small meals and avoidance of high-risk foods such as alcohol, caffeine, mints, and chocolate.
D. Education for the patient and family of a patient diagnosed with cholecystitis should include eating a low-fat diet to help prevent future gallbladder attacks.

Content Category: Gastrointestinal Tasks

Reference

27. A patient involved in a motor vehicle crash complains of right-sided abdominal pain. During palpation of the abdomen, there is rigidity in the right upper quadrant (RUQ). The nurse suspects injury to what organ?
A. Spleen
B. Liver
C. Pancreas
D. Small bowel

Rationale
A. Left upper quadrant pain with abdominal wall muscle rigidity, spasm, involuntary guarding, and rebound tenderness with signs of hypovolemic shock would be indicative of splenic injury.
B. Injury to the liver should be suspected with lower chest or abdominal injury on the right side of the body. A sign of liver injury is palpation of rigidity in the right upper quadrant (RUQ).
C. Pancreatic injury may be difficult to detect and may take 24 to 72 hours to present; rigidity of the abdomen may be palpated in the epigastric area.
D. Small bowel injuries can be characterized by palpation of a rigid abdomen in the epigastric and left upper quadrant (LUQ) areas.

Content Category: Gastrointestinal Tasks

References
28. Patients diagnosed with a common bile duct blockage will most likely describe their stools as:
A. black.
B. brown.
C. gray.
D. yellow.

**Rationale**
A. Black stools may be indicative of a gastrointestinal bleed or ingestion of iron supplements or some other medications.
B. Brown stools are considered to be a normal finding.
C. The stool will be gray or clay-colored if the common bile duct is blocked. Bile is not reaching the intestine; therefore, it does not pigment the stool.
D. Greasy, frothy, yellow stools are called steatorrhea. They may be the result of fat malabsorption.

**Content Category:** Gastrointestinal Tasks

**Reference**

29. The most precise radiographic diagnostic tool to assist in the diagnosis of appendicitis is a(n):
A. abdominal helical computed tomography (CT) scan.
B. abdominal sonography.
C. kidney, ureter, bladder (KUB) images.
D. hepatobiliary iminodiacetic acid (HIDA) scan (cholescystography).

**Rationale**
A. Abdominal helical CT is the most precise diagnostic tool for appendicitis with a high degree of sensitivity and specificity.
B. Abdominal sonography is the preferred diagnostic radiograph for pregnant female patients; however, if the test is negative, appendicitis may still be present.
C. Kidney, ureter, bladder (KUB) radiographs have overall poor sensitivity and specificity for appendicitis.
D. HIDA scans are used as a diagnostic radiographic tool to assist with the diagnosis of cholecystitis and not appendicitis.

**Content Category:** Gastrointestinal Tasks

**Reference**

30. Which of the following complications would be most concerning following emergent placement of an esophagogastric balloon tamponade tube?
A. Cardiac dysrhythmias
B. Esophageal erosions
C. Pulmonary edema
D. Airway obstruction
**Rationale**

A. Cardiac dysrhythmias can be a serious complication. However, they are not as immediately life threatening as an airway obstruction.

B. Esophageal erosions may result from excess pressure in the esophageal balloon. However, they are not as life threatening as an airway compromise from tube dislodgment. The esophageal balloon may be deflated for 1 hour in a 4-hour interval and should not be inflated for more than 8 hours at a time.

C. Pulmonary edema from the pressure of the balloons on mediastinal structures can be a serious complication. However, it is not as immediately life threatening as an airway obstruction.

D. **Airway obstruction from tube dislodgement or compression of the trachea** is a life-threatening emergency. Should this occur, cut the tube below the ports, immediately remove the tube, and perform interventions to ensure airway patency. Scissors must be kept at the bedside at all times when the tube is in place.

**Content Category:** Gastrointestinal Tasks

**References**


31. The emergency nurse is giving discharge instructions to a patient diagnosed with epididymitis. These instructions should include:

A. information that the fever and abdominal pain will continue for at least another 48 hours.

B. instructions to take the antibiotics until the penile pain is completely gone.

C. advise to return to his construction work as soon as he is feeling better.

D. information about safe sex practices and use of condoms.

**Rationale**

A. The fever and pain should be decreasing within 24 to 36 hours of being on antibiotics.

B. The antibiotics should be taken as prescribed until they are all gone, regardless if pain goes away.

C. This patient should not do any heavy lifting because this will increase the intra-abdominal pressure and the inflammatory process.

D. **Safe sexual practices and limiting the number of sexual partners** may decrease the potential of reoccurrence of this medical problem.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**Reference**

32. An 8-pound (3.6 kg) baby was just emergently delivered in the ED. The nurse is assessing vital signs on the newborn. Which of the following respiratory rates is considered to be within normal limits for this infant?
   A. 30 breaths/minute  
   B. **50 breaths/minute**  
   C. 80 breaths/minute  
   D. 20 breaths/minute

**Rationale**
A. A respiratory rate of 30 breaths/minute is low and cause for concern. Supplemental oxygen should be started on this patient.
B. **The normal respiratory rate for the newborn is 40 to 60 breaths/minute.**
C. A respiratory rate of 80 breaths/minute is very fast and cause for concern. Supplemental oxygen should be started on this patient.
D. A respiratory rate of 20 breaths/minute is very low and cause for concern. Supplemental oxygen should be started on this patient.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**Reference**

33. A 2-year-old female presents to the ED with fever, decreased appetite, and complains of a stomachache. The provider orders a urine specimen. The best way to obtain a urine specimen from this female patient is:
   A. clean catch.  
   B. **bladder catheterization.**  
   C. midstream.  
   D. adhesive urine collection bag.

**Rationale**
A. The clean catch method may result in a contaminated specimen.
B. **Sterile bladder catheterization ensures that the urine is not contaminated by perineal flora. All other techniques of urine collection may be contaminated.**
C. It is difficult to obtain a midstream specimen from a 2-year-old because they are typically not toilet trained; therefore, they are unable to provide a specimen.
D. An adhesive urine collection bag is used for a newborn.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks—Pediatric

**Reference**
34. A young adult female presents to triage complaining of right lower-quadrant pain. Which of the following conditions is **MOST** life threatening and should be ruled out first?

A. Urinary tract infection  
B. Ectopic pregnancy  
C. Premature labor  
D. Appendicitis

**Rationale**

A. Although a urinary tract infection (UTI) can result in sepsis and may be life threatening, most patients who present to the ED with a UTI are stable and remain that way during their visit. A patient with an ectopic pregnancy may be stable upon arrival and suddenly deteriorate. An ectopic pregnancy must be ruled out.

B. An **ectopic pregnancy should be considered in all women of childbearing age with lower abdominal pain.** A ruptured ectopic pregnancy can be life threatening. An ectopic pregnancy is defined as implantation of the fertilized ovum outside the normal uterine cavity. **Most often implantation is in the fallopian tube and can lead to tubal rupture.** Acute hemorrhage and shock can result. Associated pain may be pelvic or abdominal; it may be diffuse, unilateral or bilateral, vague or sharp and severe.

C. Premature labor may cause lower quadrant pain but is not usually life threatening to the patient. Premature labor may be caused by a urinary tract infection. Ectopic pregnancy must be ruled out if the patient is of childbearing age.

D. Appendicitis, an inflammation or obstruction of the appendix, may be life threatening but not as acutely as a ruptured ectopic pregnancy. The pain of appendicitis is often periumbilical initially then localizes to the right lower quadrant. A high index of suspicion is important because there is no specific test to diagnose appendicitis. The incidence of appendicitis peaks in the late teen years.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**References**


35. A female patient has right lower quadrant pain 8/10 (on the 0 to 10 pain scale), is afebrile, and her last menses was 2 weeks ago. The nurse would be concerned that this patient needs immediate intervention for:

A. ovarian cyst.
B. ectopic pregnancy.
C. diverticulitis.
D. volvulus.

**Rationale**
A. Ovarian cyst pain usually is located on one side of the abdomen during the menstrual cycle at mid-month, and pain worsens with movement.
B. When the patient has abdominal pain related to an ectopic pregnancy, the menses are usually late or abnormal and not mid-cycle.
C. Pain from diverticulitis is not related to the menstrual cycle. The patient with diverticulitis often has a fever, and the pain is usually in the left lower quadrant.
D. Volvulus pain is severe abdominal pain and is often associated with a history of surgery.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**Reference**

36. The physician is performing a vaginal examination on a patient. The physician suspects the patient has *Neisseria gonorrhoea* and is taking laboratory specimens. Which sexually transmitted disease often occurs concurrently with *Neisseria gonorrhoea*?

A. *Trichomonas vaginalis*
B. *Treponema pallidum* (Syphilis)
C. *Chlamydia trachomatis*
D. *Candida albicans*

**Rationale**
A. *Trichomonas vaginalis* does not usually occur concurrently with *Neisseria gonorrhoea*.
B. Syphilis does not usually occur concurrently with *Neisseria gonorrhoea*.
C. *Chlamydia trachomatis* often occurs concurrently with *Neisseria gonorrhoea*, and the patient should be tested for this as well.
D. *Candida albicans* does not usually occur concurrently with *Neisseria gonorrhoea*.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**Reference**
37. A woman presents to the ED in active labor at 38-weeks gestation. Exam shows a loop of umbilical cord protruding from the patient’s vagina. Along with administering 100% oxygen, the best position in which to place the patient is:
A. semi-fowlers position.
B. on her right side.
C. lying supine.
D. on her left side.

**Rationale**
A. Placing the patient on her left side relieves pressure on the abdominal aorta from the large gravid uterus. Other positions do not relieve pressure on the abdominal aorta.
B. Placing the patient on her left side relieves pressure on the abdominal aorta from the large gravid uterus. Other positions do not relieve pressure on the abdominal aorta.
C. Placing the patient on her left side relieves pressure on the abdominal aorta from the large gravid uterus. Other positions do not relieve pressure on the abdominal aorta.
D. Placing the patient on her left side relieves pressure on the abdominal aorta from the large gravid uterus. Other positions do not relieve pressure on the abdominal aorta.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**Reference**

38. Pregnancy-induced hypertension (PIH) may be manifested by all of the following subjective signs EXCEPT:
A. visual changes.
B. right-sided abdominal pain.
C. increased urine output.
D. headache.

**Rationale**
A. Subjective signs of PIH may include visual changes, headache, right-sided upper abdominal pain, and decreased urination, all related to hypertension and vasospasm.
B. Subjective signs of PIH may include visual changes, headache, right-sided upper abdominal pain, and decreased urination, all related to hypertension and vasospasm.
C. Subjective signs of PIH may include visual changes, headache, right-sided upper abdominal pain, and decreased urination, all related to hypertension and vasospasm.
D. Subjective signs of PIH may include visual changes, headache, right-sided upper abdominal pain, and decreased urination, all related to hypertension and vasospasm.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**References**
39. An abnormal finding in a patient in the third trimester of pregnancy would be:
   A. **hypertension.**
   B. increased heart rate.
   C. decreased arterial pressure of carbon dioxide.
   D. anemia.

**Rationale**

A. **Blood pressure should not change during any part of a normal pregnancy.**
B. Heart rate normally increases during pregnancy.
C. Respiratory rate normally increases during pregnancy, leading to hyperventilation, which drives the PaCO₂ down.
D. Anemia develops because of increased iron requirements by mother and fetus, as well as hemodilution from increased plasma volume.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**Reference**


40. Which of the following conditions should prompt the emergency nurse to observe for signs and symptoms of disseminated intravascular coagulation (DIC)?
   A. Preterm labor
   B. **Placenta abruption**
   C. Mild preeclampsia
   D. Spontaneous abortion

**Rationale**

A. DIC is not usually associated with preterm labor. Preterm labor may be associated with septic abortion, eclampsia, retained fetus/fetal parts, and amniotic fluid embolism.
B. **DIC is a complex disorder that is initiated by some other primary disease process. It involves inappropriate and accelerated activation of the coagulation cascade. Numerous microclots are formed and then broken down; clotting factors are depleted, and abnormal bleeding can occur systemwide. DIC is a potentially fatal complication associated with placental abruption. DIC is associated with various other complications of pregnancy as well as sepsis, trauma (especially severe crush injuries, burns, and head injuries), and malignancies. Emergency nurses should be aware of and assess for signs of DIC after a patient is diagnosed with an abruption.**
C. DIC may be associated with severe eclampsia or hemolysis, elevated liver enzymes, low platelets (HELLP) syndrome, but it is not usually seen with mild preeclampsia.
D. DIC is not often associated with spontaneous abortion.

**Content Category:** Genitourinary/Gynecology/Obstetrical Tasks

**References**


41. An altercation results in multiple facial injuries in which the upper teeth and maxillary arch are movable when grasped. CT scan of the face reveals a triangular midfacial fracture. This type of fracture is called:

A. a tripod fracture of the zygoma.
B. Le Fort I.
C. Le Fort III.
D. Le Fort II.

**Rationale**

A. A tripod fracture involves the lateral orbital wall, inferior orbital wall, and zygomatic arch.
B. A Le Fort I fracture is a transverse fracture of the maxilla above the upper teeth at the level of the nasal floor.
C. A Le Fort III fracture is a complete separation of the cranial attachments from the facial bones, resulting in craniofacial dysjunction.
D. A Le Fort II fracture is a pyramidal-shaped fracture that involves a triangular segment of the midportion of the face and nasal bones.

**Content Category:** Maxillofacial/Ocular Tasks

**References**


42. The term for blood in the anterior chamber of the eye is:

A. anterior uveitis.
B. hyphema.
C. detached retina.
D. chemosis.

**Rationale**

A. Anterior uveitis is an inflammation of the uveal tract involving the iris, ciliary body, and/or choroid. Although there are often cells and flare visible in the anterior chamber, there is no actual bleeding from the vessels of the iris.

B. A hyphema is caused by tears in the small blood vessels of the iris. The blood layers in the anterior chamber and is often visible without magnification. Microhyphema is the term for red blood cells (RBCs) suspended in the anterior chamber and usually requires slit lamp examination to detect.

C. The retina is located in the posterior portion of the eye and does not involve the anterior chamber. A detached retina involves a defect of the retina causing flashes of light, floaters, “cobwebs or curtain” over vision, and sometimes blurred vision.

D. Chemosis refers to edema of the conjunctiva and pertains to the superficial portion of the eye.

**Content Category:** Maxillofacial/Ocular Tasks
Malocclusion, trismus, and ruptured tympanic membrane are associated with which of the following facial injuries?

A. Zygoma fracture
B. **Mandible fracture**
C. Maxillary fracture
D. Temporomandibular dislocation

**Rationale**

A. Injuries to the zygomatic arch involve the structures of the lateral and inferior walls of the orbits and not the jaw.

B. **Malocclusion or any change in the patient’s preinjury bite is highly suggestive of mandibular fracture.** Inability to open the mouth may be due to trismus caused by contraction of local muscles used to chew. Rupture of the tympanic membrane or hemotympanum may be related to barotrauma or basilar skull fracture. Other common findings of mandible fracture include open bite, facial asymmetry, sensory changes of lower lip, and local soft tissue trauma.

C. Maxillary fractures often present with obvious facial asymmetry and a flattening or “dishpan” appearance of the midface best appreciated by assessing the patient from the head of the bed. Other clinical findings may include periorbital edema, ecchymosis, bony deformity, nasal trauma with possible midface instability, cerebrospinal rhinorrhea, and malocclusion.

D. Temporomandibular dislocation is almost always a spontaneous rather than traumatic event caused by opening the mouth too widely. It is associated with malocclusion and the inability to close the mouth, local pain and headache, drooling, and difficulty speaking.

**Content Category:** Maxillofacial/Ocular Tasks

**References**


44. After being struck in the eye with a baseball, a patient has a limited upward gaze. The nurse suspects:
   A. blow-out orbital fracture with entrapment.
   B. hyphema.
   C. retinal detachment.
   D. ruptured globe.

Rationale
A. Painful or restricted extraocular muscle movements, especially upward or lateral, are hallmarks of blow-out orbital fractures. Other clinical findings are subcutaneous emphysema, infraorbital anesthesia, palpable bony tenderness and deformity, and enophthalmos.
B. A hyphema may be a concomitant injury with a blow-out fracture, but a hyphema does not lead to painful or restricted movement of the extraocular muscles.
C. Traumatic retinal detachment is characterized by flashes of light, floaters, and a “cobweb or curtain” over the patient’s vision.
D. The evaluation of globe integrity is always an essential part of the assessment of an injured eye and can be caused by blunt trauma. Expected findings are extrusion of aqueous or vitreous humor, possible enophthalmos, and peaked or tear-shaped pupil. If limitation of extraocular muscle movement is present, it is in the direction of the rupture; it is possible to have an associated blow-out orbital fracture.

Content Category: Maxillofacial/Ocular Tasks

References

45. Trauma resulting in hoarseness, pain with swallowing, stridor, or hemoptysis most likely indicates which of the following?
   A. Ludwig’s angina
   B. Tracheobronchial injury
   C. Fractured larynx
   D. Pneumomediastinum
Rationale

A. Ludwig's angina is a deep space infection that is a complication of peritonsillar or dental infection and can result in airway management problems. It causes diffuse swelling of the tissue of the oral cavity and face, extending to the deeper structures of the neck. Ludwig's angina can cause hoarseness, stridor, pain on swallowing, and neck pain.

B. Tracheobronchial injuries are uncommon and affect more males than females; more than 25% of injuries result in death, most often in the first hour after injury. Inaccurate or delayed diagnosis contributes to problems such as airway stenosis, infection, and reduced pulmonary capacity. There is some overlap in clinical findings with laryngeal injuries such as hoarseness, stridor, dyspnea, cough, and hemoptysis. It is important to note the presence of subcutaneous emphysema of the neck, possible tracheal shift, and persistent pneumothorax to assist in the diagnosis.

C. Most laryngeal injuries are caused by blunt force trauma and are often associated with other serious injuries to the head, face, neck, and cervical spine. Classic signs and symptoms in addition to hoarseness, dysphagia, stridor, and hemoptysis include dyspnea, cough, and difficulty speaking. Fiberoptic-assisted intubation or surgical airway may be required to maintain airway patency. The goal of emergency care is to preserve airway and vocal function.

D. Pneumomediastinum, free air in the mediastinal space, can compromise cardiopulmonary function and is often associated with injuries to the larynx, trachea, bronchus, or lungs. The most common findings are chest pain and dyspnea. Pneumomediastinum should be suspected if an abnormal crunching sound is heard synchronous with the heartbeat (Hamman's crunch), although this finding is not always present.

Content Category: Maxillofacial/Ocular Tasks

References


46. The most appropriate aftercare instructions for a patient following the reduction of a temporomandibular joint (TMJ) dislocation is to:

A. return to regular diet as tolerated.
B. rest with head of the bed elevated.
C. consult an otolaryngologist within 24 hours.
D. avoid yawning or opening the mouth widely.

Rationale

A. To avoid recurrence of dislocation, patients should be advised to eat a soft diet for 3 to 4 days to reduce chewing. Care is also taken to avoid any stress on the TMJ, such as teeth grinding or clenching. Muscle relaxants may be indicated to rest the joint.

B. Temporomandibular dislocation rarely leads to significant swelling requiring elevation of the head.
C. ENT consultation is advised to evaluate for possible ligament injury and mandibular instability; some patients may experience chronic TMJ dysfunction. Consultation is indicated in the first 1 to 2 weeks following reduction but does not require urgent evaluation in the first 24 hours.

D. Patients are at risk for recurrence of temporomandibular joint dislocation by any mechanism that causes the mouth to open widely, such as yawning, singing, or laughing. Once the joint capsule and ligaments have been disrupted, recurrent dislocations are common and surgical intervention may be indicated.

**Content Category:** Maxillofacial/Ocular Tasks

**References**


47. Treatment for a patient with thrombocytopenia purpura is considered effective by which of the following laboratory findings?

A. Platelet count of 300,000 cells/mm³
B. Hemoglobin count of 5.6 g/dL
C. Quantitative D-Dimer of 120 ng/mL
D. Prothrombin time (PT) of 55.5 seconds

**Rationale**

A. Normal platelet count is between 150,000 and 450,000 cells/mm³. The hallmark sign of thrombocytopenia purpura is platelet levels below 150,000 cells/mm³ and the presence of petechiae and purpura. This level (300,000 cells/mm³) is within the normal range and indicates treatment has been effective.

B. A hemoglobin count of 5.6 g/dL is considered low and replacement therapy with packed red cells may be required. The hemoglobin would be normal in thrombocytopenia purpura unless there was severe hemorrhage present.

C. The normal range for D-dimer is 0 to 300 ng/mL. Values exceeding 300 ng/mL (varies institutionally) are considered positive. This value is not considered high or representative of thrombocytopenia. D-dimer is used to diagnose pulmonary embolus (PE), deep vein thrombosis (DVT), or disseminated intravascular coagulation (DIC).

D. The prothrombin time (PT) is a measure of the extrinsic pathway of coagulation (reference range 12 to 15 seconds). PT measures factors II, V, VII, X, and fibrinogen and may be elevated in a patient actively bleeding. Because this PT (55.5 seconds) is not normal, serial levels should be closely monitored in thrombocytopenia purpura.

**Content Category:** Medical Emergency Tasks

**References**


48. A middle-aged male patient presents to the ED with complaint of fever. He is awake, alert, and in no acute distress.

- Vital signs on arrival: HR: 112 beats/minute, RR: 20 breaths/minute, SaO₂: 95%, BP: 118/58 mmHg, T: 101.9°F (38.8°C)
- Medical history: HIV(+), taking antiviral medications

Using a 5-level triage system, this patient should be triaged as which acuity level?

A. Acuity Level 3 (Urgent)
B. Acuity Level 1 (Resuscitation or life-threatening situation)
C. Acuity Level 2 (High risk and/or emergent)
D. Acuity Level 4 (Nonurgent)

**Rationale**

A. This patient will require more than two resources if using the ESI and is considered high risk due to his HIV diagnosis with fever. Level 3 patients in both the CTAS and ESI are considered urgent and should be seen within a timely manner or their condition could worsen (CTAS within 60 minutes).

B. This patient is not apneic, unresponsive, or requiring life-saving intervention. This patient is high risk and should be evaluated as soon as possible but is not the highest acuity. Level 1 patients in the CTAS and ESI require life-saving interventions immediately.

C. An HIV patient with a fever on presentation should be considered high risk. He should be placed in the first available bed to begin workup for potential infection, especially in the immunocompromised patient. A Level 2 patient in emergency severity index (ESI) is considered high risk and should not wait. In the Canadian Triage Acuity Scale (CTAS), this would be an emergent patient or Level 2 with potential threat to life, limb, or function. An HIV patient could become worse if exposed to other patients in the waiting room with a potential infection.

D. A level 4 acuity requires only one resource (lab, radiology exams, ECG, etc.) according to the ESI. An HIV patient with a fever will require multiple resources and should be considered high risk and should not wait in the waiting room. A Level 4 patient is less urgent in the CTAS and can wait to be seen for up to 120 minutes.

**Content Category:** Medical Emergency Tasks

**References**


49. Which of the following would indicate a positive tuberculin skin test (PPD) for a patient WITHOUT human immunodeficiency virus (HIV) infection?

A. Induration of 10 mm
B. Redness >10 mm
C. Itching
D. Induration of 5 mm

**Rationale**
A. A result of 10 mm induration or greater is considered a positive PPD result.
B. Redness is not a factor related to a positive PPD.
C. Itching may be associated with allergy testing but is not considered a positive PPD finding.
D. Induration of 5mm is considered a positive test for a patient with HIV.

**Content Category:** Medical Emergency Tasks

**Reference**

50. An elderly patient presents with a chief complaint of “not feeling well.” The patient has been taking digoxin (Lanoxin) for 4 months as prescribed along with a potassium supplement. The nurse suspects the patient may be digoxin (Lanoxin) toxic due to:

A. decreased renal function.
B. overdosage.
C. hyperkalemia.
D. decreased cardiac output.

**Rationale**
A. Renal blood flow, glomerular filtration rate, and creatinine clearance are decreased in advanced age. Reduced ability to metabolize and clear medications can lead to toxicity.
B. Although an overdose may cause digoxin (Lanoxin) toxicity, the patient has been taking the medication as prescribed.
C. Hypokalemia, not hyperkalemia, would cause a patient to become digoxin (Lanoxin) toxic.
D. Patients are placed on digoxin (Lanoxin) for atrial dysrhythmias and/or to enhance the force of contractions. Decreased cardiac output would not directly affect the metabolism of digoxin (Lanoxin).

**Content Category:** Medical Emergency Tasks—Geriatric

**References**
51. An age-specific consideration for the pediatric patient with sickle cell disease is that:
   A. prophylactic splenectomy should be scheduled.
   B. the frequency of attacks decreases with age.
   C. vaccinations are not routinely recommended.
   D. the incidence of ischemic stroke is increased.

**Rationale**

A. A splenectomy is not done as a prophylactic treatment for splenic sequestration (when a large number of sickle cells get trapped in the spleen and cause it to suddenly get large). Splenic sequestration can become life threatening requiring multiple blood transfusions. A splenectomy would be done only if blood transfusions are not successful. Parents should be taught to feel and measure the size of their child’s spleen.

B. Age does not affect the frequency of attacks. The onset of sickle cell attacks is sudden or explosive. Cluster attacks are common, remission can last months to years, and recurrence is common.

C. Infants and children with sickle cell disease are more at risk for infections. According to the CDC, children with sickle cell disease should get all the regular childhood vaccines, plus the flu vaccine every year after age 6 months, a pneumococcal vaccine at ages 2 and 5, and some should get a meningococcal vaccine. Sickle cell disease can impair splenic function causing ineffective clearance of bacteria, resulting in increased susceptibility, especially to *Streptococcus pneumoniae*.

D. The sickled cells increase blood viscosity, impede capillary blood flow, and can cause tissue and organ ischemia and necrosis. About 10% of children with sickle cell disease will have a stroke.

**Content Category:** Medical Emergency Tasks—Pediatric

**References**


52. A fear of which of the following should be anticipated in a 4-year-old needing sutures after falling down the stairs:
   A. changes in body image.
   B. separation from parents.
   C. being handled by strangers.
   D. *body mutilation.*
Rationale
A. In adolescence (ages 12 to 18) common fears are loss of control and change in body image.
B. Parental separation occurs in infants (birth to age 18 months) and continues into the toddler years (ages 18 months to 3 years).
C. Stranger anxiety starts after age 6 months and continues to age 3.
D. The preschool child’s (ages 3 to 5) common fears are body mutilation, insides leaking out, the dark, pain, the unknown, and loss of control.

Content Category: Medical Emergency Tasks—Pediatric

Reference

53. A middle-aged woman being discharged with the diagnosis of fibromyalgia is given a prescription for amitryptyline (Elavil). Which of the following statements by the nurse is correct regarding proper medication administration?
A. “You may not see improvement of symptoms for 2 to 3 weeks.”
B. “Initially you may need to increase your dosage to achieve adequate pain relief.”
C. “You should see results within 2 to 3 days.”
D. “You need to take your medication every morning.”

Rationale
A. Amitryptyline (Elavil) is a tricyclic antidepressant and may take up to 3 weeks to achieve the therapeutic effect of a decrease in pain.
B. Amitryptyline (Elavil) is a tricyclic antidepressant and dosages should not exceed 300 mg/day. High dosages can lead to electrocardiogram changes, tachycardias, and dysrhythmias.
C. Amitryptyline (Elavil) is a tricyclic antidepressant and may take up to 3 weeks until patients achieve a therapeutic effect.
D. Amitryptyline (Elavil) is a tricyclic antidepressant and should be taken nightly at bedtime. This will assist with decreasing drowsiness during the day. Drowsiness and dizziness are common side effects.

Content Category: Medical Emergency Tasks

References

54. A semiresponsive, elderly patient is admitted to the ED with the following findings: finger stick glucose is 380 mg/dL, serum osmolality is 330 mOsm/kg, and the pH is 7.2. Kussmaul respirations are noted. The nurse would suspect:
A. syndrome of inappropriate antidiuretic hormone (SIADH).
B. diabetic ketoacidosis (DKA).
C. thyroid storm.
D. hyperosmolar hyperglycemic nonketotic coma (HHNC).
Rationale
A. Patients with SIADH, or hypersecretion of the antidiuretic hormone, would demonstrate a decreased urinary output, confusion, lethargy, and decreased sodium levels.

B. Patients with elevated glucose levels, decreased level of consciousness, elevations in osmolality, along with acidosis and dehydration would be suspect for diabetic ketoacidosis (DKA). Kussmaul, or deep gasping rapid respirations, are also common in patients with DKA as a compensatory measure to decrease carbon dioxide levels.

C. Thyroid storm would present with a hyperdynamic state, not reflected in elevations in osmolality and glucose.

D. Although patients with HHNC may present with similar lab values, glucose levels are frequently above 600 mg/dL, and acidosis is generally not present.

Content Category: Medical Emergency Tasks—Geriatric

Reference

55. Which of the following electrolyte abnormalities would you expect to find in a patient in adrenal crisis?
A. Hyperglycemia
B. Hyponatremia
C. Hyperkalemia
D. Hypocalcemia

Rationale
A. Absence of cortisol leads to decreased gluconeogenesis, decreased glycogen storage by the liver, decreased metabolism of proteins, and increased insulin sensitivity. Cortisol helps balance insulin in the breakdown of carbohydrates, proteins, and fats. Patients with Addison’s disease have low cortisol production. This does not allow for sugar breakdown into glucose. Hypoglycemia may develop.

B. Patients with adrenal disease are unable to retain sodium due to low levels of aldosterone production, thereby leading to hyponatremia.

C. Patients with adrenal disease are no longer able to regulate the proper amount of aldosterone to maintain sodium and water retention by the kidneys. When the aldosterone level drops, sodium and water are then lost, potassium retained. This leads to elevation in potassium.

D. Low levels of mineralocorticoid production leads to hypocalcemia.

Content Category: Medical Emergency Tasks

References

56. An elderly patient with known hyperthyroidism arrives in the ED with confusion, restlessness, and fever. Vital signs are BP 180/100 mmHg, HR 130 beats/minute (irregular), RR 32 breaths/minute, T 103°F (39.4°C). Which of the following diagnostic values would be expected to be decreased?
A. Serum alkaline phosphatase (ALP)
B. Serum calcium
C. Thyroxine (T4)
D. Thyroid-stimulating hormone (TSH)

**Rationale**
A. Serum alkaline phosphatase is elevated with hyperthyroidism.
B. Serum calcium may be increased in hyperthyroidism due to increased bone reabsorption.
C. Thyroxine (T4) is a thyroid function study that is elevated with hyperthyroidism.
D. Thyroid-stimulating hormone (TSH) is a thyroid function study that is decreased with hyperthyroidism.

**Content Category:** Medical Emergency Tasks—Geriatric

**References**

57. A 3-year-old child presents with a 1-week history of fever, rash, loss of appetite, cough, and runny nose. The nurse notes a red rash to the forehead, eyes, ears, and trunk with tiny bluish white spots to the mouth and throat. The nurse suspects:
A. Rubeola (red measles).
B. Rubella (German measles).
C. Roseola infantum.
D. Varicella.

**Rationale**
A. Rubeola is a highly contagious illness affecting the skin, eyes, and upper respiratory tract. Koplik’s spots are a classic presentation for rubeola, and appear as bluish-white spots to the mouth and throat 1 to 4 days before the rash fully appears over the body.
B. Rubella presents as a red rash that starts in the face and spreads to the trunk and extremities. The other classic presentation for rubella is swollen lymph nodes at the base and sides of the neck. The rash lasts only 2 to 3 days, but the child is still contagious 1 week prior to the outbreak of the rash.
C. Roseola infantum’s classic presentation is a flat, reddish rash most prominently on the back and trunk. The rash can take as long as 5 to 15 days to appear after initial exposure incidence of fever and irritability. The rash usually lasts 1 to 2 days.
D. Varicella presents as a red, raised fluid-filled lesion. It most commonly appears on the trunk and face but can occur anywhere. Varicella also causes severe itching in most children and will often spread with itching and opening of the fluid-filled vesicles.

**Content Category:** Medical Emergency Tasks—Pediatric
References


58. An elderly patient with a history of Alzheimer’s presents to the emergency department with complaints of excessive salivation, severe nausea, diaphoresis, flushed skin, bradycardia, and hypotension. The emergency nurse would suspect an adverse drug effect from which medication that the patient currently takes?
A. Carbidopa/levodopa (Sinemet)
B. Memantine (Namenda)
C. Selegiline (Eldepryl)
D. Donepezil (Aricept)

Rationale

A. Carbidopa/levodopa (Sinemet) is used in the treatment of Parkinson’s disease, not Alzheimer’s disease. It works by converting levodopa to dopamine by inhibiting hyperactive cholinergic activity. It can lead to dystonic and dyskinetic movements but not a severe cholinergic crisis.

B. Memantine (Namenda) is a neurotransmitter inhibitor that decreases the effects of glutamate, the principal excitatory neurotransmitter in the brain. It may reduce deterioration of Alzheimer’s symptoms. Patients may complain of some dizziness, but there are no serious side effects associated with this drug.

C. Selegiline (Eldepryl) is used to treat symptoms of Parkinson’s disease. It irreversibly inhibits the activity of monoamine oxidase type B, an enzyme that breaks down dopamine and has been shown to increase dopaminergic action. Selegiline has an unlabeled use in treatment of Alzheimer’s disease. Side effects include dizziness, tachycardia, or bradycardia and hypertensive crisis.

D. Donepezil (Aricept) overdose or polypharmacy can lead to a dangerous potentially life-threatening cholinergic crisis characterized by severe nausea, increased salivation, diaphoresis, bradycardia, flushed skin, and hypotension. This can lead to respiratory depression and cardiopulmonary arrest especially if the respiratory muscle weakness is severe.

Content Category: Medical Emergency Tasks—Geriatric

References


59. Which of the following statements would suggest to the nurse that a patient diagnosed with mononucleosis has an understanding of the disease?
A. “If my parents had allowed me to take my immunizations, this would have been avoided.”
B. “Kissing would be OK as long as there is no fever.”
C. “Weight lifting and contact sports should be avoided for at least 4 weeks.”
D. “I inherited the gene for this from my parents.”

Rationale
A. There are no childhood immunizations for mononucleosis.
B. Kissing on the mouth should be avoided due to the potential for sharing the virus. The usual transmission of mononucleosis is person to person by the oropharyngeal route, with a 30 to 50 day incubation period.
C. Due to the possibility of splenomegaly with mononucleosis, heavy lifting and contact sports should be avoided for at least 4 weeks. Enlargement of the spleen may lead to increased likelihood of splenic injury.
D. Mononucleosis is a viral infection, not an inherited illness.

Content Category: Medical Emergency Tasks

Reference

60. Which nursing action is of greatest priority for a patient with bone pain related to leukemia?
A. Administer pain medication.
B. Place patient in private room.
C. Administer oxygen.
D. Discuss advanced directives.

Rationale
A. Pain medication is highly important, but not the first priority. Isolation would be the first priority since it will protect the patient from contracting an illness that will be further debilitating.
B. Patients with leukemia are highly susceptible to infection. The development of an infection can be deadly to a patient with leukemia. Placing the patient in reverse isolation and limiting close contact with others will decrease the risk of infection.
C. Maintaining adequate oxygenation is important. However, there is no report of airway or breathing problems associated with this scenario.
D. Although it is important to discuss advanced directives, this would not be the first priority.

Content Category: Medical Emergency Tasks

Reference
61. Which of the following patient statements would lead the nurse to determine that the patient understands hypokalemia and dietary discharge instructions?
A. “I should drink 8 glasses of water every day.”
B. “I should limit my use of table salt.”
C. “I should eat only lean meats.”
D. “I should eat more bananas.”

Rationale
A. Drinking eight glasses of water is a healthy practice for maintaining hydration, but it will not correct hypokalemia.
B. Table salt is sodium chloride and will not affect hypokalemia.
C. Lean meats are a source of protein and will not correct hypokalemia.
D. Hypokalemia refers to a serum potassium level less than 3.5 mEq/L. Potassium loss can occur through the gastrointestinal and renal systems as well as through the use of various medications. A well-balanced diet, with foods high in potassium (e.g., spinach, Swiss cheese, cauliflower, carrots, bananas, tomatoes, and dried beans) can help restore potassium to normal levels.

Content Category: Medical Emergency Tasks
Reference

62. Which cranial nerve is NOT responsible for eye movement?
A. Cranial nerve II—Optic nerve
B. Cranial nerve III—Oculomotor
C. Cranial nerve IV—Trochlear
D. Cranial nerve VI—Abducens

Rationale
A. Cranial nerve II is responsible for vision. Damage to this nerve will result in vision loss and alterations in visual fields.
B. Cranial nerve III is responsible for movement of the eyelid and eyeball, as well as dilatation and constriction of the pupil. Damage to this nerve will result in ptosis and alteration is size, shape, and equality of the pupils.
C. Cranial nerve IV is responsible for movement of the eyeball. Damage to this nerve can result in double vision, outward rotation of the affected eye, and difficulty with downward gaze.
D. Cranial nerve VI is responsible for movement of the eyeball. Damage to this nerve can result in a medially directed eye, strabismus, and double vision.

Content Category: Neurological Tasks
Reference
63. All of the following are associated with neurogenic shock **EXCEPT**:

A. flaccid paralysis.
B. **tachycardia.**
C. loss of sphincter tone.
D. hypotension.

**Rationale**

A. Disruption of the sympathetic nervous system results in flaccid paralysis, loss of sphincter tone, bradycardia, and hypotension.

**B. Disruption of the sympathetic nervous system results in flaccid paralysis, loss of sphincter tone, bradycardia, and hypotension.**

C. Disruption of the sympathetic nervous system results in flaccid paralysis, loss of sphincter tone, bradycardia, and hypotension.

D. Disruption of the sympathetic nervous system results in flaccid paralysis, loss of sphincter tone, bradycardia, and hypotension.

**Content Category:** Neurological Tasks

**Reference**


64. When preparing a patient with a suspected spinal cord injury for transport to another facility, the nurse should anticipate:

A. administering prophylactic anticonvulsants.
B. assisting with endotracheal intubation.
C. placing the patient in spinal immobilization.
D. elevating the head of the bed to 30 degrees.

**Rationale**

A. Although anticonvulsants are appropriate if the patient has already had a seizure, spinal injury alone does not increase the likelihood of having a seizure.

B. Although persons with spinal injuries are at greater risk for having an associated airway injury, having patients maintain their own airways is preferred over an artificial airway.

C. **Spinal immobilization with a rigid cervical collar, head blocks, and backboard is necessary to prevent movement that may further injure the patient.**

D. Head elevation is appropriate for the control of intracranial pressure in head-injured patients, but it is contraindicated for spinal injury patients for whom it may actually cause further injury.

**Content Category:** Neurological Tasks

**Reference**

65. When administering phenytoin (Dilantin) intravenously, the following recommendation should always be followed:
A. administer the phenytoin (Dilantin) by rapid IV push.
B. flush the IV with dextrose solution immediately after administration of phenytoin (Dilantin).
C. monitor the patient for hypertension after intravenous administration of phenytoin (Dilantin).
D. mix the phenytoin (Dilantin) in normal saline.

Rationale
A. Phenytoin (Dilantin) should be administered slowly in small increments, each 25 to 50 mg over 1 to 5 minutes.
B. Because of the likelihood of precipitation, phenytoin (Dilantin) should be mixed with normal saline 1 mL/50 mg phenytoin (Dilantin). Clear IV line first with normal saline, insert in-line filter followed by administration of phenytoin (Dilantin) at 50 mg/minute.
C. Hypotension (cardiovascular collapse) may occur with too rapid intravenous administration of phenytoin (Dilantin).
D. Because of the likelihood of precipitation, phenytoin (Dilantin) should be mixed with normal saline 1 mL/50 mg phenytoin (Dilantin). Clear IV line first with normal saline, insert in-line filter followed by administration of phenytoin (Dilantin) at 50 mg/minute.

Content Category: Neurological Tasks

Reference

66. After being hit in the head, a patient experiences an initial loss of consciousness followed by a Glasgow Coma Scale (GCS) of 15, and no motor or sensory deficits. Fifteen minutes later, the GCS drops to 11 (the patient opens eyes to pain only, is verbally confused, and localizes to pain only). The most likely etiology of these findings is a(n):
A. diffuse axonal injury.
B. subdural hematoma.
C. subarachnoid hemorrhage.
D. epidural hematoma.
**Rationale**

A. Diffuse axonal injury is a widespread dysfunction of neurological function without any focal lesions. It is often caused by a sudden acceleration or deceleration injury to the brain resulting in shearing forces to the axons. It is often characterized by an immediate loss of consciousness that can last from days to weeks.

B. The elderly are at greater risk for subdural hematomas due to use of anticoagulants, frailty of the bridging veins, atrophy of brain tissue, and coagulation defects. Chronic subdural hematomas can take 2 weeks or longer to develop.

C. Subarachnoid hemorrhage is a diffuse collection of blood between the pia mater and the arachnoid membrane. It usually occurs from an aneurysm rupture, which is precipitated by a sudden increase in intracranial pressure such as straining for a bowel movement, heavy lifting, or excitement.

D. An epidural hematoma is an acute collection of blood between the skull and the dura mater. It is usually due to a laceration in the middle meningeal artery with a rapid collection of blood and increased intracranial pressure. It has a short course of onset from immediate to as long as 8 hours.

**Content Category:** Neurological Tasks

**Reference**


67. Which of the following is an early sign of increasing intracranial pressure in a patient with a head injury?

A. Bradycardia and premature ventricular escape beats  
B. Unilateral fixed and dilated pupil  
C. Nausea and vomiting  
D. Extension of upper extremities with stimuli

**Rationale**

A. As the brain continues to swell and puts pressure on the pons and medulla, the heart center of the brain is compromised, causing dysrhythmias. When the heart slows, alternative foci will be triggered, such as those in the ventricles causing premature ventricular contractions (PVCs).

B. A unilateral, dilated pupil in the presence of a head injury is a late sign of increasing intracranial pressure.

C. **Headache, nausea, vomiting, altered mental status, and amnesia of the event are examples of early signs of increasing intracranial pressure.**

D. Abnormal posturing is a late sign of increasing intracranial pressure.

**Content Category:** Neurological Tasks

**Reference**

68. Which type of headache is associated with having an aura, signaling the start of the headache?
A. Cluster
B. Migraine
C. Tension
D. Temporal arteritis

Rationale
A. Believed to be caused by a dysfunction of the trigeminal nerve, cluster headaches are not associated with an aura.
B. Fifteen percent of migraine patients experience an aura, signaling the start of their headache.
C. Tension headaches are the result of skeletal muscle contraction and are not associated with an aura.
D. Temporal arteritis is caused by inflammation of the branches of the carotid artery and is not associated with an aura.

Content Category: Neurological Tasks

References

69. Which of the following drugs is used as a diagnostic test for myasthenia gravis?
A. Edrophonium (Tensilon)
B. Flumazenil (Romazicon)
C. Vitamin K (Aqua-Mephyton)
D. Naloxone (Narcan)

Rationale
A. Administration of edrophonium (Tensilon) during the “Tensilon Test” will cause a temporary improvement of symptoms if the patient has myasthenia gravis.
B. Flumazenil (Romazicon) antagonizes the effects of benzodiazepines.
C. Vitamin K reverses the effect of an oral anticoagulant, such as warfarin (Coumadin).
D. Naloxone reverses the effects of opioid medications.

Content Category: Neurological Tasks

Reference
70. When caring for a patient during a clonic-tonic seizure, which nursing action has the first priority?
   A. **Establish and maintain a patent airway.**
   B. Insert a padded tongue blade between the patient’s teeth.
   C. Pad the side rails.
   D. Administer 100% oxygen by mask.

**Rationale**
A. **Establishing a patent airway is always a priority intervention.**
B. Putting anything into the patient’s mouth increases the risk of injury to the patient (broken teeth) and to the health care provider (bite by patient).
C. Padding the side rails is an important intervention (to protect the patient from injury) but maintaining airway patency has the higher priority.
D. Supplemental oxygen is an important intervention, but airway patency has a higher priority.

**Content Category:** Neurological Tasks

**Reference**

71. An elderly patient with some gait instability, sudden onset of combative behavior, ecchymosis over the mastoid process, and a hemotympanum may have sustained a(n):
   A. subarachnoid hemorrhage.
   B. subdural hematoma.
   C. epidural hematoma.
   D. **basilar skull fracture.**

**Rationale**
A. A subarachnoid hemorrhage is another type of intracranial bleed, classically associated with a severe headache.
B. Clinical features of a subdural hematoma would most likely include a loss of consciousness, hemiparesis, and fixed and dilated pupils.
C. Epidural hematomas are characterized by a brief period of unconsciousness, followed by a lucid period, and then another loss of consciousness.
D. **Signs of a basilar skull fracture may also include periorbital ecchymosis and a cerebrospinal fluid leak. This type of head trauma may cause intracerebral bleeding, and 25% of basilar skull fractures are not seen on radiograph.**

**Content Category:** Neurological Tasks—Geriatric

**Reference**
72. When a child presents with an altered mental status, the first intervention priority should be:
   A. screening for child abuse and neglect.
   B. assessing for trauma, especially head trauma.
   C. ensuring a patent airway for ventilation.
   D. assessing response to painful stimulus.

   **Rationale**
   A. Screening for child abuse and neglect is an important step in the assessment process, but it is done later in a defined step-by-step assessment process.
   B. Although important, a rapid assessment and history follows the maintenance and support of the airway, breathing, and circulation.
   C. Airway management and ventilation is the first priority in assessment and management of any presenting pediatric patient.
   D. Assessing neurologic status and disability follows the ABCs of pediatric evaluation.

   **Content Category:** Neurological Tasks—Pediatric

   **Reference**

73. Autonomic dysreflexia in spinal cord injury (SCI) is characterized by which of the following symptoms?
   A. Pupillary constriction
   B. Tachycardia
   C. Hypertension
   D. Sweating below the level of the lesion

   **Rationale**
   A. Pupillary dilation, not constriction, is an associated symptom of autonomic dysreflexia.
   B. Hypertension, bradycardia and severe distress are characteristic of autonomic dysreflexia.
   C. Hypertension, bradycardia, and severe distress are characteristic of autonomic dysreflexia.
   D. Sweating below the level of the lesion may occur due to vasomotor changes.

   **Content Category:** Neurological Tasks

   **Reference**

74. An elderly patient has a history of falling at home and a decline in mentation over the last 2 weeks. The patient is confused to time and location. Blood glucose is 104 mg/dL. The nurse would suspect a(n):
   A. diffuse axonal injury.
   B. subarachnoid hemorrhage.
   C. epidural hematoma.
   D. subdural hematoma.
Rationale
A. Diffuse axonal injury is a widespread dysfunction of neurological function without any focal lesions. It is often caused by a sudden acceleration or deceleration injury to the brain resulting in shearing forces to the axons. It is often characterized by an immediate loss of consciousness that can last from days to weeks.

B. Subarachnoid hemorrhage is a diffuse collection of blood between the pia mater and the arachnoid membrane. It is usually caused by an aneurysm rupture that is precipitated by a sudden increase in intracranial pressure, such as straining for a bowel movement, heavy lifting, or excitement.

C. An epidural hematoma is an acute collection of blood between the skull and the dura mater. It is usually due to a laceration in the middle meningeal artery with a rapid collection of blood and increased intracranial pressure. It has a short course of onset from immediate to as long as 8 hours.

D. The elderly are at greater risk for subdural hematomas due to use of anticoagulants, frailty of the bridging veins in the brain, atrophy of brain tissue, and coagulation defects. Chronic subdural hematomas can take as long as 2 weeks to develop.

Content Category: Neurological Tasks

Reference

75. One of the anatomic differences that places the younger child at a greater risk for sustaining a head injury than an adult is:
A. thickly myelinated brain cells.
B. rigid skull.
C. larger head size.
D. shorter range of neck motion.

Rationale
A. In the young child, axons are less myelinated and less able to tolerate shearing force injuries.
B. In younger children, the skull may be thinner and more pliable, allowing more of the injuring force to be transferred through to the underlying brain tissue.
C. Head injury is the most common type of pediatric trauma. The child's head is proportionately larger and heavier in relationship to body size. This changes the child's center of gravity and places them at higher risk for sustaining a head injury.
D. Weaker neck musculature and ligamental laxity allow for a greater range of neck motion, allowing greater acceleration/deceleration injuring forces.

Content Category: Neurological Tasks—Pediatric

Reference
76. A patient with a gunshot wound to the back is awake and reports that he has feeling on the right side of his body, but not the left, and can move his left side, but not the right. This condition is called:
   A. anterior cord syndrome.
   B. Brown-Séquard syndrome.
   C. central cord syndrome.
   D. autonomic dysreflexia.
   
   **Rationale**
   A. Anterior cord syndrome usually results from the occlusion of the anterior spinal artery, a herniated nucleus pulposus, or transaction of the anterior portion of the cord. The patient has hyperesthesia, hypoalgesia, and incomplete or complete paralysis.
   B. Brown-Séquard syndrome is the hemisection of the spinal cord in the anteroposterior plane. The most common cause is a penetrating injury, such as a gunshot. Brown-Séquard syndrome is characterized by ipsilateral (same side) paresis or hemiplegia and contralateral (opposite side) decreased sensation to pain and changes in temperature.
   C. Central cord syndrome is caused by hyperextension and is seen most often in elderly patients after a fall. This syndrome causes loss of function in the upper extremities, whereas lower extremity function is not affected.
   D. Autonomic dysreflexia is a complication of spinal cord injury above the T-6 level. Signs and symptoms include severe headache, hypertension, sweating, cardiac dysrhythmia, flushing above the level of injury, and coolness below the level of injury.

   **Content Category:** Neurological Tasks

   **Reference**

77. Which of the following procedures is likely to be performed on a patient who complains about a recently applied cast that is too tight?
   A. Padding the cast
   B. Bivalving the cast
   C. Sending the patient to an orthopedic physician immediately
   D. Removing the cast
   
   **Rationale**
   A. Padding the cast would cause further pain and swelling.
   B. Bivalving the cast is done to relieve neurovascular impairment caused by pressure from the cast.
   C. Although the patient should follow up with an orthopedic physician, the immediate action is bivalving the cast.
   D. Removal of cast is not necessary because it had recently been applied. Bivalving would continue to immobilize the extremity.

   **Content Category:** Orthopedic/Wound Tasks
78. A boxer’s fracture is a fracture of the:
   A. **distal 5th metacarpal.**
   B. distal 5th phalanx.
   C. proximal 5th metacarpal.
   D. proximal 5th phalanx.

**Rationale**
A. A boxer’s fracture is defined as a fracture of the 4th or 5th metacarpal neck, sometimes involving the head of the metacarpal.
B. A boxer’s fracture is a fracture of the metacarpal, not the metatarsal.
C. A boxer’s fracture is defined as a fracture of the 4th or 5th metacarpal neck, sometimes involving the head of the metacarpal.
D. A boxer’s fracture is a fracture of the metacarpal, not the metatarsal.

**Content Category:** Orthopedic/Wound Tasks

**References**

79. Which of the following foreign bodies is most likely to cause a tissue reaction leading to infection?
   A. Bullets
   B. Wooden splinters
   C. Glass shards
   D. Metal needles

**Rationale**
A. Bullets are not likely to cause a tissue reaction.
B. Vegetative foreign bodies (e.g., thorns, wood) are highly reactive, lead to infection, and should be removed as soon as possible.
C. Glass shards are not likely to cause a tissue reaction.
D. Metal needles are not likely to cause a tissue reaction.

**Content Category:** Orthopedic/Wound Tasks

**Reference**
80. What type of immobilization is indicated for toe (metatarsal) fractures?
   A. Thumb spica splint
   B. Posterior splint
   C. Sugar tong splint
   D. Buddy taping

   **Rationale**
   A. Thumb spica splint is indicated for thumb injuries.
   B. Posterior splint is indicated for lower leg injuries.
   C. Sugar tong splint is indicated for upper extremity injuries.
   D. **Buddy taping is the treatment for toe (metatarsal) fractures. Cotton is placed between the fractured toe and adjacent toe; then both toes are taped together.**

   **Content Category:** Orthopedic/Wound Tasks

   **Reference**

81. Assessment of a patient with a Colles’ fracture should include evaluation of which of the following nerves?
   A. Peroneal
   B. Ulna
   C. **Radial**
   D. Median

   **Rationale**
   A. Peroneal nerve injury is frequently associated with tibia/fibula fractures.
   B. Ulnar nerve injury is frequently associated with fractures of the medial humeral epicondyle.
   C. Colles’ fracture is associated with fractures of the distal one third of the ulna where the nerve innervates; radial nerve injury often occurs with fractures of the distal forearm.
   D. Median nerve injury is frequently associated with elbow dislocations.

   **Content Category:** Orthopedic/Wound Tasks

   **References**

82. Proper fitting of a walker results in the elbows being bent at:
   A. forty-five degrees.
   B. ten degrees.
   C. twenty degrees.
   **D. thirty degrees.**
Rationale
A. Forty-five degrees is an improper fit. The elbows should be flexed at 30 degrees for proper fit.
B. Ten degrees of bend is an improper fit. The elbows should be flexed at 30 degrees.
C. Twenty degrees of bend is an improper fit. The elbows should be flexed at 30 degrees.
D. A walker is measured to fit with the elbows flexed at 30 degrees.

Content Category: Orthopedic/Wound Tasks

Reference

83. Which of the following procedures would be indicated to evaluate for compartment syndrome?
A. Automatic pressure infuser
B. Blood pressure cuff with needle
C. Intracompartmental pressure monitor
D. Manual measurement of extremity circumference

Rationale
A. The automatic pressure infuser is used to infuse blood products or intravenous fluids rapidly to treat intravascular volume deficit.
B. Using a blood pressure cuff with needle is not a procedure that is used for compartment syndrome evaluation.
C. An intracompartmental pressure monitor is used to measure tissue pressure when compartment syndrome is suspected. Causes of compartment syndrome include, but are not limited to, fractures, soft tissue or vascular trauma, crush injuries, and tight cast or circumferential dressings.
D. Although extremity circumference may be increased with compartment syndrome, it is nonspecific.

Content Category: Orthopedic/Wound Tasks

Reference

84. Which of the following complications is a consequence of landing on the pavement after a motorcycle crash?
A. Tattooing
B. Contusions
C. Avulsion
D. Laceration
Rationale
A. Tattooing is caused by an abrasion of the skin by tangential trauma to the dermis and epi-dermis. This common injury is painful and can result in permanent tattooing of the skin if meticulous wound care is not done.
B. A contusion is a closed wound in which a ruptured blood vessel has hemorrhaged into the surrounding tissues. The blood may form a hematoma if bleeding is sufficient and has been contained.
C. Avulsions are characterized by full thickness loss that prevents wound edge approximation.
D. Lacerations are open wounds that result from sharp or blunt trauma to the skin.

Content Category: Orthopedic/Wound Tasks

Reference

85. Patients with gas gangrene infections due to Clostridium perfringens often have:
A. thick, yellow drainage from the wound.
B. mild soft tissue swelling.
C. complaints of moderate pain.
D. a history of intestinal or gallbladder surgery.

Rationale
A. Drainage from infected wounds with gas gangrene is thin, watery, brown, or brown-gray.
B. Patients often have soft tissue crepitus from hydrogen sulfide and carbon dioxide in the tissues.
C. Patients have severe pain with gas gangrene infections.
D. Patients with gas gangrene often have a history of intestinal or gallbladder surgery or minor trauma to an old scar containing spores.

Content Category: Orthopedic/Wound Tasks

Reference

86. A patient who complains of left shoulder pain with swelling and obvious deformity is unable to raise the left arm or bring it across the chest. The nurse suspects the patient has a:
A. sphenoid fracture.
B. subluxation of the humerus.
C. shoulder dislocation.
D. arthritis of the shoulder.

Rationale
A. A sphenoid fracture is not common.
B. Subluxations are due to loose surrounding support structures, such as tendons and ligaments.
C. Dislocation will present with deformity to the shoulder and limited range of motion.
D. Arthritis is a chronic condition, not an acute process.
References

87. The sensory component of the radial nerve includes testing the feeling on the:

A. tip of the index finger.
B. dorsum of the hand.
C. tip of the middle finger.
D. palmar surface of the hand.

Rationale
A. Testing the feeling on the tip of the index finger tests the sensory component of the median nerve.
B. The nurse can test the sensory component of the radial nerve by assessing feeling on the dorsum of the hand.
C. Testing the feeling on the tip of the middle finger tests the sensory component of the median nerve.
D. The nurse can test the sensory component of the radial nerve by assessing feeling on the dorsum of the hand, not the palmar surface of the hand.

Content Category: Orthopedic/Wound Tasks
Reference

88. What instructions are given to patients with a diagnosis of methicillin-resistant Staphylococcus aureus (MRSA)?

A. MRSA does not require special precautions by health care workers.
B. Keep the wound uncovered to promote healing.
C. MRSA cannot be transmitted to another individual unless they are immunocompromised.
D. Methicillin-resistant staphylococcus aureus (MRSA) can be on the skin without causing illness.
**Rationale**

A. MRSA is highly contagious and easily transmitted to other patients. MRSA wounds must be covered and contact precautions implemented.

B. Wounds with MRSA should always be covered.

C. MRSA is contagious by close skin-to-skin contact, openings in the skin (such as cuts and abrasions), close contact with bacteria-contaminated items and surfaces, crowded living conditions, and poor hygiene.

D. MRSA can easily be transmitted to others, and they may acquire the organism without an associated illness. Signs and symptoms of wound infection should always be verbalized to patients upon discharge and documented.

**Content Category:** Orthopedic/Wound Tasks

**Reference**


89. Sutures placed on the face should be removed within:

A. 7 to 10 days.

B. 5 to 7 days.

C. **3 to 5 days.**

D. 10 to 14 days.

**Rationale**

A. Sutures to the back, chest, arms, hands, and thighs should be removed in 7 to 10 days.

B. Eyebrow sutures should be removed in 5 to 7 days.

C. **Sutures should be removed in 3 to 5 days from the face, lips, and eyelids.**

D. Sutures to the lower legs and feet should be removed in 10 to 14 days.

**Content Category:** Orthopedic/Wound Tasks

**References**


90. A clinical indication for the immediate intubation of a trauma patient may include a(n):

A. **flail chest.**

B. Glasgow Coma Scale (GCS) score of 10.

C. upper airway protection.

D. tachypnea.
**Rationale**
A. **Certain thoracic injuries, such as flail chest, are medical emergencies that require immediate intubation.**

B. A severe head injury that requires immediate intubation would be a Glasgow Coma Scale score of less than 8.

C. Patients are usually intubated for protection of the lower airway, not the upper airway. Not all trauma patients require intubation for airway protection. Independent respirations of an appropriate rate and volume and/or the presence of a gag reflex usually preclude intubation in the absence of other specific findings.

D. The absence of respiration, such as apnea, is an indication for immediate intubation. Tachypneic patients do not necessarily require intubation.

**Content Category:** Patient Care Management Tasks

**Reference**

91. If a trauma patient suddenly becomes restless and cyanotic, the nurse should:
A. prepare for rapid sequence endotracheal intubation.
B. evaluate and open the patient's airway.
C. insert two large-caliber intravenous catheters.
D. prepare for chest tube insertion.

**Rationale**
A. Although the patient may require endotracheal intubation, the nurse must first conduct a primary assessment of the patient before determining which interventions are indicated.

B. **Assessment of the trauma patient begins with the primary survey. The first step in this process is to open and evaluate the patient’s airway while maintaining spinal protection. The nurse should be prepared to suction the airway or remove obstruction by the tongue or other objects prior to continuing the evaluation.**

C. The insertion of two large-caliber IVs for rapid infusion of crystalloid solution may be indicated and is included as part of the primary survey; however, the first step in the survey is to open and evaluate the airway.

D. Tracheal deviation is a late sign of tension pneumothorax for which insertion of a chest tube would be indicated. Although trauma patients should be continuously monitored for signs of impaired gas exchange, which would include an evaluation of breathing, the primary survey begins with the airway, and the first nursing intervention indicated is to open and assess the airway.

**Content Category:** Patient Care Management Tasks

**Reference**
92. While providing patient education for migraine headache, a patient asks about taking herbal remedies. The most appropriate response is:

A. “Herbal remedies have been shown to be safe and effective because they are natural. Be sure to buy them at a reputable health food store.”

B. “You should check with your physician or pharmacist. Some herbs interact with prescribed medications, and some may actually trigger migraines.”

C. “Herbal remedies are not recommended. There is no evidence that herbal remedies or supplements have any benefit for migraine headaches.”

D. “You should not use them. They are ineffective, expensive, and not covered by your insurance.”

**Rationale**

A. Natural does not imply safe. Many dangerous substances are natural. The best advice for herbal remedies is to seek information from a provider trained in herbology. Health food store personnel do not necessarily have that training.

B. Despite popular belief that herbal remedies are safe, many have been shown to have interactions with medications. Some herbal remedies, when used improperly, may actually cause symptoms, including migraine headaches.

C. Feverfew has been recommended by some herbalists to treat migraine headaches. There is anecdotal evidence to support its efficacy. Other supplements may also be effective. It is important that anyone who is considering using herbal remedies consult with a trained provider for advice.

D. Cost and insurance coverage are irrelevant in this discussion with the patient.

**Content Category:** Patient Care Management Tasks

**References**


93. Which of the following is an appropriate response to a patient who asks about the use of an aromatherapy essential oil as an adjunct in the management of his or her illness symptoms?

A. “They can be toxic when ingested or applied topically.”

B. “They are nontoxic and are safe for all ages.”

C. “They can be safely used to treat pregnant patients.”

D. “They are contraindicated in the presence of nausea.”
Rationale
A. Accidental ingestion, especially by children, can result in poisoning. **Topical application of some essential oils may cause dermatitis or allergic reaction.**
B. Persons using essential oils should be knowledgeable about the oil being used because some are potentially toxic.
C. Some oils have been reputed to stimulate uterine contractions. Aromatherapy should be used with caution in the pregnant patient.
D. Lavender has shown promise for reducing postoperative nausea.

Content Category: Patient Care Management Tasks

References

94. The lab has just released an INR value of 2.3 in a patient on warfarin (Coumadin) for chronic atrial fibrillation. The nurse should:
A. prepare to administer protamine sulfate if stool guaiac is positive.
B. recognize this as an elevated value and notify the physician immediately.
C. prepare to administer factor VII (NovoSeven) and vitamin K (Aqua-Mephyton).
D. recognize this as a therapeutic value in a patient on warfarin (Coumadin).

Rationale
A. Protamine sulfate is a drug that reverses the anticoagulant effects of heparin by binding to it. The INR is not a measurement of heparin therapy; therefore, this drug would not be indicated due to an elevated INR.
B. The normal range for the INR is 0.8 to 1.2. In a patient with chronic atrial fibrillation on warfarin (Coumadin) for the prevention of thromboembolic events, the “normal” level would be considered subtherapeutic. It is recommended that an INR of 2.0 to 3.0 be the target range for warfarin (Coumadin) therapy in patients with chronic atrial fibrillation in order to reduce thromboembolic events.
C. Vitamin K, factor VII, and fresh frozen plasma are agents administered to reverse the effects of a supratherapeutic level of warfarin (Coumadin) in patients who are actively bleeding. This is not the situation; therefore, these medications are not indicated.
D. **It is recommended that an INR of 2.0 to 3.0 be the target range for warfarin (Coumadin) therapy in patients with chronic atrial fibrillation in order to reduce thromboembolic events.**

Content Category: Patient Care Management Tasks

Reference
95. Which of the following is the most important reason to obtain an accurate triage severity rating?

A. Accurate triage severity ratings facilitate movement of patients through the emergency department.
B. Overtriaged patients divert valuable resources from those who need them.
C. Undertriaged patients receive delayed care and risk deterioration.
D. Accurate triage severity ratings allow triage nurses to initiate appropriate treatment.

**Rationale**

A. Accurately triaging patients ensures that those more acutely ill are evaluated and treated most expeditiously.
B. A risk of overtriaging is that emergency department resources, such as treatment rooms, may be unavailable, resulting in possible treatment delay for those acutely ill or injured.
C. The undertriaging of patients puts them at risk of harm and further deterioration if they remain in the waiting room awaiting evaluation and treatment.
D. A triage severity rating does not allow nurses to initiate treatment. Some facilities have triage protocols that allow nurses to administer medications for fever, pain control, and tetanus prophylaxis as well as initiate imaging and laboratory studies.

**Content Category:** Patient Care Management Tasks

**Reference**


96. Important triage findings that indicate a biological agent may have been released in the community include:

A. multiple family members presenting with headaches, nausea, shortness of breath, and cherry red skin.
B. a patient suffering from symmetric cranial neuropathies, blurred vision, and symmetric descending weakness.
C. many patients presenting to the emergency department with similar signs and symptoms.
D. the report of restlessness, dizziness, tachycardia, and the odor of bitter almonds in a presenting patient.

**Rationale**

A. These are the symptoms of carbon monoxide poisoning, not a biologic agent. A family presenting with these complaints was likely exposed in their residence and would not likely be victims of terrorism.
B. These are symptoms of botulism, which is an infectious agent. This presentation in a single patient would more likely indicate an isolated exposure rather than the release of a biological agent.
C. Multiple patients with similar signs and symptoms could be an indicator of a widespread exposure to a biological agent. Because the possibility of bioterrorism exists, it is important for emergency nurses to be able to recognize the presenting signs of biological agents that could be easily distributed widely in an act of violence or terror.
D. These are symptoms of cyanide poisoning. This presentation in a single patient would more likely indicate an isolated exposure rather than the release of a biological agent.
**Content Category:** Patient Care Management Tasks

**Reference**

97. Which of the following concepts is a crucial component of discharge teaching for an adolescent who has sustained multiple abrasions and lacerations from a bicycle crash?
A. The risks and dangers involved when participating in cycling sports
B. Specifics about his wound care to facilitate autonomy and personal self-confidence
C. Need for assistance from family members to perform his wound care regimen
D. **The benefits of using personal safety equipment, such as a bike helmet, when participating in sports**

**Rationale**
A. Adolescents believe they are invincible and do not avoid high-risk behaviors.
B. Developmentally, adolescents are more concerned about peer relationships and personal privacy.
C. Adolescents value privacy and would prefer doing their own self-care.
D. Adolescents are known to participate in “high-risk” behaviors; therefore, patient education about safety is paramount.

**Content Category:** Patient Care Management Tasks—Pediatric

**Reference**

98. When assessing patient knowledge of type 2 diabetes management, the nurse recognizes the patient has adequate understanding of illness management when the patient states:
A. “I check my blood sugar and take my pills before meals.”
B. “When I am sick, I double my pills if my blood sugar levels are high.”
C. “If my blood sugar is high a half hour after taking my insulin, I give myself another dose.”
D. “I skip my evening insulin dose if I don’t eat a big dinner.”

**Rationale**
A. It is recommended that patients monitor their blood sugar and take oral diabetes medication before meals. Keeping a diary of blood sugars and eating patterns will help patients achieve better control of their blood sugars.
B. It is common for blood sugars to be altered during periods of illness. It is recommended that blood sugars be more closely monitored; however, altering medication dosages is not recommended.
C. Even the shortest-acting insulin will not exert its effects in 30 minutes. This type of behavior puts the patient at risk for hypoglycemia.
D. Regular eating patterns are recommended for patients with type 2 diabetes. Skipping medication dosages without blood sugar monitoring is not recommended.
99. Under regulations of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), individuals are entitled to all the following EXCEPT:

A. having errors in the medical record changed within one year.
B. objecting to or restricting the use of their medical records.
C. accessing their personal medical records.
D. authorizing the use of their medical records.

Rationale
A. HIPAA allows for changes to be made in errors in the medical record. This should be done within 60 days. For good reason, the hospital can make changes in the medical record up to 90 days later. Patients can also request that a disagreement be placed in the medical record if they disagree with information in the file.
B. HIPAA provides recourse for privacy violations, such as excessive exposure to medical records, through the U.S. Department of Health and Human Services (statute of HIPAA).
C. HIPAA provides recourse for privacy violations through the U.S. Department of Health and Human Services (statute of HIPAA). It allows individuals to access their own medical records.
D. HIPAA provides recourse for privacy violations through the U.S. Department of Health and Human Services (statute of HIPAA). It allows individuals to identify specific entities that may have access to their medical records.

Content Category: Professional Issue Tasks

Reference

100. The Emergency Medical Treatment and Active Labor Act (EMTALA) requires that all patients presenting to the emergency department must:
A. meet the hospital’s admission criteria.
B. show proof of ability to pay before services are rendered.
C. present to an emergency department capable of handling their emergency.
D. have a medical screening exam.

Rationale
A. The hospital’s admission criteria does not affect the patient’s ability to be seen in the ED.
B. Care may not be delayed based on the patient’s ability to pay.
C. Stabilizing care must be provided within any hospital’s capability to provide care. Even if the hospital is ultimately not capable of providing definitive care to the patient, the patient must be stabilized and transferred to a hospital that is capable of providing definitive care to the patient.
D. All patients must be medically screened and stabilized before their ability to pay is determined.

Content Category: Professional Issue Tasks
101. A 4-year-old child brought to the ED after falling out of a tree is awake, but fearful. Past medical records indicate the child has experienced multiple instances of injury. An appropriate first action for the nurse would be to:
A. tell the parents that abuse is suspected.
B. immediately report the suspicion of physical abuse to the proper authorities.
C. **discuss with the ED physician the possibility of child neglect.**
D. recognize that all children are accident prone.

**Rationale**
A. If, during the course of discussion, abuse or neglect is suspected, the parents need to be informed. However, this would not be a first action.
B. Further discussion between the physician and parents may uncover additional information that may aid in determining whether there is cause for concern about this child’s repeated injuries.
C. **It would be appropriate for the nurse to discuss the issue of child neglect with the physician.** Further discussion of the issue between the physician and the parents can then take place. If, at any time, the nurse believes that abuse or neglect is present, the nurse is obligated to report the situation to the authorities regardless of whether the physician agrees.
D. Although many children are accident prone, repetitive childhood injuries cannot be ignored and must be investigated further.

**Content Category:** Professional Issue Tasks—Pediatric

**Reference**

102. Monitoring the physical and psychological well-being of the patient who is restrained or secluded includes an assessment of:
A. neurological status and psychosocial status.
B. **respiratory and circulatory status.**
C. muscle tone and respiratory status.
D. skin turgor and circulatory status.

**Rationale**
A. Neurological and psychosocial status are not identified as areas that need to be assessed when monitoring patients who are in restraint/seclusion.
B. **The Department of Health and Human Services, Centers for Medicare & Medicaid Services outline rules for monitoring patients who are restrained. These patients must be assessed on a regular basis. The assessment must include evaluation of respiratory and circulatory status.**
C. Muscle tone is not required when monitoring patients who are in restraint/seclusion; respiratory and circulatory status is required.
D. Skin turgor is not required when monitoring patients who are in restraint/seclusion, respiratory and circulatory status is required.

**Reference**
Content Category: Professional Issue Tasks

References

103. Research that examines whether the use of a five-level triage acuity categorization system increases the triage nurse’s confidence when assigning triage acuities is described as which type of research?
A. Quasi-experimental
B. Descriptive
C. Experimental
D. Qualitative

Rationale
A. Quasi-experimental research manipulates an independent variable but cannot randomly assign subjects to control or experimental groups.
B. Descriptive research attempts to describe a problem or clinical issue that has not been examined before or one for which little research has been done.
C. Experimental research involves doing something different to at least one treatment group.
D. Qualitative research yields results that are not quantitative. The findings are not presented statistically but rather in words, through description.

Content Category: Professional Issue Tasks

Reference

104. Collecting trace evidence in the ED from a crime victim includes:
A. separating scrapings or clippings or taking swabs of skin cells or debris by extremity.
B. flooding the area with water if unable to lift dry pieces of evidence.
C. vigorously scraping debris evidence onto a clean slide.
D. clipping all of the patient’s fingernails and placing the clippings on a piece of clean paper.

Rationale
A. Collected debris needs to be packaged separately and identified by the extremity from which it was obtained.
B. Dry evidence can be obtained by moistening it first using sterile water on a swab or gauze pad. Flooding the area will wash the evidence away.
C. Evidence should be gently scraped and placed onto a clean glass slide.
D. Individual fingernail clippings need to be identified and placed on separate pieces of paper.
**Content Category:** Professional Issue Tasks

**Reference**

105. The claim of battery against an emergency nurse might result from which of the following actions?

A. **Starting intravenous access on a patient who declines treatment**
B. Forgetting to remove an IV catheter before discharging the patient
C. Threatening the patient
D. Failing to obtain informed consent prior to sending the patient to surgery

**Rationale**
A. **Battery is the nonconsensual, offensive touch of another individual. If a patient does not consent to a procedure, it is not advisable to do the procedure even if it is indicated in the treatment plan.**
B. This is an omission in care that potentially could result in negligence if the patient experienced an injury from failure to remove the IV catheter.
C. This is an example of assault. This is an intentional act meant to cause harm.
D. This is an omission in care and an example of negligence.

**Content Category:** Professional Issue Tasks

**Reference**

106. Which of the following is the most important question in determining the disposition of a mental health patient?

A. “Does the patient understand his or her mental health problem?”
B. “Are follow-up resources indicated for this patient?”
C. “Is the patient free of sadness and disturbed thought processes?”
D. “**Does the patient require hospitalization?**”
Rationale

A. Patient education is a very important element in the care of any patient. Patient teaching is explicitly incorporated into the role and responsibilities of the professional emergency nurse. Knowledge of home care is a patient’s right. Ensuring this knowledge also benefits the ED by reducing the number of callbacks and return visits. Consequently, patient teaching can be considered an integral component of emergency patient care. This is a very important component, but having an adequate support system takes precedence.

B. This is an important component of aftercare for the psychiatric patient. Good follow-up will help the patient maintain medications and management of the disorder. However, a solid home support system is more important to have first in adequate management of psychiatric disorders.

C. This is a great nursing goal for a mental health patient; however, achievement of this goal is rarely present upon disposition from the ED.

D. An important factor to consider in the disposition of a mental health patient is the presence or absence of a solid support system. It must be determined if the patient has competent family members or friends willing to observe and supervise the individual. Patients who cannot be discharged safely must be placed on a psychiatric hold, usually by a psychiatrist. Mental health holds are typically limited to 72 hours in most states. Involuntary hold criteria differ from state to state, but most states require mandatory hospitalization if the patient meets the following criteria: (1) a serious, imminent risk to health and safety exists because the patient is completely unable to provide self-care, (2) the patient is a suicide risk, and (3) the patient is a physical threat to others.

Content Category: Psychological/Social Tasks

References


107. The priority for a patient who verbalizes suicidal thoughts is to:

A. determine if the patient has a past medical history of depression.

B. determine if the patient has a supportive spouse.

C. ascertain if the patient has a plan to kill himself.

D. identify recent diagnosis of a chronic condition.

Rationale

A. The suicidal patient frequently experiences depression, but a history of depression does not automatically predispose someone toward suicidal behaviors.

B. According to statistics, people who are most likely to commit suicide are separated, divorced, or widowed. However, the priority is to determine whether the patient has a plan for completing the suicide.

C. When assessing for suicide risk, if the patient can articulate a plan for completing the suicide, then the patient should be considered at high risk and be put on suicide precautions.

D. The diagnosis of a chronic illness can be a risk factor for suicidal behavior, so further assessment is necessary. However, the priority is to determine whether the patient has a plan for completing the suicide.
108. A patient is diaphoretic, anxious, pacing the floor, and disoriented. The patient has noticeable hand tremors, complains of aching all over, and has a temperature of 100°F (37.8°C). The nurse suspects the client may be experiencing:

A. lithium (Eskalith, Lithobid) overdose.
B. withdrawal from benzodiazepines.
C. neuroleptic malignant syndrome.
D. tricyclic antidepressant overdose.

Rationale
A. Symptoms of lithium overdose include lethargy, ataxia, nausea, vomiting, muscle twitching, lack of coordination, and seizures.
B. Benzodiazepine withdrawal symptoms include anxiety, disorientation, hand tremors, flu-like symptoms, and low grade temperature.
C. Neuroleptic malignant syndrome is characterized by catatonia, dyspnea, significant hyperthermia, unstable blood pressure, and profuse sweating.
D. Tricyclic antidepressant overdoses are characterized by cardiac dysrhythmias, hypotension, CNS depression, and anticholinergic effects.

109. A psychiatric patient admits to hearing voices telling him to hang himself. The nurse documents that the patient is at risk for suicide based on:

A. an intolerable feeling of hopelessness.
B. command hallucinations.
C. overwhelming anxiety.
D. specific visual hallucinations.

Rationale
A. Although hopelessness can contribute to suicidal ideations, there is not enough information to know if the client is hopeless.
B. Command hallucinations are especially serious and can place clients at an increased risk for attempting suicide.
C. Overwhelming anxiety is not indicative of suicidality.
D. Visual hallucinations can be disturbing for the client but do not typically increase suicidal risks.
110. Which of the following would be indicative of Alzheimer’s disease?
A. Acute onset of dysarthria and ataxia
B. Sudden onset of mood swings and repetitive behavior
C. **Gradual onset of memory loss and cognitive function**
D. Diplopia or gradual loss of visual fields

**Rationale**
A. The acute onset of dysarthria (slurred speech) and ataxia are symptoms consistent with a stroke or cerebral vascular accident (CVA).
B. Sudden onset of symptoms is associated with delirium.
C. In Alzheimer’s, dementia develops gradually over time.
D. Diplopia is a symptom of cerebral vascular accident (CVA) or stroke and not Alzheimer’s disease.

**Content Category:** Psychological/Social Tasks—Geriatric

111. During an assessment of a patient who presents to the ED after a work-related back injury, the patient admits to a pattern of promiscuous sexual behavior, repeated substance use/abuse, and a history of sleeping only 2 hours in the past 48 hours. The patient describes having episodes of lethargy, lack of motivation, decreased energy, and no appetite. The emergency nurse suspects that this patient has the following condition:
A. schizoaffective disorder.
B. disorganized schizophrenia.
C. major depressive disorder.
D. **bipolar disorder.**

**Rationale**
A. Schizoaffective disorder is characterized by delusional thinking, aggressive and bizarre behavior, substance use/abuse, and depressive symptoms.
B. Schizophrenia is characterized by bizarre behavior, hallucinations, and an inability to care for self or function well in a work or social environment.
C. Patients with the diagnosis of major depressive disorder describe feelings of hopelessness, helplessness, and uselessness.
D. **Bipolar disorder is often characterized by alternating euphoric moods and depressed periods.**

**Content Category:** Psychological/Social Tasks
112. After intubation, auscultation of the lung fields reveals breath sounds louder in the upper-right anterior aspect and decreased on the left side. The nurse anticipates the need for the practitioner to:
A. pull back on the endotracheal tube.
B. advance the endotracheal tube.
C. remove the endotracheal tube.
D. secure the endotracheal tube.

**Rationale**
A. Placement of the endotracheal tube must end above the carina in order to ventilate both lungs. Insertion of the endotracheal tube beyond this point oftentimes leads to right mainstem bronchus intubation, evidenced by decreased or absent left-sided breath sounds. Withdrawal of the endotracheal tube ½ inch (1 to 2 cms) should correct this inequality of breath sounds.
B. Decreased breath sounds on the left after endotracheal intubation can signify that the endotracheal tube is past the carina into the right bronchus and be indicative of right mainstem intubation. Advancing the tube can lead to continued intubation of the right bronchus and to barotrauma due to ventilation of one lung.
C. Endotracheal tubes that are located in the esophagus will result in gurgling sounds in the epigastrium without breath sounds in either lung and will need to be removed. This is not the case in this scenario. Pulling back on the tube should correct the problem.
D. Endotracheal tubes are secured once placement is verified by direct visualization of the tube passing through the vocal cords or chest radiography. Breath sounds louder on the right are indicative of right mainstem bronchus intubation and proper placement should proceed before securing of the tube.

**Content Category:** Respiratory Tasks

**Reference**

113. Which of the following arterial blood gas results would be indicative of acute respiratory failure?
A. \( \text{PaCO}_2 \) level of 65 mmHg
B. \( \text{PaO}_2 \) level of 82 mmHg
C. Bicarbonate level of 24 mEq/L
D. Base excess (BE) of +3
Rationale
A. The PaCO₂ measurement is the respiratory component of the arterial blood gas. A PaCO₂ level greater than 45 mmHg is indicative of hypoventilation.
B. The normal range for PaO₂ is 80 to 100 mmHg. A measurement of 82 mmHg is low but lies within the normal range.
C. Bicarbonate is the metabolic component of the arterial blood gas. It represents the bicarbonate plasma concentration in the blood. Normal range is 22 to 26 mEq/L.
D. Base excess (or deficit) represents the sum of the concentration of bicarbonate ions, plasma proteins, red blood cells, hemoglobin, and phosphates. This is based on the metabolic component and represents the amount of buffering anions in the blood. Base excess indicates metabolic alkalosis or compensation to a prolonged respiratory acidosis.

Content Category: Respiratory Tasks

References

114. Biphasic positive airway pressure (BiPAP) can be an ideal therapy to use in a respiratory failure patient with:
A. excessive oral secretions.
B. nasal deformity and bleeding.
C. an absent gag reflex.
D. crackles and distended neck veins.

Rationale
A. Biphasic positive airway pressure (BiPAP) ventilation delivers support during inspiration and at end-expiration. The patient with excessive oral secretions would be at an increased risk of aspiration and is, therefore, not a candidate for its use.
B. Patients must have an intact airway for biphasic positive airway pressure (BiPAP) ventilation. Patients with suspected midfacial trauma (nasal deformity and bleeding) are at high risk of having a compromised airway. Therefore, these patients are not ideal candidates for BiPAP.
C. Biphasic positive airway pressure (BiPAP) ventilation delivers support during inspiration and at end-expiration. The patient with an absent gag reflex would be at an increased risk of aspiration of secretions and/or vomitus and its use is, therefore, contraindicated.
D. Crackles and distended neck veins are symptoms of cardiogenic pulmonary edema. Biphasic positive airway pressure (BiPAP) ventilation is an effective treatment modality for patients with respiratory failure related to chronic pulmonary disease, asthma, and cardiogenic pulmonary edema.
Content Category: Respiratory Tasks

Reference


115. Following patient teaching for metered dose inhaler (MDI) therapy, the nurse determines the patient can correctly use the MDI when the patient:
A. rinses his or her mouth before puffing.
B. compresses the MDI chamber on exhalation.
C. **compresses the MDI chamber mid-inspiration.**
D. takes two puffs in rapid sequence.

Rationale

A. The mouth should be rinsed after use of MDI, and rinsing is not necessary before use.
B. Puffing on exhalation provides no medication to the lungs.
C. **When not using a spacer, inhaling mid-inspiration is the correct administration for a metered dose inhaler.**
D. There should be a 1-minute pause between inhalation puffs.

Content Category: Respiratory Tasks

Reference


116. One of the most important factors to consider when assessing the respiratory status of a geriatric patient is:
A. that skin cushioning increases due to loss of skin elasticity.
B. that there is a gradual increase in physiologic reserve.
C. that the loss of bone density increases elasticity of the chest.
D. **the age-related loss of pulmonary reserve.**

Rationale

A. With the older patient, the skin provides less cushioning against mechanical forces, making older adults susceptible to shearing-type injuries. A decrease in skin tensile strength associated with a decrease in skin thickness and subcutaneous fat combine to impair the older adult’s protection against injury, such as rib fractures, incurred in a motor vehicle collision.
B. In the older population, there is actually a limited and lack of physiologic reserve, which makes them more susceptible to the development of pulmonary complications following significant trauma.
C. The loss of bone density makes rib fractures a dangerous injury for the elderly patient. Their bones are more brittle, and the loss of calcium through normal aging processes makes fractures a greater concern and rehabilitation longer. Elasticity of the rib cage is actually decreased.
D. **There is a gradual decrease in the strength of the respiratory muscles, especially the diaphragm, and a reduced cough reflex, leading to a loss of pulmonary reserve. These age-related changes accompanied with the stress of trauma may predispose the older adult to respiratory complications.**
117. A patient with a stab wound to the right anterior axillary line, 6th intercostal space is pale, restless, tachypneic, tachycardic, and hypotensive. Oxygen is provided and two large-caliber intravenous lines have been established with an isotonic crystalloid solution infusing at a fast rate. The nurse should immediately prepare for:

A. endotracheal intubation.
B. needle decompression.
C. chest tube insertion.
D. blood transfusion.

**Rationale**

A. If the patient has a patent airway and spontaneous breathing, chest tube placement would be the most important intervention at this time. Intubation would be indicated for significant airway or breathing compromise.

B. A penetrating wound to the chest with signs and symptoms of shock is consistent with hemothorax. Chest tube insertion is indicated for hemothorax as the primary method to evacuate the pleural cavity of blood, facilitate reexpansion of the lung, and restore negative pressure to the pleural space. A mechanism of injury consistent with tension pneumothorax is blunt chest trauma or occlusion of the site after an open pneumothorax. The classic presentation would be hypotension, restlessness, asymmetrical chest expansion, distended neck veins, and tracheal deviation. Needle thoracentesis for decompression is indicated for tension pneumothorax. The large bore needle should be placed in the 2nd intercostal space, mid-clavicular line above the 3rd rib.

C. **This mechanism of injury and the assessment findings are consistent with hemothorax. Hemothorax is the presence of blood in the pleural space. The most common cause is penetrating or blunt chest trauma. The patient is also exhibiting signs and symptoms of hypovolemic shock. Chest tube insertion is indicated in hemothorax as the primary method to evacuate the pleural cavity of blood, facilitate reexpansion of the lung, and restore negative pressure to the pleural space.**

D. Although blood transfusion is indicated for shock resulting from blood loss, stabilization of the patient’s airway and breathing would be attempted immediately. The priority treatment indicated would be chest tube insertion; therefore, it should not be delayed to perform other interventions. In addition to chest tube insertion and fluid resuscitation with possible transfusion, the patient may require surgical intervention to identify the source of the bleeding and control it.

**Content Category:** Respiratory Tasks

**Reference**

118. A patient who was a restrained driver involved in a motor vehicle crash (MVC) has some respiratory distress, and bowel sounds are auscultated in the chest. What injury is suspected?

A. **Ruptured diaphragm**
B. Pneumothorax
C. Myocardial contusion
D. Pulmonary contusion

**Rationale**
A. A ruptured diaphragm and diaphragmatic hernia can cause respiratory distress in trauma patients and are characterized by bowel sounds in the chest.
B. Respiratory distress in trauma patients can be caused by injuries such as a pneumothorax. Frontal and lateral impacts can result in pneumothorax. Diminished or absent breath sounds would be noted to the injured side with auscultation, rather than the presence of bowel sounds.
C. If a trauma patient has sustained an injury to the chest wall, a myocardial contusion should be considered; however, it does not result in bowel sounds auscultated in the chest cavity.
D. If a trauma patient has sustained an injury to the chest wall, a pulmonary contusion may have occurred, but this does not result in the auscultation of bowel sounds in the chest.

**Content Category:** Respiratory Tasks

**Reference**

119. Which of the following is more likely to occur after a recent history of a routine abdominal hysterectomy?

A. Urosepsis
B. Bowel perforation
C. Anemia
D. **Pulmonary embolism**

**Rationale**
A. Instrumentation of the urinary tract is a risk factor for the development of urosepsis because pathogens may be introduced by the procedure. This is not routine for a hysterectomy.
B. Bowel perforation is not a common complication after a hysterectomy.
C. Anemia is highly unlikely after hysterectomy unless trauma occurred during the procedure.
D. **Pulmonary embolism is commonly associated with immobilization, oral contraceptive use, and/or pelvic surgery.**

**Content Category:** Respiratory Tasks

**References**
120. Colorimetric exhaled CO₂ detectors will display high CO₂ levels as:
   A. blue.
   B. purple.
   C. yellow.
   D. beige.

**Rationale**
A. Blue is not a color associated with colorimetric exhaled CO₂ detector.
B. The color of a colorimetric exhaled CO₂ detector is based on the concentration of carbon dioxide exhaled. The detector will yield a purple color during inspiration when the CO₂ concentration is low. If the device is purple during expiration, the endotracheal tube is most likely positioned in the esophagus (when adequate perfusion is preserved).
C. Exhaled CO₂ devices are adjuncts for determining correct placement of an endotracheal tube. The color of a colorimetric exhaled CO₂ detector is based on the concentration of carbon dioxide exhaled. The detector will yield a yellow color during expiration when the CO₂ concentration is high. If the device turns yellow during expiration, the endotracheal tube is most likely located in the trachea.
D. The color of a colorimetric exhaled CO₂ detector is based on the concentration of carbon dioxide exhaled. The detector will yield a beige color when there is an intermediate concentration of CO₂; if the device remains beige during exhalation, endotracheal tube placement is questionable (or perfusion is poor).

**Content Category:** Respiratory Tasks

**Reference**

121. When using a bulb syringe to suction an infant, the nurse should:
   A. suction the back of the throat and then the mouth.
   B. **suction the mouth before the nose.**
   C. depress the bulb syringe while in the nose.
   D. limit suctioning to 20-second intervals.

**Rationale**
A. In an infant, suctioning the back of the throat can cause vagal stimulation and should not be performed.
B. **Suctioning the mouth and then the nose may help prevent aspiration. Infants are obligate nose breathers. Once their nasal passages are clear, they could inhale the sections from their oropharynxes.**
C. The bulb syringe should be depressed prior to placement in the nose. Depressing the bulb syringe while in the nose may only push the secretions down into the nasopharynx.
D. Infants are prone to vagal stimulation. Suctioning should be limited to no more than 10 seconds and heart rate must be monitored while suctioning.

**Content Category:** Respiratory Tasks—Pediatric

**Reference**
122. Which of the following conditions would be suspected in a patient with the following presentation: RR 34 breaths/minute and very labored, cyanosis, no breath sounds on the right side, and jugular venous distension?

A. **Tension pneumothorax**
B. Aspiration
C. Flail chest
D. Cardiac tamponade

**Rationale**

A. **Dyspnea, labored respirations, jugular venous distention, and decreased or absent breath sounds are the most common signs and symptoms of a tension pneumothorax.**
B. Patients who have aspirated can have a fever, cough, chest pain, and tachypnea. Breath sounds can be diminished. However, there is no evidence that this patient has aspirated.
C. Patients with a flail chest exhibit similar signs and symptoms that this patient has; however, there would be paradoxical movement of the chest wall, but no jugular venous distension.
D. Patients with cardiac tamponade exhibit hypotension, muffled heart tones, and jugular venous distension (Beck’s triad), anxiety, and dyspnea. Decreased breath sounds would not be present.

**Content Category:** Respiratory Tasks

**References**


123. While assessing a patient, the nurse notices a significant decrease in systolic blood pressure and weakening of pulse during inspiration. This finding is significant and is occasionally found in which one of the following conditions?

A. Pneumonia
B. Mild asthma exacerbation
C. Tuberculosis
D. **Chronic obstructive pulmonary disease (COPD)**

**Rationale**

A. Pulses paradoxus is not consistent with pneumonia.
B. Pulses paradoxus may be seen in severe asthma because intrathoracic pressure increases with inspiration.
C. Pulses paradoxus is not consistent with a diagnosis of tuberculosis.
D. **Pulses paradoxus (decrease of greater than 10 mmHg in systolic blood pressure during inspiration) is seen in disorders that cause a high negative intrathoracic pressure (such as in COPD) or an increase in restrictive forces on the heart (such as in cardiac tamponade).** In COPD, airway obstruction leading to air trapping and hyperinflation results in an increase in intrathoracic pressure. This then results in decreased cardiac output and decreased blood pressure, which is accentuated during inspiration (when intrathoracic pressures increase). Other disorders presenting with this phenomenon can include cardiac tamponade, severe asthma, and pericardial effusion.
124. Which of the following would be expected in a patient with a past medical history of chronic obstructive pulmonary disease (COPD) who has received a nebulized albuterol (Ventolin HFA) treatment?

A. Increased pulse
B. Decreased temperature
C. Increased salivation
D. Decreased blood pressure

Rationale
A. Albuterol (Ventolin HFA) is a beta agonist. Some of the common side effects are tachycardia, atrial fibrillation, extrasystoles, flushing, hypertension, and palpitations. The patient may experience chest discomfort and angina as well.
B. Although the patient may feel flushed and warm, albuterol (Ventolin HFA) generally will not affect temperature.
C. After treatment with albuterol (Ventolin HFA), the patient is likely to experience oropharyngeal drying and irritation.
D. Albuterol (Ventolin HFA) can cause hypertension, nervousness, lightheadedness, migraines, and tremors. Hypotension is not a side effect of this drug.

125. A patient developed dyspnea after receiving blunt trauma to the neck. The patient is in obvious respiratory distress, with hemoptysis and subcutaneous emphysema in the anterior neck. The nurse suspects a:

A. ruptured diaphragm.
B. pneumothorax.
C. tracheobronchial injury.
D. pulmonary contusion.
Rationale

A. Classic signs and symptoms for a ruptured diaphragm include dyspnea, orthopnea, abdominal pain, bowel sounds auscultated in the lower to mid chest and decreased breath sounds on the injured side.

B. Although dyspnea is a sign of a simple pneumothorax, hemoptysis and subcutaneous emphysema are not associated with pneumothorax.

C. Tracheobronchial injuries involve tears of the trachea or mainstem bronchus as a result of blunt or penetrating trauma. Blunt ruptures should be suspected in karate-type blows or “clothesline-type” injuries or when the neck strikes the steering wheel. Signs and symptoms include dyspnea, tachypnea, and hoarseness; subcutaneous emphysema in the neck, face, or suprasternal area; decreased or absent breath sounds; and signs and symptoms of airway obstruction.

D. Pulmonary contusions may be a result of both blunt and penetrating trauma. Hemoptysis as well as dyspnea, ineffective cough, hypoxia, and chest pain are associated signs and symptoms of a pulmonary contusion. Subcutaneous emphysema is not associated with a simple pulmonary contusion.

Content Category: Respiratory Tasks

References


126. A patient with a tracheostomy has a sudden drop in oxygen saturations. The first intervention should be to:

A. insert a bite block in the mouth.
B. increase the oxygen concentration (FiO₂).
C. instill saline into the tracheostomy.
D. suction the tracheostomy.

Rationale

A. In an orally intubated patient, inserting a bite block will prevent the patient from biting down on the tube or the tube kinking, which could decrease oxygen saturations. A bite block will not be effective for a tracheostomy.

B. Increasing the FiO₂ will not help until the airway obstruction is relieved.

C. Saline solution is not effective and may decrease the arterial oxygenation. The inner cannula may need to be removed and cleaned if passing a suction catheter does not relieve the obstruction.

D. The tracheostomy may be occluded with secretions that prevent air from entering the tracheostomy and cause drops in oxygen saturation. Attempt suctioning. If this does not clear the airway immediately, the inner cannula may need to be removed and cleaned.

Content Category: Respiratory Tasks

Reference

127. When assessing the pediatric respiratory system, it is important to remember that:
A. the intercostal muscles are used primarily for breathing.
B. **small amounts of edema or secretions can increase airway resistance.**
C. tracheal and bronchial cartilaginous support rings are O-shaped.
D. the larynx is positioned more posteriorly and cephalad than in adults.

**Rationale**
A. In pediatric patients, the intercostal muscles are poorly developed; therefore, abdominal breathing is common, using the diaphragm as the major muscle of breathing.
B. **Due to the small diameter of the trachea in children, airway obstructions can develop rapidly. Small amounts of edema or secretions can increase airway resistance and may result in partial or complete airway obstruction.**
C. Pediatric tracheal and bronchial cartilaginous support rings are C-shaped. This allows for airway collapse that can be exacerbated during illness or when the neck is not in a neutral position (e.g., flexed or hyperextended).
D. The larynx of a pediatric patient is positioned more anteriorly and cephalad, leading to the increased risk for aspiration causing airway obstruction.

**Content Category:** Respiratory Tasks—Pediatric

**Reference**

128. Which of the following statements made by a patient would lead the nurse to conclude that the patient understands risk factors for pulmonary embolism?
A. “Resuming my birth control pills not only lowers my risk of cancer but can also lower my risk of another clot.”
B. “As long as I drink plenty of water while driving on a long trip, this shouldn’t happen again.”
C. “Stopping the car to get out and stretch every hour when I’m on a long trip is important.”
D. “Switching from my regular cigarettes to the ultra light kind can reduce my risk.”

**Rationale**
A. Increase in estrogen is a risk factor for deep vein thrombosis leading to pulmonary embolism.
B. Although maintaining adequate hydration is important, immobility has been found to be a significant contributor to deep vein thrombosis leading to pulmonary embolism.
C. **The most common contributing factors related to pulmonary embolism are prolonged immobility, obesity, pregnancy, oral contraceptive use, recent multiple bone fracture or surgery, cigarette smoking, and history of deep vein thrombosis or pulmonary embolism. Scheduling stops during a long drive or ride is one way to avoid immobility leading to stasis, which increases the risk of deep vein thrombosis.**
D. The patient with increased risk for deep vein thrombosis leading to pulmonary embolism should be counseled about smoking cessation. Nicotine in cigarettes is a vasoconstrictor. A decrease in vessel diameter alters flow and pressure and is a contributing factor to the development of thrombi.
129. Which statement made by a patient indicates an understanding of discharge instructions for asthma exacerbation?
A. “Most asthma attacks occur suddenly and without warning; usually in the morning.”
B. “The physiologic changes seen in asthma are not reversible.”
C. “Exacerbations are most often seen as a result of a bacterial infection.”
D. “Asthma is primarily caused by swelling of the airway and hypersensitivity to allergens.”

Rationale
A. Asthma attacks do not occur without warning and can be predicted through the identification of triggers and by using peak flow rate measurements.
B. Asthma changes are episodic and reversible with treatment and appropriate use of medication.
C. Although it is true that infection can trigger an asthma exacerbation, most patients have other specific triggers that can be identified and avoided.
D. The patient needs to understand that inflammation and the body’s response to the stimuli are considered the key factors in the treatment and prevention of asthma.

Content Category: Respiratory Tasks

Reference

130. A patient with a penetrating wound to the chest has a patent airway and equal breath sounds. The patient is pale, cold, and diaphoretic with decreased peripheral pulses. Vital signs are BP 90/40 mmHg, HR 132 beats/minute, RR 28 breaths/minute, and oxygen saturation is 90%. Which type of shock is associated with these findings?
A. Hypovolemic
B. Distributive
C. Obstructive
D. Cardiogenic
Rationale

A. Hypovolemic shock results from a blunt or penetrating injury that may cause loss of blood, plasma, or other body fluids. The patient has sustained a penetrating injury to the chest that has resulted in blood loss. This assessment indicates inadequate tissue perfusion (hypotension) as well as demonstrating that the body is trying to compensate (tachycardia and tachypnea).

B. The primary cause of distributive shock is infection or anaphylaxis. This patient has suffered a penetrating injury to the chest. Initially, the patient’s skin would be warm and the pulses bounding.

C. A penetrating wound to the chest may be a cause of obstructive shock if the patient had suffered a tension pneumothorax or a pericardial tamponade. However, this patient has equal breath sounds and palpable peripheral pulses.

D. The most common cause of cardiogenic shock is myocardial infarction. This patient has suffered a penetrating injury to the chest, and the current assessment is more indicative of blood loss than a myocardial infarction.

Content Category: Shock/Multi-System Tasks

Reference


131. Which of the following findings are associated with septic shock?
A. Tachycardia, jugular venous distention, and dyspnea
B. Fever, hypertension, and petechial hemorrhage
C. Flushing, generalized urticaria, and pruritus
D. Hypotension, tachycardia, and hypothermia

Rationale

A. Tachycardia, jugular venous distention, and dyspnea are signs of typical volume overload as seen with congestive heart failure.

B. Hypertension is not a clinical symptom of septic shock.

C. Flushing, generalized urticaria, and pruritus are skin signs of anaphylactic shock and histamine release.

D. Hypotension, tachycardia, and hypothermia are symptoms of late septic shock. Compensatory mechanisms are failing, and widespread system failure becomes more apparent.

Content Category: Shock/Multi-System Tasks

References


132. An elderly patient who takes warfarin (Coumadin) for atrial fibrillation loses consciousness after falling and striking their head. Computerized tomography (CT) scan reveals a subdural hematoma. The emergency nurse anticipates the administration of:

A. packed red blood cells.
B. protamine sulfate.
C. fresh frozen plasma.
D. platelets.

Rationale
A. The patient may eventually require packed red blood cells, but the bleeding needs to be stopped.
B. Protamine sulfate is the antidote for heparin toxicity.
C. When a patient is acutely bleeding and is on warfarin sodium, clotting factors can be returned to normal by administering 200 to 500 mL of fresh frozen plasma.
D. Warfarin causes anticoagulation by inhibiting the synthesis of vitamin K–dependent clotting factors, not by interfering with platelet aggregation.

Content Category: Shock/Multi-System Tasks—Geriatric

Reference

133. Which form of shock results from anaphylaxis?
A. Cardiogenic
B. Distributive
C. Hemorrhagic
D. Obstructive

Rationale
A. Cardiogenic shock is caused by depression of cardiac contractility.
B. In anaphylaxis, histamines and inflammatory mediators cause massive vasodilation resulting in hypotension.
C. Hemorrhagic shock is caused by profound blood loss.
D. Obstructive shock is related to inadequate circulation resulting in obstruction to blood flow.

Content Category: Shock/Multi-System Tasks

Reference

134. Which of the following measures ensures that an intraosseous (IO) needle has been properly placed?
A. Normal saline can be flushed easily into the needle.
B. The needle appears stable and immovable.
C. Blood is aspirated into a syringe.
D. The tissue surrounding the needle is not swollen.
**Rationale**
A. A needle properly placed into the marrow cavity will easily allow saline to be flushed.
B. A needle inserted into the bone will appear stable and immovable. This does not ensure, however, that the needle has been properly placed. It is possible that the needle was inserted too deep or too shallow for the tip to reside in the bone marrow.
C. A properly placed intraosseous needle will rest in the marrow cavity. If anything is aspirated, it will be bone marrow, not blood. The aspirate can, however, be sent to the laboratory for analysis.
D. Although infiltration into the tissues implies that the needle is not properly placed, the reverse is not necessarily true. The needle may terminate in the bone (rather than in the marrow cavity) with the result that no fluids can be infused.

**Content Category:** Shock/Multi-System Tasks

**Reference**

135. Which of the following blood products must be ABO compatible to decrease the risk of transfusion reaction?
A. Leukocyte-poor red blood cells
B. **Fresh frozen plasma**
C. Platelets
D. Albumin

**Rationale**
A. Leukocyte-poor red blood cells, platelets, and albumin do not require ABO compatibility.
B. **Whole blood, packed red blood cells, cryoprecipitate, and fresh frozen plasma must be ABO compatible.**
C. Leukocyte-poor red blood cells, platelets, and albumin do not require ABO compatibility.
D. Leukocyte-poor red blood cells, platelets, and albumin do not require ABO compatibility.

**Content Category:** Shock/Multi-System Tasks

**Reference**

136. Which form of shock occurs due to pump failure?
A. Distributive
B. Obstructive
C. Hypovolemic
D. **Cardiogenic**
**Rationale**

A. Distributive shock is related to loss of blood vessel tone and vasodilation.
B. Obstructive shock results from loss of adequate circulating volume due to an obstruction of flow or vessel compression leading to decreased or absent blood return to the heart.
C. Hypovolemic shock is related to acute blood or volume loss.
D. **Cardiogenic shock is due to ineffective perfusion caused by inadequate contractility of the heart (the pump).**

**Content Category:** Shock/Multi-System Tasks

**Reference**


137. An older adult enters the ED with a chief complaint of confusion, unsteady gait, and incontinence. There is a small bruise to the forehead. History reveals that the patient is taking warfarin (Coumadin). This patient may be experiencing which of the following?

A. **Intracranial hemorrhage**
B. Dementia
C. Overmedication
D. Parkinson’s disease

**Rationale**

A. Forehead bruising, confusion, unsteady gait, and incontinence are indications of head trauma. This presentation, in addition to patient history (patient is taking an anticoagulant), leads to suspicion of head trauma and possible intracranial hemorrhage.
B. Given the data presented, there is no indication that the confusion is long standing. A bruise to the forehead indicates possible head trauma.
C. With the information provided, there is no evidence to indicate that the patient is overmedicated.
D. Although unsteady gait and incontinence are possible, Parkinson’s disease does not cause confusion.

**Content Category:** Shock/Multi-System Tasks—Geriatric

**Reference**


138. Which of the following findings would be the best indicator of shock in the pediatric patient?

A. **Tachycardia**
B. Hypotension
C. Increased respiratory rate
D. Decreased capillary refill time
Rationale
A. Tachycardia is the initial response to shock in the pediatric patient. As blood loss increases, the pediatric patient compensates with increased sympathetic stimulation, causing the heart rate to increase, which increases the cardiac output. Pediatric patients are able to maintain a normal blood pressure until 25% volume loss occurs.
B. Hypotension is a late sign of shock in the pediatric patient. Compensatory mechanisms are in place maintaining a normal blood pressure until 25% or more volume loss occurs.
C. Respiratory rate can be increased by many mechanisms, including pain, anxiety, and crying and is not a reliable indicator of shock.
D. The capillary refill time actually increases in pediatric shock because sympathetic stimulation causes peripheral vasoconstriction to maintain the child’s blood pressure and cardiac output.

Content Category: Shock/Multi-System Tasks—Pediatric

Reference

139. According to the Surviving Sepsis Campaign guidelines (2004), which of the following therapies has the strongest research-based support in sepsis survival?
A. Transfuse blood products to maintain a hemoglobin level of 10 g/dL.
B. Administer initial fluid resuscitation to attain a central venous pressure (CVP) of 15 mmHg.
C. Initiate prophylactic measures against deep vein thrombosis and stress ulcer.
D. Administer recombinant human activated protein C (Xigris).

Rationale
A. Transfusion of blood products to maintain a hemoglobin level of 7 to 9 g/dL is a Grade B recommendation.
B. Initial fluid resuscitation to maintain a CVP between 8 to 12 mmHg is a Grade B recommendation.
C. Prophylactic measures against deep vein thrombosis and stress ulcer are supported by a minimum of two Level I investigations (Grade A).
D. Recombinant human activated protein C (Xigris) is a Grade B recommendation for patients who develop multiple organ failure as a consequence of sepsis.

Content Category: Shock/Multi-System Tasks

Reference

140. All the following are examples of a primary blast injury EXCEPT:
A. cerebral air embolism.
B. tympanic membrane rupture.
C. pneumothorax.
D. thermal burn.
Rationale
A. Primary blast injuries affect primarily air-filled organs. Cerebral air embolism is a primary blast injury.
B. Primary blast injuries affect primarily air-filled organs. Tympanic membrane rupture is a primary blast injury.
C. Primary blast injuries affect primarily air-filled organs. Pneumothorax is a primary blast injury.
D. Thermal burns are categorized as miscellaneous blast injuries.

Content Category: Shock/Multi-System Tasks

Reference

141. The geriatric population is at increased risk for hyperthermia and hypothermia related to a(n):
A. immature nervous system.
B. larger ratio of body surface area to body weight.
C. decreased ability to vasodilate or vasoconstrict blood vessels.
D. increased sweat response.

Rationale
A. An immature nervous system influences hyperthermia and hypothermia in the pediatric population, not the older adult population.
B. Larger ratio of body surface area to body weight influences hyperthermia and hypothermia in the pediatric population, not the older adult population.
C. Older adults have a decreased ability to vasodilate and vasoconstrict blood vessels.
D. The older adult population has a delayed and diminished sweat response, which puts them at an increased risk of heat-related emergencies.

Content Category: Substance Abuse/Toxicological/Environmental Tasks—Geriatric

Reference

142. Which of the following substances may produce potentially hazardous bodily fluids after a patient comes in contact with them?
A. Organophosphates (fertilizers)
B. Acetaminophen (Tylenol)
C. Household bleach (Clorox)
D. Ferrous sulfate (iron)
**Rationale**

A. **Organophosphates** (fertilizers) can be ingested, inhaled, or absorbed topically. Cases of contamination of ED staff have been reported in the past. This is of particular concern in cases of agricultural spills or bioterrorist activity.

B. Gastric contents caused by acetaminophen overdose pose no hazard if contact occurs.

C. Although household bleach causes vomiting, it is not a absorbed dermally if contact occurs.

D. Gastric contents or diarrhea caused by iron overdose poses no hazard if contact occurs.

**Content Category:** Substance Abuse/Toxicological/Environmental Tasks

**References**


143. A patient presents to the ED having sustained a bee sting. Which of the following would indicate the need for emergent management?

- A. Erythema
- B. Increased respiratory rate
- C. Diffuse rash
- D. **Angioedema**

**Rationale**

A. Erythema indicates a localized reaction. It does not warrant emergent management.

B. Increased respiratory rate can be related to anxiety and/or increased respiratory effort related to edema. This would be something to monitor further. However, airway compromise takes precedence.

C. A rash is not life threatening. It is a sign that an allergic reaction is occurring.

D. **Swelling in and around the oral cavity indicates a worsening allergic reaction. It may be the first sign of airway swelling and compromise. Immediate action is needed.**

**Content Category:** Substance Abuse/Toxicological/Environmental Tasks

**Reference**


144. High altitude illness/acute mountain syndrome (AMS) is a collection of symptoms usually caused by which of the following?

- A. Skydiving from heights greater than 10,000 feet
- B. Flying in an unpressurized aircraft to 8,000 feet
- C. **Rapid ascent of an unacclimatized person to 8,000 feet or higher from altitudes below 5,000 feet**
- D. A rapid decompression on an aircraft above 15,000 feet
Rationale
A. This is not a cause of high altitude sickness. It is caused by rapid ascent of an unacclimatized person to 8,000 feet or higher from altitudes below 5,000 feet.
B. This is not a cause of high altitude sickness. It is caused by rapid ascent of an unacclimatized person to 8,000 feet or higher from altitudes below 5,000 feet.
C. **High altitude illness/AMS is caused by rapid ascent of an unacclimatized person to 8,000 feet or higher from altitudes below 5,000 feet.** High altitude illness/AMS may result from an abrupt ascent to a higher altitude, overexertion, and/or use of respiratory depressants. High altitude illness/AMS is a result of hypoxia or insufficient oxygen to the tissue. Due to the decreased partial pressure of oxygen at altitude, there is less oxygen available to the tissue due to incomplete hemoglobin loading.
D. This is not a cause of high altitude sickness. It is caused by rapid ascent of an unacclimatized person to 8,000 feet or higher from altitudes below 5,000 feet.

**Content Category:** Substance Abuse/Toxicological/Environmental Tasks

Reference

145. Whole bowel irrigation (WBI) involving administration of polyethylene glycol electrolyte solution (GoLytely or Colyte) may be used as a treatment to enhance elimination of which of the following substances?
A. Hydrocarbons or petroleum distillates
B. **Ingested bags of cocaine or methamphetamine**
C. Diazepam (Valium)
D. Acetaminophen (Tylenol)

Rationale
A. Due to the potential for aspiration and ineffectiveness in use of liquid substances, use of WBI is contraindicated.
B. **WBI has no direct effect on preventing adsorption of substances. Its primary purpose is to increase transit through the gastrointestinal tract and may enhance passage of bags quickly.**
C. Use of WBI in benzodiazepine overdose is contraindicated due to sedation and ineffectiveness.
D. WBI will have no effect on reducing acetaminophen levels.

**Content Category:** Substance Abuse/Toxicological/Environmental Tasks

References
146. Signs and symptoms of acetaminophen (Tylenol) overdose that occur within the first 24 hours after ingestion include:
   A. **mild gastric upset including nausea and vomiting.**
   B. vomiting with hypoglycemia.
   C. enlarged and painful liver upon palpation.
   D. abnormal liver and renal function tests.

**Rationale**
A. Symptoms may be mild or absent in the early phase, even in significantly toxic individuals. In rare cases of massive poisoning (4-hour blood level > 800 mg/L), metabolic acidosis and coma can develop within the first 24 hours.
B. Vomiting and hypoglycemia occur 48 to 96 hours post acetaminophen (Tylenol) ingestion.
C. Significant right upper quadrant pain occurs 48 to 96 hours post acetaminophen (Tylenol) ingestion.
D. Abnormal liver function and renal function tests occur after the first 24 hours post acetaminophen (Tylenol) ingestion.

**Content Category:** Substance Abuse/Toxicological/Environmental Tasks

**Reference**

147. According to the American Association of Poison Control Centers, the largest number of unintentional poisonings occurs in which age group?
   A. Seniors over 60 years of age
   B. Adolescents aged 13 to 19
   C. Adults aged 21 to 35
   D. Children under 6 years old

**Rationale**
A. Some estimates report as many as 10% of unintentional poisonings involve the elderly, but these statistics are not consistent. An increasingly aging population may increase this number.
B. Adolescents and young adults account for the largest number of intentional poisonings and overdoses.
C. Adults ages 21 to 35 are not representative of a large number of poisonings.
D. Data from the American Association of Poison Control Centers report that children ages 6 and younger account for 51.3% of unintentional poisonings, with 38.5% occurring in children age 2 and younger.

**Content Category:** Substance Abuse/Toxicological/Environmental Tasks—Pediatric

**References**
148. A patient experiences facial edema, stridor, and urticaria after an insect sting. Appropriate interventions include all of the following EXCEPT:
A. administration of intravenous atropine (Atropine Sulfate).
B. securing the airway and providing supplemental oxygen.
C. administration of subcutaneous epinephrine (Adrenaline).
D. administration of intravenous diphenhydramine (Benadryl).

Rationale
A. This patient’s findings indicate anaphylaxis. Atropine (Atropine Sulfate) is not indicated for acute anaphylaxis.
B. Securing the airway and providing supplemental oxygen are appropriate interventions for acute anaphylaxis.
C. Administration of subcutaneous epinephrine (Adrenaline) is an appropriate intervention for acute anaphylaxis.
D. Administration of intravenous diphenhydramine (Benadryl) is an appropriate intervention for acute anaphylaxis.

Content Category: Substance Abuse/Toxicological/Environmental Tasks

Reference

149. In addition to loss of consciousness, respiratory depression, or in extreme cases, sudden sniffing death, inhalation abuse from chlorofluorocarbon (Freon) may result in which clinical finding?
A. Thermal burns
B. Nausea and vomiting
C. Skin rash
D. Blood in urine

Rationale
A. Chlorofluorocarbon (Freon) is a refrigerant, outlawed in many states, but still available. Dermal contact can cause thermal burns.
B. Although nausea and vomiting are possible side effects, they are not supported by data.
C. Skin rash has not been documented.
D. Blood in urine has not been documented.

Content Category: Substance Abuse/Toxicological/Environmental Tasks

Reference
150. Naloxone (Narcan) 2 mg IV push is ordered for an unconscious patient following an overdose of Gamma-hydroxybutyrate (GHB) in a suspected suicide attempt. What is the expected outcome in this setting?

A. The patient becomes apneic and all muscles relax.
B. The respiratory rate will increase.
C. Complete or partial reversal of the effects of the GHB.
D. No response.

Rationale

A. This response is expected to be present after administering a neuromuscular blocking agent.
B. Naloxone (Narcan) is not known to increase respiratory drive or rate in a GHB overdose.
C. Naloxone (Narcan) is a narcotic antagonist. It works by blocking opiate receptor sites, which reverses or prevents toxic effects of narcotic (opioid) analgesics. GHB is not an opioid.
D. Naloxone (Narcan) should have no effect on this patient. Gamma-hydroxybutyrate (GHB) is a putative neurotransmitter, structurally related to gamma-aminobutyric acid and glutamic acid. GHB is a naturally occurring metabolite that produces a biphasic dopamine response and triggers release of an opiate-like substance that mediates sleep cycles, temperature regulation, cerebral glucose metabolism and blood flow, memory, and emotional control and crosses the blood-brain barrier. There is no antidote for GHB overdose.

Content Category: Substance Abuse/Toxicological/Environmental Tasks

References


Instructions

STEP 1: Determine Your Total Score

1. Indicate on your answer sheet whether each of your answers is correct or incorrect.

2. Count the total number of items that you answered correctly (or count the items answered incorrectly and subtract from 150).

3. Look on the Scoring Equivalent grid in Chapter 5 to compare the number answered correctly with the percentage. Your goal is to achieve a score of 70% or greater, for which you must answer 105 items correctly.
**STEP 2: Determine Content Areas for Further Study**

1. Go through the answer sheet and transfer the number of each incorrect answer into the column for the corresponding content area onto the Self-Diagnostic Content Area Worksheet.

2. Count the number of incorrect questions in each content category and total them in the appropriate column.

3. Refer to the last column of the Self-Diagnostic Content Area Worksheet for the number of incorrect answers that constitutes 30% of the total number of questions in that Content Area. If your incorrect answers are equal to or greater than that number (or the total number of all questions in the Blueprint is greater than 30%), additional review in that particular content area is indicated.

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