

Kevin's Review - 85 NCLEX Practice Questions

1. Which of the following agents can be used in the treatment of rheumatoid arthritis, Sjögren's syndrome, and SLE?

- A. auranofin (Ridaura)
- B. allopurinol (Zyloprim)
- C. sulfasalazine (Azulfidine)
- D. chloroquine (Aralen)

Correct Answer: D. chloroquine (Aralen)

Chloroquine has had documented success in the treatment of rheumatoid arthritis, Sjögren's syndrome, and SLE. Auranofin and sulfasalazine are used in the treatment of rheumatoid arthritis, but none are used in the treatment of all three syndromes. Non-FDA approved indications of chloroquine include the treatment of certain autoimmune diseases, such as rheumatoid arthritis and systemic lupus erythematosus. Also, current research suggests that chloroquine may be helpful as an antitumor medication for the treatment of cancer in association with chemotherapy and radiation

- **Option A:** This medication is used as part of a complete treatment program including non-drug therapies (e.g., rest, physical therapy) to treat active rheumatoid arthritis. It is used to treat patients with severe rheumatoid arthritis who have not responded to or cannot take other medications. Auranofin is a gold compound.
- **Option B:** Allopurinol, a xanthine oxidase inhibitor, is a urate-lowering medication. Allopurinol undergoes metabolism in the liver, where it transforms into its pharmacologically active metabolite, oxypurinol. The half-life of allopurinol is 1 to 2 hours, and oxypurinol is about 15 hours. Both allopurinol and oxypurinol are renally excreted. Allopurinol and oxypurinol both inhibit xanthine oxidase, an enzyme in the purine catabolism pathway that converts hypoxanthine to xanthine to uric acid.
- **Option C:** Sulfasalazine is indicated for the treatment of chronic inflammatory diseases such as rheumatoid arthritis in children and adults and ulcerative colitis. It also has off-label uses in treating patients with ankylosing spondylitis, mild to moderately active Crohn's disease, psoriasis, and psoriatic arthritis.

2. Soon after delivery, a neonate is admitted to the central nursery. The nursery nurse begins the initial assessment by:

- A. auscultate bowel sounds.
- B. determining chest circumference.
- C. inspecting the posture, color, and respiratory effort.
- D. checking for identifying birthmarks.

Correct Answer: C. inspecting the posture, color, and respiratory effort.

- **Option C:** One of the first assessments is a baby's Apgar score. At one minute and five minutes after birth, infants are checked for heart and respiratory rates, muscle tone, reflexes, and color. This helps identify babies that have difficulty breathing or have other problems that need further care.

3. When assessing a male client for suicidal risk, which of the following methods of suicide would the nurse identify as most lethal?

- A. Wrist cutting
- B. Headbanging
- C. Use of gun
- D. Aspirin overdose

Correct Answer: C. Use of gun

A crucial factor in determining the lethality of a method is the amount of time that occurs between initiating the method and the delivery of the lethal impact of the method. A clear and complete evaluation and clinical interview provide the information upon which to base a suicide intervention. Although risk factors offer major indications of the suicide danger, nothing can substitute for a focused patient inquiry. However, although all the answers a patient gives may be inclusive, a therapist often develops a visceral sense that his or her patient is going to commit suicide. The clinician's reaction counts and should be considered in the intervention.

- **Option A:** Determine whether the person has any thoughts of hurting him or herself. Suicidal ideation is highly linked to completed suicide. Some inexperienced clinicians have difficulty asking this question. They fear the inquiry may be too intrusive or that they may provide the person with an idea of suicide. In reality, patients appreciate the question as evidence of the clinician's concern. A positive response requires further inquiry.
- **Option B:** If suicidal ideation is present, the next question must be about any plans for suicidal acts. The general formula is that more specific plans indicate greater danger. Although vague threats, such as a threat to commit suicide sometime in the future, are the reason for concern, responses indicating that the person has purchased a gun, has ammunition, has made out a will, and plans to use the gun are more dangerous. The plan demands further questions. If the person envisions a gun-related death, determine whether he or she has the weapon or access to it.
- **Option D:** Nearly one-third of adults who had serious thoughts of suicide made suicide plans, and about 1 in 9 adults who had serious thoughts of suicide made a suicide attempt. In other words, more than two-thirds of adults in 2014 who had serious thoughts of suicide did not make suicide plans, and 8 out of 9 adults who had serious thoughts of suicide did not attempt suicide. This data shows that suicidal thoughts can serve as an indicator of suicidal plans and attempts.

4. Frequent eye examinations are recommended in clients receiving:

- A. chloroquine
- B. colchicine
- C. penicillamine
- D. gold compounds

Correct Answer: A. chloroquine

Corneal deposits are an adverse reaction associated with chloroquine administration, necessitating frequent eye examination. Although chloroquine has relatively few side effects when taken as prescribed, higher doses of chloroquine have been shown to have severe adverse effects. The most severe adverse effects associated with high doses of chloroquine include retinal toxicity, long and subtle symptoms of reduced visual acuity, diplopia, and bilateral loss of vision.

- **Option B:** The most common adverse reactions are related to the gastrointestinal tract. Diarrhea is the most commonly reported symptom (23%), followed by vomiting (17%) and nausea (4% to 17%). There are reports of central nervous system symptoms such as fatigue and headache. Endocrine and metabolic conditions such as gout have been reported with the use of colchicine, as has pharyngolaryngeal pain.
- **Option C:** Most common adverse effects of penicillamine include diarrhea and dysgeusia. 33% of patients can present with an allergic reaction to the drug. It often presents with a rash that heals on stopping the drug. The patient should stop the medication if the patient presents with fever, arthralgia, and lymphadenopathy.
- **Option D:** The new gold compound triethyl phosphine gold (auranofin) can be partially absorbed in the gut following oral administration due to its higher lipophilic nature. This is probably also the main cause for the differences in kinetic properties versus the parenteral gold compounds. Following administration of auranofin, there are lower concentrations of gold in blood and organs; 95% of the gold is excreted in feces whereas 70% of gold, following gold sodium thiomalate, is excreted in the urine.

5. The following clients are presented with signs and symptoms of heat-related illness. Which of them needs to be attended first?

- A. A relatively healthy homemaker who reports that the air conditioner has been broken for days and who manifest fatigue, hypotension, tachypnea, and profuse sweating.
- B. An elderly person who complains of dizziness and syncope after standing in the sun for several hours to view a parade.
- C. A homeless person who is a poor historian; has altered mental status, poor muscle coordination, and hot, dry ashen skin; and whose duration of heat exposure is unknown.
- D. A marathon runner who complains of severe leg cramps and nausea, and manifests weakness, pallor, diaphoresis, and tachycardia.

Correct Answer: C. A homeless person who is a poor historian; has altered mental status, poor muscle coordination, and hot, dry ashen skin; and whose duration of heat exposure is unknown.

The signs and symptoms manifested by the homeless person indicate that a heat stroke is happening, a medical emergency, which can lead to brain damage. Also, there must be clinical signs of central nervous system dysfunction that may include ataxia, delirium, or seizures, in the setting of exposure to hot weather or strenuous physical exertion. Patients who present with heat stroke typically have vital sign abnormalities to include an elevated core body temperature, sinus tachycardia, tachypnea, a widened pulse pressure, and a quarter of patients will be hypotensive.

- **Option A:** The homemaker is experiencing heat exhaustion, which can be managed by fluids and cooling measures. It is important to differentiate where the patient is on the heat illness continuum. The signs and symptoms of heat exhaustion may present similarly include cramping, fatigue, dizziness, nausea, vomiting, headache. If progression to end-organ damage occurs it then becomes heat injury.
- **Option B:** The elderly client is at risk for heat syncope and should be advised to rest in a cool area and avoid similar situations. Heat syncope is the temporary, self-limited dizziness, weakness, or loss of consciousness during prolonged standing or positional changes in a hot environment, including physical activity. The thinking is that it is due to a combination of dehydration, pooling of blood in the venous system, decreased cardiac filling, and low blood pressure, which leads to decreased cerebral blood flow.

- **Option D:** The runner is experiencing heat cramps, which can be managed with fluid and rest. Heat cramps: include involuntary spasmodic contractions of large muscle groups as opposed to an isolated muscle spasm/cramp that can also occur during or after exertion. This condition is due to a relative deficiency of sodium, potassium, chloride, or magnesium. Other symptoms may include nausea, vomiting, fatigue, weakness, sweating, and tachycardia.

6. The nurse understands that the fetal head is in which of the following positions with a face presentation?

- A. Completely flexed
- B. Completely extended
- C. Partially extended
- D. Partially flexed

Correct Answer: B. Completely extended

In a face presentation, the fetal head and neck are hyperextended, causing the occiput to come in contact with the upper back of the fetus while lying on a longitudinal axis.

- **Option A:** With a vertex presentation, the head is completely or partially flexed.
- **Option C:** With a brow (forehead) presentation, the head would be partially extended.
- **Option D:** Partially flexed fetal head is categorized as a sinciput presentation.

7. A nurse has the order to begin administering warfarin sodium (Coumadin) to a client. While implementing this order, the nurse ensures that which of the following medications is available on the nursing unit as the antidote for Coumadin?

- A. Vitamin K
- B. Aminocaproic acid
- C. Potassium chloride
- D. Protamine sulfate

Correct Answer: A. Vitamin K

The antidote to warfarin (Coumadin) is Vitamin K and should be readily available for use if excessive bleeding or hemorrhage should occur. When managing warfarin toxicity, the initial step would be to discontinue warfarin and then administer vitamin K (phytonadione). The vitamin K may administration can be either via the oral, intravenous, or subcutaneous route. However, the initial administration of oral vitamin K is often preferable in patients without major bleeding or extremely elevated INR.

- **Option B:** Aminocaproic acid has received approval from the Food and Drug Administration (FDA) for the therapeutic management of acute hemorrhages caused by elevated fibrinolytic activity leading to surgical complications after cardiac surgery, hematological disorders, hepatic cirrhosis, and neoplastic disease.
- **Option C:** Potassium chloride is a medication used in the management and treatment of hypokalemia. It is in the electrolyte supplement class of medications. Regardless of the administration route, KCl is used to increase the potassium content of the body. Approximately

98% of all potassium in the body exists within cells, particularly skeletal muscle cells.

- **Option D:** The antidote to heparin is protamine sulfate and should be readily available for use if excessive bleeding or hemorrhage should occur. Protamine is a medication used to reverse and neutralize the anticoagulant effects of heparin. Protamine is the specific antagonist that neutralizes heparin-induced anticoagulation. When appropriately dosed, this neutralization reduces the risk of postoperative bleeding.

8. In applying the principles of pain treatment, what is the first consideration?

- A. Treatment is based on client goals.
- B. A multidisciplinary approach is needed.
- C. The client must believe in perceptions of own pain.
- D. Drug side effects must be prevented and managed.

Correct Answer: C. The client must be believed about perceptions of own pain.

The client must be believed and his or her experience of pain must be acknowledged as valid. The data gathered via client reports can then be applied to other options in developing the treatment plan. Assist patients to develop a daily routine to support achievement and, where necessary, readjustment of habits and roles according to individual capacity and life situation.

- **Option A:** Use a person-centered perspective to formulate collaborative intervention strategies consistent with a physical therapy perspective. Understand the need to involve family members and significant others including employers where appropriate.
- **Option B:** Demonstrate an ability to integrate the patient assessment into an appropriate management plan using the concepts and strategies of clinical reasoning.
- **Option D:** Understand the principles of an effective therapeutic patient/professional relationship to reduce pain, promote optimal function and reduce disability through the use of active and where appropriate, passive pain management approaches.

9. Which of the following tasks should be included in the immediate postoperative management of a client who has undergone gastric resection?

- A. Monitoring gastric pH to detect complications.
- B. Assessing for bowel sounds.
- C. Providing nutritional support.
- D. Monitoring for symptoms of hemorrhage.

Correct Answer: D. Monitoring for symptoms of hemorrhage.

The client should be monitored closely for signs and symptoms of hemorrhage, such as bright red blood in the nasogastric tube suction, tachycardia, or a drop in blood pressure. Identify signs and symptoms requiring medical evaluation such as persistent nausea and vomiting or abdominal fullness; weight loss; diarrhea; foul-smelling fatty or tarry stools; bloody or coffee-ground vomitus or presence of bile, fever. Instruct the patient to report changes in pain characteristics.

- **Option A:** Gastric pH may be monitored to evaluate the need for histamine-2 receptor antagonists. Caution the patient to read labels and avoid products containing ASA, ibuprofen. This can cause

gastric irritation and bleeding. Review medication purpose, dosage, and schedule, and possible side effects.

- **Option B:** Bowel sounds may not return for up to 72 hours postoperatively. Auscultate for resumption of bowel sounds and note passage of flatus. Peristalsis can be expected to return about the third postoperative day, signaling readiness to resume oral intake.
- **Option C:** Nutritional needs should be addressed soon after surgery. Monitor tolerance to fluid and food intake, noting abdominal distension, reports of increased pain, cramping, nausea, and vomiting. Avoid milk and high-carbohydrate foods in the diet because this may trigger dumping syndrome.

10. An insulin-dependent diabetic delivered a 10-pound male. When the baby is brought to the nursery, the priority of care is to:

- A. clean the umbilical cord with Betadine to prevent infection
- B. give the baby a bath
- C. call the laboratory to collect a PKU screening test
- D. check the baby's serum glucose level and administer glucose if < 40 mg/dL

Correct Answer: D. check the baby's serum glucose level and administer glucose if < 40 mg/dL.

- **Option D:** Because the mother has diabetes, the baby is at risk for problems. The newborn baby may be large in size (macrosomia). Big babies are more likely to get hurt during delivery. These include shoulder injuries. The baby may also have low blood sugar (hypoglycemia), low blood calcium, low blood iron, and high levels of red blood cells and thickened blood. Hypoglycemia occurs if the mother's blood glucose levels have been consistently high, causing the fetus to have a high level of insulin in its circulation. The baby's blood glucose level is checked after birth, and if the level is too low, it may be necessary to give the baby glucose intravenously.

11. A male client who is experiencing disordered thinking about food being poisoned is admitted to the mental health unit. The nurse uses which communication technique to encourage the client to eat dinner?

- A. Focusing on self-disclosure of own food preference.
- B. Using open-ended questions and silence.
- C. Offering opinions about the need to eat.
- D. Verbalizing reasons that the client may not choose to eat.

Correct Answer: B. Using open-ended question and silence

Open-ended questions and silence are strategies used to encourage clients to discuss their problem in a descriptive manner. At times, it's useful to not speak at all. Deliberate silence can give both nurses and patients an opportunity to think through and process what comes next in the conversation. It may give patients the time and space they need to broach a new topic. Nurses should always let patients break the silence.

- **Option A:** Sometimes during a conversation, patients mention something particularly important. When this happens, nurses can focus on their statement, prompting patients to discuss it further. Patients don't always have an objective perspective on what is relevant to their case; as impartial

observers, nurses can more easily pick out the topics to focus on.

- **Option C:** Recognition acknowledges a patient's behavior and highlights it without giving an overt compliment. A compliment can sometimes be taken as condescending, especially when it concerns a routine task like making the bed. However, saying something like "I noticed you took all of your medications" draws attention to the action and encourages it without requiring a compliment.
- **Option D:** Patients often ask nurses for advice about what they should do about particular problems or in specific situations. Nurses can ask patients what they think they should do, which encourages patients to be accountable for their own actions and helps them come up with solutions themselves.

12. A client comes into the health clinic 3 years after undergoing resection of the terminal ileum complaining of weakness, shortness of breath, and a sore tongue. Which client statement indicates a need for intervention and client teaching?

- A. "I have been drinking plenty of fluids."
- B. "I have been gargling with warm salt water for my sore tongue."
- C. "I have 3 to 4 loose stools per day."
- D. "I take a vitamin B12 tablet every day."

Correct Answer: D. "I take a vitamin B12 tablet every day."

Vitamin B12 combines with intrinsic factor in the stomach and is then carried to the ileum, where it is absorbed in the bloodstream. In this situation, vitamin B12 cannot be absorbed regardless of the amount of oral intake of sources of vitamin B12 such as animal protein or vitamin B12 tablets. Vitamin B12 needs to be injected every month, because the ileum has been surgically removed.

- **Option A:** Replacement of fluids and electrolytes is important when the client has continuous multiple loose stools on a daily basis. Massive small bowel resection can lead to short bowel syndrome (SBS), a condition that is characterized by malnutrition and malabsorption secondary to loss of functional small bowel and more rapid intestinal transit. In addition to weight loss and protein-calorie malnutrition, patients suffer from diarrhea, steatorrhea, electrolyte abnormalities, and deficiencies in fat-soluble vitamins.
- **Option B:** Warm salt water is used to soothe sore mucous membranes. Parenteral nutrition, therefore, is a mainstay of early SBS management to limit malnutrition. Early return to enteral feeds once ileus has resolved is advised, even if a diagnosis of SBS is expected. Enteral feeding is thought to stimulate intestinal adaptation by both directly stimulating enterocytes and by inducing endocrine and paracrine effects signaling for hypertrophy of the remaining small bowel mucosa.
- **Option C:** Crohn's disease and small bowel resection may cause several loose stools a day. Drugs such as loperamide, diphenoxylate and atropine, and opiates will slow gut function, increasing the potential absorptive time of enteral feeds. Reducing gastrointestinal secretion and controlling diarrhea are also important goals for maximizing absorption.

13. Which of the following should the nurse do first for a 15-year-old boy with a full leg cast who is screaming in unrelenting pain and exhibiting right foot pallor signifying compartment syndrome?

- A. Medicate him with acetaminophen.
- B. Notify the physician immediately.
- C. Release the traction.
- D. Monitor him every 5 minutes.

Correct Answer: B. Notify the physician immediately

Compartment syndrome is an emergent situation and the physician needs to be notified immediately so that interventions can be initiated to relieve the increasing pressure and restore circulation.

Compartment syndrome is a painful condition that occurs when pressure within the muscles builds to dangerous levels. This pressure can decrease blood flow, which prevents nourishment and oxygen from reaching nerve and muscle cells.

- **Option A:** Acetaminophen (Tylenol) will be ineffective since the pain is related to the increasing pressure and tissue ischemia. Acute compartment syndrome is a surgical emergency. There is no effective non-surgical treatment.
- **Option C:** The cast, not traction, is being used in this situation for immobilization, so releasing the traction would be inappropriate. Casts and tight bandages may lead to compartment syndrome. If symptoms of compartment syndrome develop, remove or loosen any constricting bandages. If there is a cast, contact the doctor immediately.
- **Option D:** In this situation, specific action not continued monitoring is indicated. In acute compartment syndrome, unless the pressure is relieved quickly, permanent disability and tissue death may result.

14. A laboring client has external electronic fetal monitoring in place. Which of the following assessment data can be determined by examining the fetal heart rate strip produced by the external electronic fetal monitor?

- A. Gender of the fetus
- B. Fetal position
- C. Labor progress
- D. Oxygenation

Correct Answer: D. Oxygenation

Oxygenation of the fetus may be indirectly assessed through fetal monitoring by closely examining the fetal heart rate strip. Accelerations in the fetal heart rate strip indicate good oxygenation, while decelerations in the fetal heart rate sometimes indicate poor fetal oxygenation.

- **Option A:** In the second and third trimesters of pregnancy, ultrasound imaging scans the genital anatomy of the fetus to identify its gender. In the early studies conducted on the use of ultrasound results for identifying the fetal gender, a male fetus was demonstrated by the presence of a scrotum and a penis, and a female fetus by the absence of these organs.
- **Option B:** Ultrasonography is noninvasive and has been found to be more accurate for assessing position of the fetal head, during labor. Recent studies by Sherer et al., Chou et al., Dupuis et al., and Zahalka et al. have shown that ultrasound scanning is a quick and efficient way of increasing the accuracy of the assessment of fetal head position during the second stage of labor.
- **Option C:** Recently, intrapartum transperineal ultrasound for the assessment of fetal head descent has been introduced to assess labor progress in the first stage of labor in a more objective and

non-invasive way.

15. Which of the following diagnostic tools is most commonly used to determine the location of myocardial damage?

- A. Cardiac catheterization
- B. Cardiac enzymes
- C. Echocardiogram
- D. Electrocardiogram (ECG)

Correct Answer: D. Electrocardiogram (ECG)

The ECG is the quickest, most accurate, and most widely used tool to determine the location of myocardial infarction. ECG is an effective tool to distinguish between acute MI and the myocardial ischemia that usually precedes it, as not all patients with myocardial ischemia will develop MI. Transitioning from ischemia to infarction results in precise sequential electrical abnormalities captured on ECG.

- **Option A:** Cardiac catheterization is an invasive study for determining coronary artery disease and may also indicate the location of myocardial damage, but the study may not be performed immediately. Cardiac catheterization is performed for both diagnostic and therapeutic purposes. Despite significant advancement in non-invasive cardiac imaging, it remains the standard for the measurement of cardiac hemodynamics.
- **Option B:** Cardiac enzymes are used to diagnose MI but can't determine the location. Cardiac troponins are specific and sensitive biomarkers of cardiac ischemia, and they are the preferred blood test in the evaluation of patients suspected to have acute MI. There are sensitive and highly sensitive assays to detect cardiac troponin levels in the blood.
- **Option C:** An echocardiogram is used most widely to view myocardial wall function after an MI has been diagnosed. Echocardiography is one of the most commonly used, non-invasive methods for looking at cardiac anatomy. Echocardiography is used to provide thin cross-sections of cardiac structures, this includes; left and right

16. Which of the following terms best describes the pain associated with appendicitis?

- A. Aching
- B. Fleeting
- C. Intermittent
- D. Steady

Correct Answer: D. Steady

The pain begins in the epigastrium or periumbilical region, then shifts to the right lower quadrant and becomes steady. The pain may be moderate to severe. Classically, appendicitis presents as an initial generalized or periumbilical abdominal pain that then localizes to the right lower quadrant. Initially, as the visceral afferent nerve fibers at T8 through T10 are stimulated, and this leads to vague centralized pain.

- **Option A:** Pain upon passive extension of the right leg with the patient in the left lateral decubitus position is known as psoas sign. This maneuver stretches the psoas major muscle, which can be irritated by an inflamed retrocecal appendix. Patients often flex the hip to shorten the psoas major muscle and relieve pain.
- **Option B:** As the appendix becomes more swollen and inflamed, it will irritate the lining of the abdominal wall, known as the peritoneum. This causes localized, sharp pain in the right lower part of the abdomen.
- **Option C:** As the appendix becomes more inflamed, and the adjacent parietal peritoneum is irritated, the pain becomes more localized to the right lower quadrant. The pain tends to be more constant and severe than the dull, aching pain that occurs when symptoms start.

17. A newborn's mother is alarmed to find small amounts of blood on her infant girl's diaper. When the nurse checks the infant's urine it is straw colored and has no offensive odor. Which explanation to the newborn's mother is most appropriate?

- A. "It appears your baby has a kidney infection"
- B. "Breast-fed babies often experience this type of bleeding problem due to lack of vitamin C in the breast milk"
- C. "The baby probably passed a small kidney stone"
- D. "Some infants experience menstruation like bleeding when hormones from the mother are not available"

Correct Answer: D. "Some infants experience menstruation like bleeding when hormones from the mother are not available".

- **Option D:** Most dramatically, at 2 or 3 days of age, a girl infant may have a little bit of bleeding from her vagina. This is perfectly normal; it is caused by the withdrawal of the hormones she was exposed to in the womb. It will be her first and last menstrual period for another decade or so.

18. Which clinical manifestation would the nurse expect a client diagnosed with acute cholecystitis to exhibit?

- A. Jaundice, dark urine, and steatorrhea
- B. Acute right lower quadrant (RLQ) pain, diarrhea, and dehydration
- C. Ecchymosis petechiae, and coffee-ground emesis
- D. Nausea, vomiting, and anorexia

Correct Answer: D. Nausea, vomiting, and anorexia

Acute cholecystitis is an acute inflammation of the gallbladder commonly manifested by the following: anorexia, nausea, and vomiting; biliary colic; tenderness and rigidity the right upper quadrant (RUQ) elicited on palpation (e.g., Murphy's sign); fever; fat intolerance; and signs and symptoms of jaundice.

- **Option A:** Jaundice, dark urine, and steatorrhea are clinical manifestations of the icteric phase of hepatitis. Patients in this phase present with dark-colored urine and pale-colored stool. Some patients develop jaundice and right upper quadrant pain with liver enlargement.

- **Option B:** Cases of chronic cholecystitis present with progressing right upper quadrant abdominal pain with bloating, food intolerances (especially greasy and spicy foods), increased gas, nausea, and vomiting. Pain in the mid back or shoulder may also occur.
- **Option C:** Ecchymosis, petechiae, and coffee-ground emesis are clinical manifestations of esophageal bleeding. The coffee-ground appearance indicates old bleeding. The clinical presentation can vary but should be well-characterized. Hematemesis is the overt bleeding with vomiting of fresh blood or clots. Melena refers to dark and tarry-appearing stools with a distinctive smell. The term “coffee-grounds” describes gastric aspirate or vomitus that contains dark specks of old blood.

19. Nurse Tyra is instructing a client receiving probenecid (Benemid), she should cover all of the following information except the need to:

- A. Change in dietary habits.
- B. Increase fluid intake.
- C. Have frequent laboratory work done.
- D. Recognize side effects.

Correct Answer: C. Have frequent laboratory work done.

Side effects of probenecid treatment are relatively benign, and there is no indication that there is a need for frequent laboratory evaluation. Probenecid is used to treat chronic gout and gouty arthritis. It is used to prevent attacks related to gout, not treat them once they occur. It acts on the kidneys to help the body eliminate uric acid. Probenecid is also used to make certain antibiotics more effective by preventing the body from passing them in the urine.

- **Option A:** Probenecid may cause an upset stomach. Take with food or antacids. Keep this medication in the container it came in, tightly closed, and out of reach of children. Store it at room temperature and away from excess heat and moisture (not in the bathroom).
- **Option B:** Drink at least six to eight full glasses of water a day while taking probenecid to prevent kidney stones, unless directed to do otherwise by the doctor. Unneeded medications should be disposed of in special ways to ensure that pets, children, and other people cannot consume them. However, one should not flush this medication down the toilet. Instead, the best way to dispose of the medication is through a medicine take-back program.
- **Option D:** Probenecid may cause side effects. Tell your doctor if any of these symptoms are severe or do not go away: headache, upset stomach, vomiting, loss of appetite, and dizziness.

20. The nurse is assessing the functioning of a chest tube drainage system in a client with hemothorax. Which of the following findings should prompt the nurse to notify the physician?

- A. Fluctuation of water in the tube in the water seal chamber during inhalation and exhalation.
- B. Drainage system maintained below the client’s chest.
- C. Drainage amount of 100ml in the drainage collection chamber.
- D. Occlusive dressing in place over the chest tube insertion site.

Correct Answer: C. Drainage amount of 100ml in the drainage collection chamber.

Drainage of more than 70 to 100 mL/hour is not normal and requires the immediate notification of the physician. Measure date and time, and the amount of drainage, and mark on the outside of the chamber. Record amount and characteristics of the drainage on the fluid balance sheet and patient chart. Drainage that is red and free-flowing indicates a hemorrhage. A large amount of drainage, or drainage that changes in color, should be recorded and reported to the primary health care provider.

- **Option A:** The water in the water seal chamber will rise and fall (swing) with respirations. This will diminish as the pneumothorax resolves. Watch for unexpected cessation of swing as this may indicate the tube is blocked or kinked. Cardiac surgical patients may have some of their drains in the mediastinum in which case there will be no swing in the water seal chamber.
- **Option B:** Collection chamber (drainage system) is below the level of the chest and secured to prevent it from being accidentally knocked over. The drainage system must remain upright for the water-seal chamber to function correctly. The chest drainage system must be lower than the chest to facilitate drainage and prevent backflow.
- **Option D:** The classic dressing for chest thoracostomy tube (CTT) insertion sites is petroleum gauze held in place by a secondary dressing of sterile, 4? x 4? sponge gauze secured with tape. Studies suggest that petroleum gauze macerates skin over time.

21. Which of the following is accurate pertaining to physical exercise and type 2 diabetes mellitus?

- A. Physical exercise can slow the progression of type 2 diabetes mellitus.
- B. Strenuous exercise is beneficial when blood glucose is high.
- C. Patients who take insulin and engage in strenuous physical exercise might experience hyperglycemia.
- D. Adjusting insulin regimen allows for safe participation in all forms of exercise.

Correct Answer: A. Physical exercise can slow the progression of type 2 diabetes mellitus.

Physical exercise slows the progression of type 2 diabetes mellitus because exercise has beneficial effects on carbohydrate metabolism and insulin sensitivity. Exercise improves blood glucose control in type 2 diabetes, reduces cardiovascular risk factors, contributes to weight loss, and improves well-being.

- **Option B:** Daily exercise, or at least not allowing more than 2 days to elapse between exercise sessions, is recommended to enhance insulin action. Adults with type 2 diabetes should ideally perform both aerobic and resistance exercise training for optimal glycemic and health outcomes.
- **Option C:** Insulin action in muscle and liver can be modified by acute bouts of exercise and by regular physical activity. Acutely, aerobic exercise increases muscle glucose uptake up to fivefold through insulin-independent mechanisms.
- **Option D:** Insulin and foods both must be adjusted to allow safe participation in exercise. Aerobic exercise clearly improves glycemic control in type 2 diabetes, particularly when at least 150 min/week are undertaken. Resistance exercise (free weights or weight machines) increases strength in adults with type 2 diabetes by about 50% and improves A1C by 0.57%.

22. Which of the following adverse effects is specific to the biguanide diabetic drug metformin (Glucophage) therapy?

- A. Hypoglycemia
- B. Lactic acidosis
- C. GI distress
- D. Somnolence

Correct Answer: B . Lactic acidosis

Lactic acidosis is the most dangerous adverse effect of metformin administration with death resulting in approximately 50 percent of individuals who develop lactic acidosis while on this drug. Metformin has a black box warning for lactic acidosis. This side effect is rare but serious and has an incident rate of 1/30,000 patients. Lactate builds up in the body and cannot be eliminated easily, which leads to metabolic acidosis. This lowering of pH in the blood can cause nonspecific signs and symptoms, which include malaise, respiratory distress, elevated lactate levels, and anion gap acidosis.

- **Option A:** Metformin does not induce insulin production; thus, the administration does not result in hypoglycemic events. Metformin is a biguanide drug that reduces blood glucose levels by decreasing the production of glucose in the liver, decreasing intestinal absorption, and increasing insulin sensitivity. Metformin decreases both basal and postprandial blood glucose.
- **Option C:** Some nausea, vomiting, and diarrhea may develop but is usually not severe. Gastrointestinal side effects, including diarrhea, nausea, and vomiting, are very common and typically occur in up to 30% of patients taking metformin.
- **Option D:** Metformin does not induce sleepiness. Occurring less frequently, some patients experience chest discomfort, headache, diaphoresis, hypoglycemia, weakness, and rhinitis. Decreased vitamin B12 levels are associated with long-term metformin and should be monitored, particularly in anemic or peripheral neuropathy patients. Supplementation of vitamin B12 may be necessary.

23. Which of the following behaviors would indicate that a client was bonding with her baby?

- A. The client asks her husband to give the baby a bottle of water.
- B. The client talks to the baby and picks him up when he cries.
- C. The client feeds the baby every three hours.
- D. The client asks the nurse to recommend a good child care manual.

Correct Answer: B. The client talks to the baby and picks him up when he cries.

- **Option B:** Maternal-infant bonding is the intense attachment that develops between parents and their baby. Mothers and infants are designed to stay close to each other. For this to happen, nature has provided a process of “bonding”, so that normally a mother becomes attached to her particular baby, making her want to stay near him or her and respond to any crying or other signals.

24. The client has a deep partial-thickness injury to the posterior neck. Which intervention is most important to use during the acute phase to prevent contractures associated with this injury?

- A. Place a towel roll under the client’s neck or shoulder.

- B. Keep the client in a supine position without the use of pillows.
- C. Have the client turn the head from side to side 90 degrees every hour while awake.
- D. Keep the client in a semi-Fowler's position and actively raise the arms above the head every hour while awake.

Correct Answer: C. Have the client turn the head from side to side 90 degrees every hour while awake.

The function that would be disrupted by a contracture to the posterior neck is flexion. Moving the head from side to side prevents such a loss of flexion. Deformities and contractures can often be prevented by proper positioning. Maintaining proper body alignment when the patient is in bed is vital. This movement is what would prevent contractures from occurring.

- **Option A:** Placing a towel roll under the neck might not help prevent contractures. Immobilization is only allowed when a part of the body has just been grafted. Even then, the area must be kept in an antideformity position.
- **Option B:** The client should not only be in a supine position but there should be a movement to avoid contractures. Splinting and proper positioning will also help achieve the prevention of contractures. As a matter of importance, movement should be incorporated into the patient's daily routine from their inception to the hospital.
- **Option D:** The burns are in the client's posterior neck. Performing active or passive range of motion (ROM) exercises, depending on the patient's level of consciousness is crucial in the prevention of these complications.

25. A client with acute asthma showing inspiratory and expiratory wheezes and a decreased expiratory volume should be treated with which of the following classes of medication right away?

- A. Beta-adrenergic blockers
- B. Bronchodilators
- C. Inhaled steroids
- D. Oral steroids

Correct Answer: B. Bronchodilators

Bronchodilators are the first line of treatment for asthma because bronchoconstriction is the cause of reduced airflow. Bronchodilators are indicated for individuals that have lower than optimal airflow through the lungs. The mainstay of treatment is beta-2 agonists that target the smooth muscles in the bronchioles of the lung. Various respiratory conditions may require bronchodilators, including asthma and chronic obstructive pulmonary disease.

- **Option A:** Beta-adrenergic blockers aren't used to treat asthma and can cause bronchoconstriction. The catecholamines, epinephrine, and norepinephrine bind to B1 receptors and increase cardiac automaticity as well as conduction velocity. B1 receptors also induce renin release, and this leads to an increase in blood pressure. In contrast, binding to B2 receptors causes relaxation of the smooth muscles along with increased metabolic effects such as glycogenolysis.
- **Option C:** Inhaled steroids may be given to reduce the inflammation but aren't used for emergency relief. Inhaled corticosteroids have potent glucocorticoid activity and work directly at the cellular level by reversing capillary permeability and lysosomal stabilization to reduce inflammation. The onset of action is gradual and may take anywhere from several days to several weeks for maximal

benefit with consistent use.

- **Option D:** Corticosteroids produce their effect through multiple pathways. In general, they produce anti-inflammatory and immunosuppressive effects, protein and carbohydrate metabolic effects, water and electrolyte effects, central nervous system effects, and blood cell effects. Oral administration is more common for chronic treatment. Patients should receive non-systemic therapy whenever possible, to minimize systemic exposure.

26. The nurse has just admitted a client with severe depression. From which focus should the nurse identify a priority nursing diagnosis?

- A. Nutrition
- B. Elimination
- C. Activity
- D. Safety

Correct Answer: D. Safety

Safety is a priority of care for the depressed client. Precautions to prevent suicide must be a part of the plan. Depression can be effectively treated in primary care settings using an evidence-based collaborative approach in which primary care providers are systematically supported by mental health providers in caring for a caseload of patients.

- **Option A:** The client's nutritional plan can be discussed after his safety has been ensured. Researchers found that a healthy diet (the Mediterranean diet as an example) was associated with a significantly lower risk of developing depressive symptoms.
- **Option B:** Elimination should also be part of the nursing care plan, but this is not the priority. Any psychosocial disturbances can impact on nervous system neuroplasticity and this, in turn, will adversely affect downstream systems including the GIT.
- **Option C:** Activities for a depressed client should be structured and introduced gradually. Teach visualization as a tool to "bring them back down to their bodies" and out of the constant cycle of negative thoughts. Clients learn methods such as the "tree meditation," in which they imagine themselves as a tree that is growing from the ground and sprouting branches.

27. She reads about Path-Goal theory. Which of the following behaviors is manifested by the leader who uses this theory?

- A. Recognizes staff for going beyond expectations by giving them citations.
- B. Challenges the staff to take individual accountability for their own practice.
- C. Admonishes staff for being laggards.
- D. Reminds staff about the sanctions for non-performance.

Correct Answer: A. Recognizes staff for going beyond expectations by giving them citations

The path-Goal theory according to House and associates rewards good performance so that others would do the same. The path-goal theory states that a leader's behavior is contingent on the satisfaction, motivation, and performance of their employees. The manager's job is viewed as guiding workers to choose the best paths to reach both their goals as well as the corporation's goals.

- **Option B:** It is the leader's job to assist followers in attaining goals and to provide the direction and support needed to ensure that their goals are compatible with the organization's goals. Path-goal theory assumes that leaders are flexible and that they can change their style, as situations require.
- **Option C:** The fourth theory is the transformational leadership theory, which suggests that good leaders are those able to stimulate, transform, and use the values, beliefs, and needs of their followers to accomplish tasks.
- **Option D:** Providing employees with the necessary tools to resolve issues in the workplace will ensure organizational success is not hindered. Effective leadership not only guides employees in the right direction towards their goals but also requires leaders to assist in the identification of goals and objectives from the get-go.

28. A 43-year-old music teacher is at the clinic for her annual physical examination. She mentions a history of recurrent sinus infections that tend to flare up, especially during the cold season. The infections sometimes impact her ability to sing and teach due to the associated nasal congestion and change in voice resonance. The nurse, aiming to provide comprehensive patient education, takes the opportunity to discuss the functions and significance of the paranasal sinuses. After giving an overview, the nurse challenges the patient with a question, "I've shared some facts about the paranasal sinuses. Can you identify which of the following statements is NOT true about them?"

- A. They protect the nasal cavity by producing mucus.
- B. They act as resonating chamber for voice production.
- C. The paranasal sinuses are lined with ciliated epithelium.
- D. They increase the weight of the skull.

Correct Answer: D. They increase the weight of the skull.

Paranasal sinuses do not significantly increase the weight of the skull because they are composed of relatively lightweight, air-filled spaces within the bones of the skull. These sinuses are lined with mucous membranes and serve various functions, including lightening the skull, humidifying and filtering the air breathe, and enhancing voice resonance, without adding significant weight to the head.

- **Option A:** Paranasal sinuses help protect the nasal cavity by producing mucus. This mucus serves to humidify and moisten the incoming air, trap and remove dust and foreign particles, and prevent the nasal passages from drying out, which aids in maintaining a healthy respiratory environment.
- **Option B:** The sinuses serve as resonance chambers for voice production, helping to modify the quality of sound produced during speech.
- **Option C:** The paranasal sinuses are lined with ciliated epithelium, which helps to trap and remove foreign particles from the respiratory tract.

29. The neonatal circulation differs from the fetal circulation because

- A. The fetal lungs are non-functioning as an organ and most of the blood in the fetal circulation is mixed blood.
- B. The blood at the left atrium of the fetal heart is shunted to the right atrium to facilitate its passage to the lungs.

- C. The blood in the left side of the fetal heart contains oxygenated blood while the blood on the right side contains unoxygenated blood.
- D. None of the above.

Correct Answer: A. The fetal lungs are non-functioning as an organ and most of the blood in the fetal circulation is mixed blood.

The fetal lungs are fluid-filled while in utero and are still not functioning. It only begins to function in extrauterine life. Except for the blood as it enters the fetus immediately from the placenta, most of the fetal blood is mixed blood.

- **Option B:** The hole between the top two heart chambers (right and left atrium) is called a patent foramen ovale (PFO). This hole allows the oxygen rich blood to go from the right atrium to the left atrium and then to the left ventricle and out the aorta. As a result the blood with the most oxygen gets to the brain.
- **Option C:** The placenta accepts the blood without oxygen from the fetus through blood vessels that leave the fetus through the umbilical cord (umbilical arteries, there are two of them). When blood goes through the placenta it picks up oxygen. The oxygen rich blood then returns to the fetus via the third vessel in the umbilical cord (umbilical vein). The oxygen rich blood that enters the fetus passes through the fetal liver and enters the right side of the heart.

30. Clay is an 8-year-old boy diagnosed with heart failure. Which of the following shows that he is strictly following the directed therapeutic regimen?

- A. Daily use of an antibiotic
- B. Pulse rate less than 50 beats/minute
- C. Normal weight for age
- D. Elevation in red blood cell (RBC) count

Correct Answer: C. Normal weight for age

Adequate weight for height demonstrates adequate nutritional intake and lack of edema. Symptoms of heart failure include those due to excess fluid accumulation (dyspnea, orthopnea, edema, pain from hepatic congestion, and abdominal distention from ascites) and those due to a reduction in cardiac output (fatigue, weakness) that is most pronounced with physical exertion.

- **Option A:** Daily use of antibiotics is not indicated in heart failure. Diuretics, beta-blockers, angiotensin-converting enzyme inhibitors, angiotensin receptor blockers, angiotensin receptor neprilysin inhibitor, hydralazine plus nitrate, digoxin, and aldosterone antagonists can produce an improvement in symptoms.
- **Option B:** A pulse rate less than 50 beats/minute, bradycardia, probably indicates digoxin toxicity. Chronic presentations (months) differ in that fatigue, anorexia, abdominal distention, and peripheral edema may be more pronounced than dyspnea. The anorexia is secondary to several factors including poor perfusion of the splanchnic circulation, bowel edema, and nausea induced by hepatic congestion.
- **Option D:** An elevated RBC count demonstrates polycythemia. Cardiac troponin (T or I), complete blood count, serum electrolytes, blood urea nitrogen, creatinine, liver function test, and brain natriuretic peptide (BNP). BNP (or NT-proBNP) level adds greater diagnostic value to the history and physical examination than other initial tests mentioned above.

31. The newly hired nurse is in his first week on the job in the ED. He used to be a traveling nurse for 5 years. Which area in his present job is the most appropriate assignment for him?

- A. Fast-track clinic
- B. Pediatric medicine team
- C. Trauma team
- D. Triage

Correct Answer: A. Fast-track clinic

The ambulatory or fast-track clinic deals with relatively stable clients. The decision of whether or not to delegate or assign is based upon the RN's judgment concerning the condition of the patient, the competence of all members of the nursing team and the degree of supervision that will be required of the RN if a task is delegated.

- **Option B:** Few places are more hectic than a pediatric ward. Clearly, delegating important nursing tasks is the only plausible way for short-staffed emergency rooms to meet the challenges of providing quality patient care. All decisions related to delegation and assignment are based on the fundamental principles of protection of the health, safety, and welfare of the public.
- **Option C:** This area should be filled with nurses who are experienced with hospital routines and policies and have the ability to locate equipment immediately. There is both individual accountability and organizational accountability for delegation. Organizational accountability for delegation relates to providing sufficient resources, including sufficient staffing with an appropriate staff mix.
- **Option D:** The RN delegates only those tasks for which he or she believes the other health care worker has the knowledge and skill to perform, taking into consideration training, cultural competence, experience and facility/agency policies and procedures.

32. Initial interventions for Marco with acute anxiety include all except which of the following?

- A. Touching the client in an attempt to comfort him.
- B. Approaching the client in a calm, confident manner.
- C. Encouraging the client to verbalize feelings and concerns.
- D. Providing the client with a safe, quiet, and private place.

Correct Answer: A. Touching the client in an attempt to comfort him

The emergency nurse must establish rapport and trust with the anxious client before using therapeutic touch. Touching an anxious client may actually increase anxiety. Converse using a simple language and brief statements. When experiencing moderate to severe anxiety, patients may be unable to understand anything more than simple, clear, and brief instruction.

- **Option B:** Interact with the patient in a peaceful manner. The nurse or health care provider can transmit his or her own anxiety to the hypersensitive patient. The patient's feeling of stability increases in a calm and non-threatening environment. Accept a patient's defenses; do not dare, argue, or debate. If defenses are not threatened, the patient may feel secure and protected enough to look at behavior.

- **Option C:** Reinforce a patient's personal reaction to or expression of pain, discomfort, or threats to well-being (e.g., talking, crying, walking, other physical or nonverbal expressions). Talking or otherwise expressing feelings sometimes reduces anxiety. Allow the patient to talk about anxious feelings and examine anxiety-provoking situations if they are identifiable. Talking about anxiety-producing situations and anxious feelings can help the patient perceive the situation realistically and recognize factors leading to the anxious feelings.
- **Option D:** Familiarize the patient with the environment and new experiences or people as needed. Awareness of the environment promotes comfort and may decrease anxiety experienced by the patient. Anxiety may intensify to a panic level if the patient feels threatened and unable to control environmental stimuli. Lessen sensory stimuli by keeping a quiet and peaceful environment; keep "threatening" equipment out of sight. Anxiety may intensify to a panic state with excessive conversation, noise, and equipment around the patient. Increasing anxiety may become frightening to the patient and others.

33. The client with hyperemesis gravidarum is at risk for developing:

- A. Respiratory alkalosis without dehydration
- B. Metabolic acidosis with dehydration
- C. Respiratory acidosis without dehydration
- D. Metabolic alkalosis with dehydration

Correct Answer: B. Metabolic acidosis with dehydration

The client with hyperemesis has persistent nausea and vomiting. With vomiting comes dehydration. When the client is dehydrated, she will have metabolic acidosis. In severe cases of hyperemesis, complications include vitamin deficiency, dehydration, and malnutrition, if not treated appropriately. Wernicke's encephalopathy, caused by vitamin-B1 deficiency, can lead to death and permanent disability if it goes untreated.

- **Option A:** Electrolyte abnormalities such as hypokalemia can also cause significant morbidity and mortality. Additionally, patients with hyperemesis may have higher rates of depression and anxiety during pregnancy. Electrolytes should be replaced as needed. Severe refractory cases of hyperemesis gravidarum may respond to intravenous or intramuscular chlorpromazine 25 to 50 mg or methylprednisolone 16 mg every 8 hours, orally or intravenously.
- **Option C:** A vomiting pregnant client will ultimately develop dehydration. Additionally, there have been case reports of injuries secondary to forceful and frequent vomiting, including esophageal rupture and pneumothorax. Initial treatment should begin with non-pharmacologic interventions such as switching the patient's prenatal vitamins to folic acid supplementation only, using ginger supplementation (250 mg orally 4 times daily) as needed, and by applying acupressure wristbands.
- **Option D:** The client will not be in alkalosis with persistent vomiting. There is no single accepted definition for hyperemesis gravidarum. However, it generally refers to extreme cases of nausea and vomiting during pregnancy. It is a clinical diagnosis. The criteria for diagnosis include vomiting that causes significant dehydration (as evidenced by ketonuria or electrolyte abnormalities) and weight loss (the most commonly cited marker for this is the loss of at least five percent of the patient's pre-pregnancy weight) in the setting of pregnancy without any other underlying pathological cause for vomiting.

34. After the nurse instills atropine drops into both eyes for a client undergoing ophthalmic examination, which of the following instructions would be given to

the client?

- A. "Be careful because the blink reflex is paralyzed."
- B. "Avoid wearing your regular glasses when driving."
- C. "Be aware that the pupils may be unusually small."
- D. "Wear dark glasses in bright light because the pupils are dilated."

Correct Answer: D. "Wear dark glasses in bright light because the pupils are dilated."

Atropine, an anticholinergic drug, has mydriatic effects causing pupil dilation. This allows more light onto the retina and may cause photophobia and blurred vision. Atropine causes the muscles in the eye to become relaxed. This widens (dilates) the pupil so that it will not respond to light.

- **Option A:** Atropine doesn't paralyze the blink reflex. Atropine ophthalmic (for the eye) is used to dilate the pupils when there is an inflammatory condition or in postsurgery situations in which this effect may be helpful.
- **Option B:** Driving may be contraindicated to blurred vision. Atropine ophthalmic may make the eyes more sensitive to light. Wear sunglasses to protect the eyes whenever outdoors or in bright light. Do not use atropine eye drops while wearing contact lenses. The medicine may contain a preservative that can discolor soft contact lenses. Wait at least 15 minutes after using the eye drops before putting in contact lenses.
- **Option C:** Atropine doesn't cause miosis (pupil constriction). Atropine ophthalmic is also used in people with a condition called amblyopia (sometimes called "lazy eye"). Atropine ophthalmic can be placed into the stronger eye to temporarily blur the vision in that eye. This helps strengthen the weaker eye because the brain will force that eye to work harder to focus.

35. At a prenatal visit at 36 weeks' gestation, a client complains of discomfort with irregularly occurring contractions. The nurse instructs the client to:

- A. Lie down until they stop.
- B. Walk around until they subside.
- C. Time contraction for 30 minutes.
- D. Take 10 grains of aspirin for the discomfort.

Correct Answer: B. Walk around until they subside.

Ambulation relieves Braxton Hicks. Braxton Hicks contractions are thought to play a role in toning the uterine muscle in preparation for the birth process. Sometimes Braxton Hicks contractions are referred to as "practice for labor." Braxton Hicks contractions do not result in dilation of the cervix but may have a role in cervical softening.

- **Option A:** Braxton Hicks contractions may stop with a change in activity level or as the woman changes position. If she can sleep through the contraction, it is a Braxton Hicks contraction. True labor contractions continue and may even become stronger with movement or position change.
- **Option C:** Braxton Hicks contractions are unpredictable. They may last less than 30 seconds or up to 2 minutes. True labor contractions last between 30 to less than 90 seconds and become longer over time.

- **Option D:** There is no medical treatment for Braxton Hicks contractions. However, taking action to change the situation that triggered the Braxton Hicks contractions is warranted.

36. The nurse is instructing the client to perform a testicular self-examination. The nurse tells the client:

- A. That testicular examination should be done at least every 6 months
- B. To gently feel the testicle with one finger to feel for a growth
- C. To examine the testicles while lying down
- D. The best time for the examination is after a shower

Correct Answer: D. The best time for the examination is after a shower

- **Option D:** The testicular-self examination is recommended monthly after a warm shower or bath when the scrotal skin is relaxed. The client should stand to examine the testicles. Using both hands, with the fingers under the scrotum and the thumbs on top, the client should gently roll the testicles, feeling for any lumps.
- **Option A:** Testicular self-examination is done at least once a month.
- **Option B:** Testicles are examined using both hands by placing the index and middle fingers under the scrotum.
- **Option C:** To do the exam, the patient should stand in front of a mirror.

37. After receiving a dose of penicillin, a client develops dyspnea and hypotension. Nurse Celestina suspects the client is experiencing anaphylactic shock. What should the nurse do first?

- A. Page an anesthesiologist immediately and prepare to intubate the client.
- B. Administer epinephrine, as prescribed, and prepare to intubate the client if necessary.
- C. Administer the antidote for penicillin, as prescribed, and continue to monitor the client's vital signs.
- D. Insert an indwelling urinary catheter and begin to infuse I.V. fluids as ordered.

Correct Answer: B. Administer epinephrine, as prescribed, and prepare to intubate the client if necessary.

To reverse anaphylactic shock, the nurse first should administer epinephrine, a potent bronchodilator as prescribed.

- **Option A:** The physician is likely to order additional medications, such as antihistamines and corticosteroids; if these medications don't relieve the respiratory compromise associated with anaphylaxis, the nurse should prepare to intubate the client.
- **Option C:** No antidote for penicillin exists; however, the nurse should continue to monitor the client's vital signs. A client who remains hypotensive may need fluid resuscitation and fluid intake and output monitoring; however, administering epinephrine is the first priority.
- **Option D:** An indwelling catheter is not needed in a client experiencing anaphylactic shock; however, IV fluids may be ordered by the physician after.

38. To assist an adult client to sleep better the nurse recommends which of the following?

- A. Drinking a glass of wine just before retiring to bed.
- B. Eating a large meal 1 hour before bedtime.
- C. Consuming a small glass of warm milk at bedtime.
- D. Performing mild exercises 30 minutes before going to bed.

Correct Answer: C. Consuming a small glass of warm milk at bedtime.

A small glass of milk relaxes the body and promotes sleep. Encourage the client to take milk. L-tryptophan is a component of milk that promotes sleep. Instruct the patient to follow a consistent daily schedule for rest and sleep. Consistent schedules facilitate regulation of the circadian rhythm and decrease the energy needed for adaptation to changes.

- **Option A:** Educate the patient on the proper food and fluid intake such as avoiding alcohol, caffeine, or smoking before bedtime. Alcohol produces drowsiness and may facilitate the onset of sleep but interferes with REM sleep.
- **Option B:** Educate the patient on the proper food intake such as avoiding heavy meals before bedtime. Having full meals just before bedtime may produce gastrointestinal upset and hinder sleep onset.
- **Option D:** Encourage daytime physical activities but instruct the patient to avoid strenuous activities before bedtime. In insomnia, stress may be reduced by therapeutic activities and may promote sleep. However, strenuous activities may lead to fatigue and may cause insomnia.

39. During the initial interview, the client reports that she has a lesion on the perineum. Further investigation reveals a small blister on the vulva that is painful to touch. The nurse is aware that the most likely source of the lesion is:

- A. Syphilis
- B. Herpes
- C. Gonorrhea
- D. Condylomata

Correct Answer: B. Herpes

A lesion that is painful is most likely a herpetic lesion. Herpes genitalis can be caused by the herpes simplex virus type 1 or type 2 and manifests as either a primary or recurrent infection. Most commonly, viral replication occurs in epithelial tissue and establishes dormancy in sensory neurons, reactivating periodically as localized recurrent lesions. It remains one of the most common sexually transmitted infections (STI) but continues to be underestimated, given the vague presentation of its symptoms.

- **Option A:** A chancre lesion associated with syphilis is not painful. The classic primary syphilis presentation is a solitary non-tender genital chancre in response to invasion by the *T. pallidum*. However, patients can have multiple non-genital chancres, such as digits, nipples, tonsils, and oral mucosa. These lesions can occur at any site of direct contact with the infected lesion and are accompanied by tender or nontender lymphadenopathy.
- **Option C:** Gonorrhea does not present as a lesion, but is exhibited by a yellow discharge. Although many females, more than 50%, will not manifest symptoms of their gonococcal cervix infections,

most males, more than 90%, will manifest urogenital gonorrhea symptomatically. The most common clinical manifestations of gonococcal disease in males include penile purulent discharge, dysuria, and testicular discomfort.

- **Option D:** Condylomata lesions are painless warts, so answer D is incorrect. Patients will generally be concerned about the appearance of the lesions, as they often cause psychological and psychosexual distress. Condyloma acuminata may also be found incidentally during routine female gynecological examinations.

40. Safety of a drug is determined by the degree between:

- A. Therapeutic and toxic doses.
- B. Potency and efficacy.
- C. Subtherapeutic and toxic levels.
- D. Side and adverse effects.

Correct Answer: A. Therapeutic and toxic doses.

Safety is determined by the degree between therapeutic and toxic doses. The Therapeutic Index (TI) is used to compare the therapeutically effective dose to the toxic dose of a pharmaceutical agent. The TI is a statement of relative safety of a drug. It is the ratio of the dose that produces toxicity to the dose needed to produce the desired therapeutic response.

- **Option B:** Potency and efficacy are not related to safety. Potency denotes the amount of drug needed to produce a given effect. Efficacy is the maximal effect that a drug produces irrespective of concentration (dose) Potency: We generally refer to potency as the amount of drug dose that produces a quantal effect in 50% of the population.
- **Option C:** Subtherapeutic levels are not part of safety determinations because if a drug is subtherapeutic it does not exert any desired effect. Toxicity can be measured by the effect the substance has on an organism, a tissue, or a cell. We know that individuals will respond differently to the same dose of a substance because of a number of factors including their gender, age, and body weight. Therefore a population-level measure of toxicity is often used.
- **Option D:** Side effects are expected, and adverse effects are often the result of toxicity. A side effect is an undesirable physical symptom caused by taking a drug or undergoing medical treatment or therapy. Side effects can range from relatively minor symptoms—such as drowsiness or an upset stomach—to serious effects such as liver damage, and sometimes even life-threatening or potentially fatal effects.

41. A client has started a new drug for hypertension. Thirty minutes after he takes the drug, he develops chest tightness and becomes short of breath and tachypnea. He has a decreased level of consciousness. These signs indicate which of the following conditions?

- A. Asthma attack
- B. Pulmonary embolism
- C. Respiratory failure
- D. Rheumatoid arthritis

Correct Answer: C. Respiratory Failure

The client was reacting to the drug with respiratory signs of impending anaphylaxis, which could lead to eventual respiratory failure. Respiratory failure is a clinical condition that happens when the respiratory system fails to maintain its main function, which is gas exchange, in which PaO₂ lower than 60 mmHg and/or PaCO₂ higher than 50 mmHg.

- **Option A:** Although the signs are also related to an asthma attack, consider the new drug first. The overall etiology is complex and still not fully understood, especially when it comes to being able to say which children with pediatric asthma will carry on to have asthma as adults (up to 40% of children have a wheeze, only 1% of adults have asthma), but it is agreed that it is a multifactorial pathology, influenced by both genetics and environmental exposure.
- **Option B:** Most pulmonary embolisms originate as lower extremity DVTs. Hence, risk factors for pulmonary embolism (PE) are the same as risk factors for DVT. Virchow's triad of hypercoagulability, venous stasis, and endothelial injury provides an understanding of these risk factors.
- **Option D:** Rheumatoid arthritis doesn't manifest these signs. Most common clinical presentation of RA is polyarthritis of small joints of hands: proximal interphalangeal (PIP), metacarpophalangeal (MCP) joints, and wrist. Some patients may present with monoarticular joint involvement.

42. Andy is admitted to the psychiatric unit with a diagnosis of borderline personality disorder. Nurse Hilary should expect the assessment to reveal:

- A. Coldness, detachment, and lack of tender feelings
- B. Somatic symptoms
- C. Inability to function as responsible parent
- D. Unpredictable behavior and intense interpersonal relationships

Correct Answer: D. Unpredictable behavior and intense interpersonal relationships

A client with borderline personality displays a pervasive pattern of unpredictable behavior, mood, and self-image. Interpersonal relationships may be intense and unstable and behavior may be inappropriate and impulsive. Borderline personality disorder (BPD) is characterized by hypersensitivity to rejection and resulting instability of interpersonal relationships, self-image, affect, and behavior. Borderline personality disorder causes significant impairment and distress and is associated with multiple medical and psychiatric co-morbidities.

- **Option A:** A pervasive pattern of instability of interpersonal relationships, self-image, and affects as well as marked impulsivity beginning by early adulthood. The client exhibits affective instability caused by a marked reactivity of mood, for example, intense episodic dysphoria, anxiety, or irritability, usually lasting a few hours and rarely more than a few days.
- **Option B:** Somatic symptom disorder involves a person having a significant focus on physical symptoms, such as pain, weakness, or shortness of breath, that results in major distress and/or problems functioning. The individual has excessive thoughts, feelings, and behaviors relating to the physical symptoms.
- **Option C:** A personality disorder is a disorder involving a rigid and unhealthy pattern of thinking. Personality disorders are prevalent in the general population and more so in clinical populations. In the pediatric population, all personality disorders can be diagnosed, except antisocial personality disorder, as long as the pathologic behavior has been present for a year or more.

43. Which of the following does not match with the appropriate position?

- A. Vaginal examination: Lithotomy position.
- B. Thyroidectomy: Fowler's position.
- C. Hemorrhoidectomy: Lateral position.
- D. Hypophysectomy: Prone position.

Correct Answer: D. Hypophysectomy: Prone position.

Hypophysectomy is the surgical removal of the hypophysis (pituitary gland). After the surgery, the client's head is elevated to prevent increased intracranial pressure. CSF fluid around the brain and spine leaks into the nervous system. This requires treatment with a procedure called a lumbar puncture, which involves inserting a needle into the spine to drain excess fluid.

- **Option A:** Lithotomy position is commonly used during gynecologic, rectal, and urologic surgeries with a patient lying supine with legs abducted 30 to 45 degrees from midline with knees flexed and legs held supported with the foot of the bed lowered or removed to facilitate the procedure.
- **Option B:** When a patient comes back from having their thyroidectomy surgery, place them in a semi-Fowler's position. Sitting totally upright would put the patient at a 90-degree angle, but in a semi-Fowler's position, they are angled between 15 and 45 degrees.
- **Option C:** In lateral position, the lower extremities are carefully padded between the knees and below the dependent knee to avoid excessive external pressure over bony prominences. The dependent lower extremity is somewhat flexed to avoid stretch or compression of the lower extremity nerves.

44. A 35-year-old male client was admitted due to severe burns around his right hip. Which position is most important to use to maintain the maximum function of this joint?

- A. Hip maintained in 30-degree flexion
- B. Hip at zero flexion with leg flat
- C. Knee flexed at 30-degree angle
- D. Leg abducted with a foam wedge

Correct Answer: B. Hip at zero flexion with leg flat

The maximum function for ambulation occurs when the hip and leg are maintained at full extension with neutral rotation. Although the client does not have to spend 24 hours in this position, he or she should be in this position (in bed or standing) longer than with the hip in any degree of flexion.

- **Option A:** Anti-contracture positioning and splinting must start from day one and may continue for many months post-injury. Legs should be positioned in a neutral position ensuring that the patient is not externally rotating at the hips.
- **Option C:** Patients rest in a position of comfort; this is generally a position of flexion and also the position of contracture. Without ongoing advice and help with positioning, the patient will continue to take the position of contracture and can quickly lose ROM in multiple joints. Once contracture starts to develop it can be a constant battle to achieve full movement, so preventative measures to minimize contracture development are necessary.

- **Option D:** Splinting helps maintain anti-contracture positioning particularly for those patients experiencing a great deal of pain, difficulty with compliance, or with burns in an area where positioning alone is insufficient. If the injured site is over joint surfaces, special precautions should be taken to identify all possible joint contractures.

45. Mike is admitted to a psychiatric unit with a diagnosis of undifferentiated schizophrenia. Which of the following defense mechanisms is probably used by Mike?

- A. Projection
- B. Rationalization
- C. Regression
- D. Repression

Correct Answer: C. Regression

Regression, a return to earlier behavior to reduce anxiety, is the basic defense mechanism in schizophrenia. Adapting one's behavior to earlier levels of psychosocial development. For example, a stressful event may cause an individual to regress to bed-wetting after they have already outgrown this behavior.

- **Option A:** Projection is a defense mechanism in which one blames others and attempts to justify actions; it's used primarily by people with paranoid schizophrenia and delusional disorder. Attributing one's own maladaptive inner impulses to someone else. For example, someone who commits an episode of infidelity in their marriage may then accuse their partner of infidelity or may become more suspicious of their partner.
- **Option B:** Rationalization is a defense mechanism used to justify one's action. The justification of one's behavior through attempts at a rational explanation. This defense mechanism may be present in someone who steals money but feels justified in doing so because they needed the money more than the person from whom they stole.
- **Option D:** Repression is the basic defense mechanism in the neuroses; it's an involuntary exclusion of painful thoughts, feelings, or experiences from awareness. Subconsciously blocking ideas or impulses that are undesirable. This defense mechanism may be present in someone who has no recollection of a traumatic event, even though they were conscious and aware during the event.

46. A nurse who explains that a client's psychotic behavior is unconsciously motivated understands that the client's disordered behavior arises from which of the following?

- A. Abnormal thinking
- B. Altered neurotransmitters
- C. Internal needs
- D. Response to stimuli

Correct Answer: C. Internal needs

The concept that behavior is motivated and has meaning comes from the psychodynamic framework. According to this perspective, behavior arises from internal wishes or needs. Much of what motivates behavior comes from the unconscious. The psychodynamic approach includes all the theories in psychology that see human functioning based upon the interaction of drives and forces within the person, particularly unconscious, and between the different structures of the personality.

- **Option A:** According to Freud (1915), the unconscious mind is the primary source of human behavior. Like an iceberg, the most important part of the mind is the part you cannot see. Our feelings, motives, and decisions are actually powerfully influenced by our past experiences and stored in the unconscious.
- **Option B:** Psychodynamic theory states that events in our childhood have a great influence on our adult lives, shaping our personality. Events that occur in childhood can remain in the unconscious, and cause problems as adults. Personality is shaped as the drives are modified by different conflicts at different times in childhood (during psychosexual development).
- **Option D:** The remaining responses do not address the internal forces thought to motivate behavior. Psychodynamic theory is strongly determinist as it views our behavior as caused entirely by unconscious factors over which we have no control. Unconscious thoughts and feelings can transfer to the conscious mind in the form of parapraxes, popularly known as Freudian slips or slips of the tongue. We reveal what is really on our minds by saying something we didn't mean to.

47. A client returns to the clinic for follow-up treatment following a skin biopsy of a suspicious lesion performed one (1) week ago. The biopsy report indicates that the lesion is melanoma. The nurse understands that which of the following describes a characteristic of this type of lesion?

- A. Melanoma is characterized by local invasion.
- B. Melanoma is highly metastatic.
- C. Metastasis is rare.
- D. Melanoma is encapsulated.

Correct Answer: B. Melanoma is highly metastatic.

Melanomas are pigmented malignant lesions originating in the melanin-producing cells of the epidermis. This cancer is highly metastatic, and prognosis depends on early diagnosis and treatment.

48. Jessie weighed 210 pounds on admission to the hospital. After 2 days of diuretic therapy, Jessie weighs 205.5 pounds. The nurse could estimate the amount of fluid Jessie has lost:

- A. 0.3 L
- B. 1.5 L
- C. 2.0 L
- D. 3.5 L

Correct Answer: C. 2.0 L

One liter of fluid approximately weighs 2.2 pounds. A 4.5-pound weight loss equals to approximately 2L. Diuresis is necessary for a variety of non-edematous and edematous conditions, which require

clearing out excess water when the body abnormally sequesters fluid in third space in the form of edema.

- **Option A:** Option A has a very low amount of fluid loss and is incompatible with the weight that the client has lost. Diuretics are drugs that pharmacologically tilt the renal fluid regulation in favor of excretion of water and electrolytes. Thus, diuretics are substances that increase the production and volume of urine. This class of drugs achieves this objective primarily by suppressing receptors that aid in reabsorption of Na⁺, the most abundant extracellular cation, from the renal tubules, thereby increasing the osmolality of the renal tubules and consequently suppressing water reabsorption.
- **Option B:** 1.5 L is not an accurate amount of fluid loss based on the client's weight loss. The most common adverse effect for any diuretic is mild hypovolemia, which can lead to transient dehydration and increased thirst. When there is an over-treatment with a diuretic, this could lead to severe hypovolemia, causing hypotension, dizziness, and syncope.
- **Option D:** 3.5 L is more than the amount of fluid loss based on the client's amount of weight loss. Diuretic treatment calls for careful assessment of extracellular fluid volume, urine output, electrolyte levels in plasma and urine, body weight, acid-base status, serum glucose, and BP regularly with particular emphasis on patients with cardiovascular, hepatic, renal, or metabolic disorders and in elderly individuals.

49. A 26-year old multigravida is 14 weeks pregnant and is scheduled for an alpha-fetoprotein test. She asks the nurse, "What does the alpha-fetoprotein test indicate?" The nurse bases a response on the knowledge that this test can detect:

- A. Kidney defects
- B. Cardiac defects
- C. Neural tube defects
- D. Urinary tract defects

Correct Answer: C. Neural tube defects.

The alpha-fetoprotein test detects neural tube defects and Down syndrome. Alpha-fetoprotein (AFP) is a plasma protein produced by the embryonic yolk sac and the fetal liver. AFP levels in serum, amniotic fluid, and urine functions as a screening test for congenital disabilities, chromosomal abnormalities, as well as some other adult occurring tumors and pathologies.

- **Option A:** In some cases, one or both kidneys may fail to develop. In other instances, an abnormality may be present that blocks the outflow of urine. This blockage may cause urine to back up into the kidney, a condition called hydronephrosis, which causes the kidney to appear enlarged on the ultrasound test. Another common abnormality is called reflux. This occurs when a valve-like mechanism at the point where the ureter joins the bladder does not work, allowing urine to wash back up into the kidney.
- **Option B:** The baby's heart begins to form immediately after conception and is complete by eight week's gestation. The heart begins as a tube-shaped structure that twists and divides to form the heart and heart valves. A congenital heart defect usually occurs because the heart does not twist or divide normally. Some mothers wonder if drugs, alcohol, or medications contributed to their child's heart defect. In most cases, we don't know why these defects occur. Although, some heart defects can run in families or be related to a disease the mother has, diabetes mellitus, for example.

- **Option D:** Common birth defects of the urinary system include hypospadias, obstructive defects of the renal pelvis, and renal agenesis. Hypospadias is characterized by the location of the urethral opening on the underside of the penis. Obstructive defects of the renal pelvis prevent urine from entering the bladder.

50. The nurse teaches a pregnant woman to avoid lying on her back. The nurse has based this statement on the knowledge that the supine position can:

- A. Unduly prolonged labor.
- B. Cause decreased placental perfusion.
- C. Lead to transient episodes of hypotension.
- D. Interfere with free movement of the coccyx.

Correct Answer: B. Cause decreased placental perfusion.

This is because of the impedance of venous return by the gravid uterus, which causes hypotension and decreased systemic perfusion.

- **Option A:** More recently there is emerging evidence that if the woman sleeps on her back that this puts her at increased risk of stillbirth (Stacey et al. 2011; Owusu et al. 2013; Gordon et al. 2015). This is biologically plausible because of what is already known about negative sequelae of the woman adopting this position during the day.
- **Option C:** Maternity care provider clinicians have been aware for many decades that maternal supine position and pregnancy are not a good mix. This is probably because when the woman lies on her back the gravid uterus is known to compress the inferior vena cava (Kerr et al. 1964). This can result in a range of negative sequelae such as maternal hypotension and reduced blood flow to the fetus (Holmes, 1960).
- **Option D:** The supine position may be disadvantageous for fetal wellbeing and in compromised pregnancies may be a sufficient stressor to contribute to fetal demise. This fits well with the triple risk model for stillbirth.

51. Which of the following conditions is common in pregnant women in the 2nd trimester of pregnancy?

- A. Mastitis
- B. Metabolic alkalosis
- C. Physiologic anemia
- D. Respiratory acidosis

Correct Answer: C. Physiologic anemia.

Hemoglobin and hematocrit levels decrease during pregnancy as the increase in plasma volume exceeds the increase in red blood cell production.

- **Option A:** Mastitis, which mainly affects breastfeeding women, causes redness, swelling, and pain in one or both breasts. Mastitis is an inflammation of breast tissue that sometimes involves an infection. The inflammation results in breast pain, swelling, warmth, and redness. You might also have fever and chills.

- **Option B:** Metabolic alkalosis is uncommon in pregnancy and is most often the result of severe vomiting. If this is present at the time of delivery, transient metabolic derangement in the fetus can occur, potentially requiring additional organ support.
- **Option D:** Progesterone levels are increased during pregnancy. Progesterone causes stimulation of the respiratory center, which can lead to respiratory alkalosis. Chronic respiratory alkalosis is a common finding in pregnant women.

52. A nurse explains the purpose of effleurage to a client in early labor. The nurse tells the client that effleurage is:

- A. A form of biofeedback to enhance bearing down efforts during delivery.
- B. Light stroking of the abdomen to facilitate relaxation during labor and provide tactile stimulation to the fetus.
- C. The application of pressure to the sacrum to relieve a backache.
- D. Performed to stimulate uterine activity by contracting a specific muscle group while other parts of the body rest.

Correct Answer: B. Light stroking of the abdomen to facilitate relaxation during labor and provide tactile stimulation to the fetus.

Effleurage is a specific type of cutaneous stimulation involving light stroking of the abdomen and is used before a transition to promote relaxation and relieve mild to moderate pain. Effleurage provides tactile stimulation to the fetus.

- **Option A:** Women using biofeedback during childbirth reported significantly lower pain: from admission to labor and delivery, at delivery, and 24-hr postpartum. Also, women in the biofeedback group labored an average of 2 hr less and used 30% fewer medications. The results of a study suggest that EMG biofeedback may be effective in reducing levels of acute pain experienced by childbearing women.
- **Option C:** Low back pain in pregnancy is generally ascribed to the many changes in load and body mechanics that occur during the carrying of a child. It is normal to gain between 20 and 40 pounds during pregnancy. This clearly shifts the body's center of gravity anteriorly and increases the moment arm of forces applied to the lumbar spine.
- **Option D:** The primary hormones involved include estrogen, progesterone, and oxytocin. Oxytocin is one of the most widely studied hormones involved in uterine contractions. It decreases Ca²⁺ efflux, by inhibiting the Ca²⁺/ATPase of the myometrial cell membrane which pumps calcium from the inside to the extracellular space, and increases Ca²⁺ influx, as well as causes the release of Ca²⁺ from the SR via IICR.

53. Which therapeutic communication technique is being used in this nurse-client interaction? Client: "When I get angry, I get into a fistfight with my wife, or I take it out of the kids." Nurse: "I notice that you are smiling as you talk about this physical violence."

- A. Encouraging comparison
- B. Exploring
- C. Formulating a plan of action

D. Making observations

Correct Answer: D. Making observations

The nurse is using the therapeutic communication technique of making observations when noting that the client smiles when talking about physical violence. The technique of making observations encourages the client to compare personal perceptions with those of the nurse.

- **Option A:** Often, patients can draw upon experience to deal with current problems. By encouraging them to make comparisons, nurses can help patients discover solutions to their problems.
- **Option B:** Exploring, in contrast to invasive and non-therapeutic probing, is using techniques that encourage the client to provide more details and information about a particular topic or health care problem.
- **Option C:** Formulating a plan of action refers to asking the client to consider the kinds of behavior likely to be appropriate in future situations. For example, the nurse asks the client, "What could you do to let your anger out harmlessly?"

54. Warning signs and symptoms of lung cancer include persistent cough, bloody sputum, dyspnea, and which of the other following symptoms?

- A. Generalized weakness
- B. Recurrent pleural effusion
- C. Dizziness
- D. Hypotension

Correct Answer: B. Recurrent pleural effusion

- **Option B:** If cancer is suspected in the lungs, it can cause fluid accumulation in the pleura called pleural effusion. This fluid build-up takes up space and fills the pleural cavity resulting in the compression of the lungs making it hard for the client to breathe properly.
- **Options A, C, and D:** Dizziness, generalized weakness, and hypotension aren't typically considered warning signals, but may occur in advanced stages of cancer.

55. Jun has been hospitalized for major depression and suicidal ideation. Which of the following statements indicates to the nurse that the client is improving?

- A. "I'm of no use to anyone anymore."
- B. "I know my kids don't need me anymore since they're grown."
- C. "I couldn't kill myself because I don't want to go to hell."
- D. "I don't think about killing myself as much as I used to."

Correct Answer: D. "I don't think about killing myself as much as I used to."

The statement "I don't think about killing myself as much as I used to." indicates a lessening of suicidal ideation and improvement in the client's condition. Suicidal ideation is highly linked to completed suicide. Some inexperienced clinicians have difficulty asking this question. They fear the inquiry may be too intrusive or that they may provide the person with an idea of suicide. In reality, patients appreciate the question as evidence of the clinician's concern. A positive response requires further inquiry.

- **Option A:** Determine what the patient believes his or her suicide would achieve. This suggests how seriously the person has been considering suicide and the reason for death. For example, some believe that their suicide would provide a way for family or friends to realize their emotional distress.
- **Option B:** Others see their death as a relief from their own psychic pain. Still others believe that their death would provide a heavenly reunion with a departed loved one. In any scenario, the clinician has another gauge of the seriousness of the planning. A clear and complete evaluation and clinical interview provide the information upon which to base a suicide intervention. Although risk factors offer major indications of the suicide danger, nothing can substitute for a focused patient inquiry.
- **Option C:** A host of thoughts and behaviors are associated with self-destructive acts. Although many assume that people who talk about suicide will not follow through with it, the opposite is true; a threat of suicide can lead to the completed act, and suicidal ideation is highly correlated with suicidal behaviors.

56. Archie is a child with iron deficiency anemia. He is required to receive elemental iron therapy at 6 mg/kg/day in three divided doses. He weighs 44 lbs. How many milligrams of iron should he receive per dose?

- A. 20 mg/dose
- B. 40 mg/dose
- C. 60 mg/dose
- D. 120 mg/dose

Correct Answer: B. 40 mg/dose

The child weighs 44 lbs, which is equal to 20 kg (1 kg=2.2 lb;44/2.2=20kg). Elemental iron therapy is ordered at 6 mg/kg/day in three doses. Therefore, the child receives 120 mg/day (6 mg/20 kg/day=120), divided into three doses (120/3), which is equal to 40 mg/dose.

- **Option A:** There are currently two forms of low-molecular-weight iron dextran available on the market in North American. Both come as injectable solutions [intravenous (IV) or intramuscular (IM)] containing 50 mg/mL of elemental iron. The incidence of toxicity relative to high-molecular-weight preparations is lower with low-molecular-weight iron dextran.
- **Option C:** As per the manufacturer, a test dose of 25 mg (0.5 mL) followed by 1 hour of observation is necessary before administering the remainder of the calculated required dose to monitor for anaphylactoid reactions. Intramuscular injections should be administered to the upper outer quadrant of the buttock using the Z – track technique (lateral displacement of skin prior to injection).
- **Option D:** If total dose calculations exceed the daily allowance of administration, smaller incremental daily doses may be used until the patient achieves the total dose requirement. All doses require administration at a maximum rate of 50 mg (1 mL) per minute. No dosage adjustments are necessary for renal and/or hepatic impairment.

57. Which of the following is not an appropriate nursing intervention for a patient with hypercalcemia?

- A. Administering calcitonin

- B. Administering calcium gluconate
- C. Administering loop diuretics
- D. Encouraging ambulation

Correct Answer: B. Administering calcium gluconate

Calcium gluconate is used for replacement in deficiency states. Calcium gluconate, gluceptate, or chloride (IV) provides rapid treatment in acute calcium deficit, especially in the presence of tetany or convulsions. Calcitonin and loop diuretics are used to lower serum calcium.

- **Option A:** Calcitonin can be administered subcutaneously but in most cases, the effects are mild and limited to a few days. Promotes movement of serum calcium into bones, temporarily reducing serum calcium levels, especially in the presence of the increased parathyroid hormone.
- **Option C:** Loop diuretics should be used with caution as even though they may enhance renal excretion, paradoxical hypercalcemia can occur due to bone resorption. Diuresis promotes renal excretion of calcium and reduces risks of fluid excess from an isotonic saline infusion.
- **Option D:** Hypercalcemia of immobilization can be prevented by encouraging activity as tolerated and adequate hydration. The specific cause of hypercalcemia needs to be identified, and treatment directed accordingly.

58. A nurse is evaluating a postoperative patient and notes a moderate amount of serous drainage on the dressing 24 hours after surgery. Which of the following is the appropriate nursing action?

- A. Notify the surgeon about evidence of infection immediately.
- B. Leave the dressing intact to avoid disturbing the wound site.
- C. Remove the dressing and leave the wound site open to air.
- D. Change the dressing and document the clean appearance of the wound site.

Correct Answer: D. Change the dressing and document the clean appearance of the wound site.

A moderate amount of serous drainage from a recent surgical site is a sign of normal healing. Serous drainage is clear, thin, and watery. The production of serous drainage is a typical response from the body during the normal inflammatory healing stage.

- **Option A:** Purulent drainage would indicate the presence of infection. Purulent drainage is milky, typically thicker in consistency, and can be gray, green, or yellow in appearance. If the fluid becomes very thick, this can be a sign of infection. Yet, if there is a large amount of serous drainage, it can be the result of a high bioburden count.
- **Option B:** A soiled dressing should be changed to avoid bacterial growth and to examine the appearance of the wound. Overall, it should be noted that the dressing selection should be based on the individual patient and wound characteristics. If the wound is not in the normal inflammatory phase of healing, the clinician must investigate what is the root cause and how to manage the drainage.
- **Option C:** The surgical site is typically covered by gauze dressings for a minimum of 48-72 hours to ensure that initial healing has begun. Changing the dressing less allows the wound bed to be left undisturbed, which allows for the migration of new cells. When wound beds are left undisturbed in an optimal moist environment, they are able to heal at a faster rate.

59. Nurse Olenna is performing community assessment; which of the following age-groups would be inappropriate for her to monitor iron deficiency anemia?

- A. Toddlers
- B. School-age children
- C. Adolescents
- D. Pregnant women

Correct Answer: B. School-age children

Periods of rapid growth predispose a person to iron deficiency anemia. Iron deficiency anemia is not prevalent in school-age children because this stage is not a period of rapid growth. Anemia among children has been conclusively seen to delay psychomotor development, poor cognitive performance, impaired immunity, and decrease working capacity.

- **Option A:** The “picky appetites” of toddlers may also predispose them to this condition. Children are at higher risk for iron deficiency because of their higher need for iron. Simply put, a diet that’s poor in sources of iron can lead to iron deficiency. A diet that features an excess amount of milk, which is a poor source of iron, can place a child at risk for iron deficiency.
- **Option C:** Adolescence is characterized by rapid growth and development and iron requirements increase during this time. Adolescents with poor diet in early childhood and/or females with an early onset of menarche may be at greater risk for developing anemia due to the rapid depletion of iron stores in their bodies.
- **Option D:** Pregnancy is a period of rapid growth. Thus, individuals in these groups are more likely to experience iron deficiency anemia. Pregnancy is associated with increased iron demand, and therefore, increases the risk of iron deficiency anemia. Up to 52% of pregnant women in the developing world are affected.

60. When assessing a patient for metabolic alkalosis, the nurse would expect to find:

- A. Low serum potassium
- B. Changes in urine output
- C. Hypotension
- D. Increased CVP

Correct Answer: A. Low serum potassium

Decreased serum potassium is a common symptom of metabolic alkalosis. The biological effects of metabolic alkalosis are directly resultant to associated problems such as hypovolemia and potassium and chloride depletion. These changes lead to decreased myocardial contractility, arrhythmias, decreased cerebral blood flow, confusion, increased neuromuscular excitability, and impaired peripheral oxygen unloading secondary to the shift of the oxygen dissociation curve to left.

- **Option B:** Of interest here, sodium is reabsorbed through an exchange for hydrogen in the renal collecting ducts under the influence of aldosterone. Therefore, pathologies that increase the levels of mineralocorticoids or increase the effect of aldosterone, such as Conn syndrome will lead to hypernatremia, hypokalemia, and hydrogen loss in the urine.

- **Option C:** In general, the causes can be narrowed down to an intracellular shift of hydrogen ions, gastrointestinal (GI) loss of hydrogen ions, excessive renal hydrogen ion loss, retention or addition of bicarbonate ions, or volume contraction around a constant amount of extracellular bicarbonate known as contraction alkalosis.
- **Option D:** As long as renal function is maintained, excess bicarbonate is excreted in the urine fairly rapidly. As a result, metabolic alkalosis will persevere if the ability to eliminate bicarbonate is impaired due to one of the following causes: hypovolemia, reduced effective arterial blood volume, chloride depletion, hypokalemia, reduced glomerular filtration rate, and/or hyperaldosteronism.

61. Which statement by the client during the initial assessment in the emergency department is most indicative of suspected domestic violence?

- A. "I am determined to leave my house in a week."
- B. "No one else in the family has been treated like this."
- C. "I have only been married for two (2) months."
- D. "I have tried leaving, but have always gone back."

Correct Answer: D. "I have tried leaving, but have always gone back."

Victims develop a high tolerance for abuse. They blame themselves for being victimized. All members of the family suffer from the effects of abuse, even if they are not the actual victims. For these reasons, victims often have an extensive history of abuse and struggle for a long time before they can leave permanently.

- **Option A:** Even when victims decide to leave, it takes them 5 attempts on average before they succeed (Stroshine & Robinson, 2003). Furthermore, some of the problems persist even after they leave (i.e. harassment and violence from the abuser).
- **Option B:** If motivated to do so, victims can learn to overcome learned helplessness, which leads to depression, inadequate problem solving and loss of self-esteem (Lysaker, Clements, Wright, Evans, & Marks, 2001). In certain immigrant communities that do not condone intimate partner abuse, victims can become completely isolated and will need help moving on with their lives (Raj & Silverman, 2003). In general, victims need help creating models of abuse-free relationships with or without their partners, and finding social support that can enhance their independence and self-efficacy.
- **Option C:** Sometimes, victims do not leave because they want to provide a family for their children, depend on the abuser financially, emotionally or their religion forbids them from breaking up a marriage. Mental health professionals usually help victims decide whether to stay or leave the relationship, find shelter if they do decide to leave as well as provide training for skills necessary for independent living.

62. A client is receiving a transfusion of one unit of cryoprecipitate. The nurse will review which of the following laboratory studies to assess the effectiveness of the therapy?

- A. Serum electrolytes
- B. White blood cell count
- C. Coagulation studies

D. Hematocrit count

Correct Answer: C. Coagulation studies

The evaluation of the effective response of a cryoprecipitate transfusion is assessed by monitoring coagulation studies and fibrinogen levels. Cryoprecipitate Antihemophilic Factor, also called cryo, is a portion of plasma, the liquid part of the blood. Cryo is rich in clotting factors, which are proteins that can reduce blood loss by helping to slow or stop bleeding.

- **Option A:** Crystalloids are the fluids of choice for most minor procedures. They are sterile aqueous solutions that may contain glucose, various electrolytes, organic salts, and nonionic compounds. Some examples of these solutes are sodium chloride, potassium chloride, sodium bicarbonate, calcium carbonate, sodium acetate, sodium lactate, and sodium gluconate.
- **Option B:** White blood cells are transfused to treat life-threatening infections in people who have a greatly reduced number of white blood cells or whose white blood cells are functioning abnormally. The use of white blood cell transfusions is rare because improved antibiotics and the use of cytokine growth factors that stimulate people to produce more of their own white blood cells have greatly reduced the need for such transfusions.
- **Option D:** The average increase in hematocrit per liter of packed red blood cells transfused was 6.4% +/- 4.1%. If 1 "unit" of packed red blood cells is approximately 300 mL, this becomes a change of hematocrit of 1.9% +/- 1.2% per "unit" of blood. The accepted correlation of about 1 "unit" of blood loss per 3% change in hematocrit would be valid for a 500-cc unit, but a typical unit of packed red blood cells is typically 300 cc.

63. Following the initial care of a client with asthma and impending anaphylaxis from hypersensitivity to a drug, the nurse should take which of the following steps next?

- A. Administer beta-adrenergic blockers.
- B. Administer bronchodilators.
- C. Obtain serum electrolyte levels.
- D. Have the client lie flat in the bed.

Correct Answer: B. Administer bronchodilators.

Bronchodilators would help open the client's airway and improve his oxygenation status. Bronchodilators are useful adjuncts in patients with bronchospasm. Patients with previous histories of respiratory disease, most notably asthma are at the highest risk. Treated with inhaled beta-agonists are the first-line treatment in wheezing; albuterol alone or as ipratropium bromide/albuterol. If there is refractory wheezing IV magnesium is appropriate with dosage and treatment similar to severe asthma exacerbations.

- **Option A:** Beta-adrenergic blockers aren't indicated in the management of asthma because they may cause bronchospasm. Corticosteroids are given for the reduction of length or biphasic response of anaphylaxis. There is minimal literature to support this use specifically in anaphylaxis, but it has been proven effective in reactive airway diseases. Therefore, use, dosages, and proposed mechanism of action mimic those of airway management protocols.
- **Option C:** Obtaining laboratory values wouldn't be done on an emergency basis. Laboratory testing is of little to no use, as there is no accurate testing for diagnosis or confirmation. Serum histamine is of no use due to transient elevation and late presentation. Serum tryptase can be considered for confirmation of an anaphylactic episode as it remains elevated for several hours,

however, as a diagnostic modality, this has low sensitivity.

- **Option D:** Having the client lie flat in bed could worsen his ability to breathe. Airway management is paramount. Thoroughly examine the patient for airway patency or any indications of an impending loss of airway. Perioral edema, stridor, and angioedema are very high risk, and obtaining a definitive airway is imperative. Delay may reduce the chances of successful intubation as continued swelling occurs, increasing the risk for a surgical airway.

64. A nurse in a labor room is assisting with the vaginal delivery of a newborn infant. The nurse would monitor the client closely for the risk of uterine rupture if which of the following occurred?

- A. Hypotonic contractions
- B. Forceps delivery
- C. Schultz delivery
- D. Weak bearing down efforts

Correct Answer: B. Forceps delivery.

Excessive fundal pressure, forceps delivery, violent bearing down efforts, tumultuous labor, and shoulder dystocia can place a woman at risk for traumatic uterine rupture. Hypotonic contractions and weak bearing down efforts do not alone add to the risk of rupture because they do not add to the stress on the uterine wall.

- **Option A:** Phelan et al found that abnormal patterns of uterine activity, such as tetany and hyperstimulation, are often not associated with uterine rupture. In their study, in which monitoring of uterine activity was limited to external tocodynamometry, tetany was defined as a contraction lasting longer than 90 seconds, and hyperstimulation was defined as more than 5 contractions in 10 minutes.
- **Option C:** The separation of the placenta from the uterine wall during labor; it begins at the placental center and leads to an expulsion of the placenta after delivery of the baby.
- **Option D:** Rodriguez et al found that the usefulness of intrauterine pressure catheters (IUPCs) for diagnosing uterine rupture was not supported. In 76 cases of uterine rupture, the classic description of decreased uterine tone and diminished uterine activity was not observed in any patients, 39 of whom had IUPCs in place. In addition, rates of fetal and maternal morbidity and mortality associated with uterine rupture did not differ with the use of an IUPC compared with external tocodynamometry.

65. The multigravida mother with a history of rapid labor who is in active labor calls out to the nurse, "The baby is coming!" Which of the following would be the nurse's first action?

- A. Inspect the perineum.
- B. Time the contractions.
- C. Auscultate the fetal heart rate.
- D. Contact the birth attendant.

Correct Answer: A. Inspect the perineum

When the client says the baby is coming, the nurse should first inspect the perineum and observe for crowning to validate the client's statement. If the client is not delivering precipitously, the nurse can calm her and use appropriate breathing techniques.

- **Option B:** The woman has a history of rapid labor and is already experiencing true labor contractions. There is no need to time the contractions experienced.
- **Option C:** Fetal heart rate monitoring is being consistently monitored during labor. The client's concerns about the delivery of the baby must be prioritized.
- **Option D:** Before contacting a birth attendant or the physician, validate the client's claims first. If she is not yet delivering, instruct about breathing techniques that may ease her discomfort.

66. A child weighing 30 kg arrives at the clinic with diffuse itching as the result of an allergic reaction to an insect bite. Diphenhydramine (Benadryl) 25 mg 3 times a day is prescribed. The correct pediatric dose is 5 mg/kg/day. Which of the following best describes the prescribed drug dose?

- A. It is the correct dose
- B. The dose is too low
- C. The dose is too high
- D. The dose should be increased or decreased, depending on the symptoms

Correct Answer: B. The dose is too low

This child weighs 30 kg, and the pediatric dose of diphenhydramine is 5 mg/kg/day ($5 \times 30 = 150$ /day). Therefore, the correct dose is 150 mg/day. Divided into 3 doses per day, the child should receive 50 mg 3 times a day rather than 25 mg 3 times a day. Dosage should not be titrated based on symptoms without consulting a physician.

- **Option A:** Diphenhydramine is used to relieve red, irritated, itchy, watery eyes; sneezing; and runny nose caused by hay fever, allergies, or the common cold. Diphenhydramine is also used to relieve coughs caused by minor throat or airway irritation.
- **Option C:** Diphenhydramine comes as a tablet, a rapidly disintegrating (dissolving) tablet, a capsule, a liquid-filled capsule, a dissolving strip, powder, and a liquid to take by mouth. When diphenhydramine is used for the relief of allergies, cold, and cough symptoms, it is usually taken every 4 to 6 hours.
- **Option D:** Before you give a diphenhydramine product to a child, check the package label to find out how much medication the child should receive. Give the dose that matches the child's age on the chart. Ask the child's doctor if you don't know how much medication to give the child.

67. Which of the following nursing interventions is considered the most effective form for universal precautions?

- A. Cap all used needles before removing them from their syringes.
- B. Discard all used uncapped needles and syringes in an impenetrable protective container.
- C. Wear gloves when administering IM injections.
- D. Follow enteric precautions.

Correct Answer: B. Discard all used uncapped needles and syringes in an impenetrable protective container.

According to the Centers for Disease Control (CDC), blood-to-blood contact occurs most commonly when a health care worker attempts to cap a used needle. Universal precautions are a standard set of guidelines aimed at preventing the transmission of bloodborne pathogens from exposure to blood and other potentially infectious materials (OPIM).

- **Option A:** Therefore, used needles should never be recapped; instead they should be inserted in a specially designed puncture resistant, labeled container. In 1987, the CDC introduced another set of guidelines termed Body Substance Isolation. These guidelines advocated the avoidance of direct physical contact with “all moist and potentially infectious body substances,” even if blood is not visible. A limitation of this guideline was that it emphasized handwashing after removal of gloves only if the hands were visibly soiled.
- **Option C:** Wearing gloves is not always necessary when administering an I.M. injection. Must be worn when touching blood, body fluids, secretions, excretions, mucous membranes, or non-intact skin. Change when there is contact with potentially infected material in the same patient to avoid cross-contamination. Remove before touching surfaces and clean items. Wearing gloves does not mitigate the need for proper hand hygiene.
- **Option D:** Enteric precautions prevent the transfer of pathogens via feces. Universal precautions do not apply to sputum, feces, sweat, vomit, tears, urine, or nasal secretions unless they are visibly contaminated with blood because their transmission of Hepatitis B or HIV is extremely low or non-existent.

68. The breathing technique that the mother should be instructed to use as the fetus' head is crowning is:

- A. Blowing
- B. Slow chest
- C. Shallow
- D. Accelerated-decelerated

Correct Answer: A. Blowing.

Blowing forcefully through the mouth controls the strong urge to push and allows for a more controlled birth of the head.

- **Option B:** Slow breathing may be started when contractions are intense enough that the woman can no longer walk or talk through them without pausing. Use slow breathing for as long as it is helpful. Switch to another pattern if the woman becomes tense and can no longer relax during contractions.
- **Option C:** Most women feel the need to switch to light breathing at some time during the active phase of labor. Let the intensity of the contractions guide in deciding if and when to use light breathing. Breathe in and out rapidly through the mouth at about one breath per second. Keep breathing shallow and light. Inhalations should be quiet, but exhalation should be clearly audible.
- **Option D:** This is a variation of light breathing. It is sometimes referred to as “pant-pant-blow” or “hee-hee-hoo” breathing. Variable breathing combines light shallow breathing with a periodic longer or more pronounced exhalation. Variable breathing is used in the first stage if the woman feels overwhelmed, unable to relax, in despair, or exhausted.

69. The nurse inspects a client's back and notices small hemorrhagic spots. The nurse documents that the client has:

- A. Extravasation
- B. Osteomalacia
- C. Petechiae
- D. Uremia

Correct Answer: C. Petechiae

Petechiae are small hemorrhagic spots. Petechiae are tiny purple, red, or brown spots on the skin. They usually appear on the arms, legs, stomach, and buttocks. They can also be found inside the mouth or on the eyelids. These pinpoint spots can be a sign of many different conditions — some minor, others serious. They can also appear as a reaction to certain medications.

- **Option A:** Extravasation is the leakage of fluid in the interstitial space. Extravasation is the leakage of a fluid out of its container into the surrounding area, especially blood or blood cells from vessels. In the case of inflammation, it refers to the movement of white blood cells from the capillaries to the tissues surrounding them (leukocyte extravasation, also known as diapedesis).
- **Option B:** Osteomalacia is the softening of bone tissue. Osteomalacia refers to a marked softening of the bones, most often caused by severe vitamin D deficiency. The softened bones of children and young adults with osteomalacia can lead to bowing during growth, especially in weight-bearing bones of the legs. Osteomalacia in older adults can lead to fractures.
- **Option D:** Uremia is an excess of urea and other nitrogen products in the blood. Uremia is the condition of having high levels of urea in the blood. Urea is one of the primary components of urine. It can be defined as an excess of amino acid and protein metabolism end products, such as urea and creatinine, in the blood that would be normally excreted in the urine.

70. What should be the initial bolus of crystalloid fluid replacement for a pediatric patient in shock?

- A. 20 ml/kg
- B. 10 ml/kg
- C. 30 ml/kg
- D. 15 ml/kg

Correct Answer: A. 20 ml/kg

Fluid volume replacement must be calculated to the child's weight to avoid overhydration. Initial fluid bolus is administered at 20 ml/kg, followed by another 20 ml/kg bolus if there is no improvement in fluid status. Shock is a life-threatening manifestation of circulatory failure. Circulatory shock leads to cellular and tissue hypoxia resulting in cellular death and dysfunction of vital organs.

- **Option B:** Obtain two large-bore IVs or central line. Place the patient in the Trendelenburg position. Aggressive IV fluid resuscitation with 2 to 4 L of isotonic crystalloids. PRBC transfusion if ongoing bleeding. Appropriate medical or interventional strategies to treat the underlying etiology. Continue with isotonic crystalloids and use vasopressors if needed
- **Option C:** Immediate treatment with intravenous (IV) fluid should be initiated, followed by vasopressor therapy, if needed, to maintain tissue perfusion. Depending on the underlying etiology

of shock, specific therapies might also be needed.

- **Option D:** The initial approach to management is the stabilization of the airway and breathing with oxygen and oral mechanical ventilation when needed. Peripheral IV or intraosseous infusion (IO) access should be obtained. Central venous access may be required in the setting of shock if there is difficulty securing peripheral venous access, or the patient needs prolonged vasopressor therapy or large-volume resuscitation.

71. The nurse can expect a 60-year old patient with ischemic bowel to report a history of:

- A. Diabetes mellitus
- B. Asthma
- C. Addison's Disease
- D. Cancer of the bowel

Correct Answer: A. Diabetes mellitus

Ischemic bowel occurs in patients over 50 with a history of diabetes mellitus. Diabetes mellitus is the most common endocrine disorder affecting multiple organs including the gastrointestinal (GI) tract where manifestations and/or complications relate to disordered gut motility possibly as a result of autonomic neuropathy.

- **Option B:** Asthma is not related to an ischemic bowel. An increased prevalence of GI symptoms or complications has been documented in diabetic patients compared with nondiabetic control subjects including symptoms from both the upper and lower GI tract such as gastroparesis, anorexia, vomiting, early satiety, intestinal enteropathy, diarrhea, constipation, or fecal incontinence.
- **Option C:** Addison disease is an acquired primary adrenal insufficiency. A primary adrenal insufficiency is termed Addison disease when an autoimmune process causes the condition. It is a rare but potentially life-threatening emergency condition. It results from bilateral adrenal cortex destruction leading to decreased adrenocortical hormones, which may include cortisol, aldosterone, and androgens.
- **Option D:** Approximately 5% of patients with ischemic colitis have an obstructing lesion, usually in the distal colon. Half of these patients have colon cancer while the remainder has strictures caused by disorders such as diverticulitis, radiation, and previous surgery.

72. A newly admitted client is suspected to have avian influenza (“bird flu”) due to increasing dyspnea and dehydration. Which of these prescribed actions will the nurse implement first?

- A. Give first dose of oseltamivir (Tamiflu)
- B. Instill 5% dextrose in water at 100 mL/hr
- C. Collect blood and sputum specimens for testing
- D. Start oxygen using a non-rebreather mask

Correct Answer: D. Start oxygen using a non-rebreather mask

The nurse's first action should be to start oxygen therapy because the respiratory manifestations linked to avian influenza are most likely life-threatening. Patients with respiratory compromise should be placed on supplemental oxygen and monitored closely for signs of deterioration as these patients are at high risk of requiring intubation and mechanical ventilation.

- **Option A:** The World Health Organization released Rapid Advice Guidelines in 2007, outlining consensus treatment recommendations for H5N1 influenza outbreaks. Similar recommendations can likely be used in avian influenza outbreaks due to other strains of the virus. These recommendations include neuraminidase inhibitors (especially oseltamivir) for strongly suspected or confirmed cases of H5N1.
- **Option B:** Treatment of avian influenza usually consists of supportive care and antiviral medications. The majority of care should aim at managing the sequelae of infection. For instance, patients with volume loss or possible electrolyte imbalances should receive volume resuscitation and treatment to correct imbalances.
- **Option C:** The preferred source of a sample for testing is a nasopharyngeal swab or aspirate, but other body fluids are usable if the nasopharyngeal swab or aspirate is not available. Because the infection carries high mortality risk, a negative rapid antigen test should not rule out AIV infection when high suspicion exists.

73. Mandy, a patient, calls the clinic today because he is taking atorvastatin (Lipitor) to treat his high cholesterol and is having pain in both of his legs. You instruct him to:

- A. Stop taking the drug and make an appointment to be seen next week.
- B. Continue taking the drug and make an appointment to be seen next week.
- C. Walk for at least 30 minutes and call if symptoms continue.
- D. Stop taking the drug and come to the clinic to be seen today.

Correct Answer: D. Stop taking the drug and come to the clinic to be seen today.

Muscle aches, soreness, and weakness may be early signs of myopathy such as rhabdomyolysis associated with the HMG-CoA reductase class of antilipemic agents. This patient will need an immediate evaluation to rule out myopathy. The principal finding of the present study is that 7.5% (15/200) of atorvastatin-treated patients had myopathy and incidence of myopathy increases with increase in doses of atorvastatin. The most common complaint was pain which was reported by 93% of patients with myopathy.

- **Option A:** There are several mechanisms postulated for statin-induced myopathy. Statin decreases the cholesterol content of the cell membrane so decreases its stability. It has been also hypothesized that it reduces the production of ubiquinone (coenzyme Q 10), which is a component of the respiratory chain in the inner mitochondrial membrane. This deficiency leads to abnormal energy metabolism and thus muscle weakness. Statins also prevent the formation of prenylated proteins which include Ras, Rac, and Rho GTP-binding proteins.
- **Option B:** Additional doses may exacerbate the problem. There is not a single conscience for the management of statin-induced myopathy. All guidelines recommend determining serum CK levels on the onset of myopathy only not in asymptomatic patients. For a symptomatic rise in serum CK levels >10 times the upper limit of normal, immediate discontinuation of the drug is recommended. If CK levels are between 3 and 10 times the normal levels, there are different opinions among different guidelines stating suspension of statins till there is an improvement in symptoms.

- **Option C:** Exercise will not reverse myopathy and delay diagnosis. Myopathy symptoms were found in a significant number of patients taking atorvastatin and the incidence of myopathy increases with an increase in the dose of atorvastatin. Further, though, the benefits of statins continue to outweigh their adverse effects. However, possible alternate options including statin switching, non-statin drugs, change in dosing regimens may also be considered to reduce the incidence of myopathy.

74. Which of the following is a contraindication for use of oxytocin to induce labor?

- A. Missed abortion
- B. Placenta previa
- C. Hyperbilirubinemia
- D. Pregnancy past due date

Correct Answer: B. Placenta previa

Use of oxytocin is contraindicated in the presence of placenta previa. Labor induction in this condition could be fatal to the fetus. Placenta previa is an indication for cesarean section. Specific contraindications to oxytocin include hypersensitivity to the hormone itself or any part of its synthetic version and vaginal deliveries that are in themselves contraindicated. These include the patient having an active genital herpes infection, vasa previa, complete placenta previa, invasive cervical cancer, and prolapse or presentation of the umbilical cord).

- **Option A:** Oxytocin is indicated and approved by the FDA for two specific time frames in the obstetric world: antepartum and postpartum. In the antepartum period, exogenous oxytocin is FDA-approved for strengthening uterine contractions with the aim of successful vaginal delivery of the fetus. There are three situations during the antepartum period in which oxytocin is indicated for mothers who have preeclampsia, maternal diabetes, premature rupture of the membranes; for mothers with inactive uteri that require stimulation to start labor; and for mothers with inevitable or incomplete abortions in their second trimester.
- **Option C:** Hypoosmolarity causes swelling of the red blood cells and makes them fragile and susceptible to hemolysis. Various studies have approved the effects of oxytocin on jaundice. Some studies have suggested that the extensive use of oxytocin in labor induction is one of the factors leading to neonatal jaundice
- **Option D:** When oxytocin is released, it stimulates uterine contractions, and these uterine contractions, in turn, cause more oxytocin to be released; this is what causes the increase in both the intensity and frequency of contractions and enables a mother to carry out vaginal delivery completely. The head of the fetus pushes against the cervix, the nerve impulses from this action travel to the mother's brain, which activates the posterior pituitary to secrete oxytocin. This oxytocin is then carried through the blood to the uterus to increase uterine contractions further, and the cycle continues until parturition.

75. While the postpartum client is receiving heparin for thrombophlebitis, which of the following drugs would the nurse expect to administer if the client develops complications related to heparin therapy?

- A. Calcium gluconate

- B. Protamine sulfate
- C. Methylergonovine (Methergine)
- D. Nitrofurantoin (Macrochantin)

Correct Answer: B. Protamine sulfate

Protamine sulfate is a heparin antagonist given intravenously to counteract bleeding complications caused by heparin overdose.

- **Option A:** Calcium gluconate is the calcium salt of gluconic acid, an intravenous medication used to treat conditions arising from calcium deficiencies such as hypocalcemic tetany and hypocalcemia.
- **Option C:** Methylergonovine is used to prevent or treat bleeding from the uterus that can happen after childbirth or an abortion.
- **Option D:** Nitrofurantoin is used to treat urinary tract infections. It is an antibiotic that works by killing bacteria that cause infection.

76. Nurse John is talking with a client who has been diagnosed with an antisocial personality about how to socialize during activities without being seductive. Nurse John would focus the discussion on which of the following areas?

- A. Discussing his relationship with his mother.
- B. Asking him to explain reasons for his seductive behavior.
- C. Suggesting to apologize to others for his behavior.
- D. Explaining the negative reactions of others toward his behavior.

Correct Answer: D. Explaining the negative reactions of others toward his behavior.

The nurse would explain the negative reactions of others towards the client's behaviors to make the clients aware of the impact of his seductive behaviors on others. Antisocial personality disorder (ASPD) is a deeply ingrained and rigid dysfunctional thought process that focuses on social irresponsibility with exploitive, delinquent, and criminal behavior with no remorse. Disregard for and the violation of others' rights are common manifestations of this personality disorder, which displays symptoms that include failure to conform to the law, inability to sustain consistent employment, deception, manipulation for personal gain, and incapacity to form stable relationships.

- **Option A:** The Diagnostic and Statistical Manual of Mental Disorders (DSM 5) classifies all ten personality disorders into three clusters (A, B, and C). Antisocial personality disorder falls into 1 of 4 cluster-B disorders, which also includes borderline, narcissistic, and histrionic. All of these disorders characteristically present with dramatic, emotional, and unpredictable interactions with others. Antisocial personality disorder is the only personality disorder that is not diagnosable in childhood. Before the age of 18, the patient must have been previously diagnosed with conduct disorder (CD) by the age of 15 years old to justify diagnostic criteria for ASPD.
- **Option B:** Although the precise etiology is unknown, both genetic and environmental factors have been found to play a role in the development of ASPD. Various studies in the past have shown differing estimates of heritability, ranging from 38% to 69%. Environmental factors that correlate to the development of antisocial personality disorder include adverse childhood experiences (both physical and sexual abuse, as well as neglect) along with childhood psychopathology (CD and

ADHD).

- **Option C:** Better preventative measures are necessary as many of those with ASPD may only have an evaluation upon incarceration after inflicting harm. One is not apt to seek help for ASPD symptomatology. Many only seek assistance for co-occurring mental disorders or only present for court-mandated assessments.

77. Enrique who is under chemotherapy has the following CBC results: WBC 5000/mm³, RBC platelet 10,000/mm³. Which of the following is he at risk for?

- A. Infection
- B. Bleeding
- C. Angina
- D. None of the above

Correct Answer: B. Bleeding

A platelet count of 10,000/mm³ means that the client does not have enough platelets to clot the blood; therefore, the possibility of bleeding is high. Platelets help the blood to clot. A low platelet count (thrombocytopenia) means the body can't stop itself from bleeding.

- **Option A:** It is a normal value of WBC. These cells help the body fight infection. A low white blood cell count (leukopenia) leaves the body more open to infection. And if an infection does develop, the body may be unable to fight it off.
- **Option C:** Angina would only be a risk if the client had a lower RBC count. Another part of a CBC test is the mean corpuscular volume, which is a measure of the average size of your red blood cells. Specific blood tests can be performed to detect problems with your heart, lungs, or blood vessels. Cardiac enzyme tests measure the cardiac enzyme levels in the blood.
- **Option D:** Red blood cells carry oxygen throughout the body. The red blood cells' ability to carry oxygen is measured by the amount of hemoglobin in the blood. If the level of hemoglobin is low, the client may be anemic and the body works much harder to supply oxygen to the tissues. This can make the client feel fatigued and short of breath.

78. The primary reason for taping an indwelling catheter laterally to the thigh of a male client is to:

- A. Eliminate pressure at the penoscrotal angle.
- B. Prevent the catheter from kinking in the urethra.
- C. Prevent accidental catheter removal.
- D. Allow the client to turn without kinking the catheter.

Correct Answer: A. Eliminate pressure at the penoscrotal angle

The primary reason for taping an indwelling catheter to a male client is so the penis is held in a lateral position to prevent pressure at the penoscrotal angle. Prolonged pressure at the penoscrotal angle can cause a urethrocutaneous fistula.

- **Option B:** Firm-fitting underwear can sometimes cause kinks, therefore males are advised to wear loose-fitting underwear. Check for and remove any kinks in the catheter or the drainage bag tubing.

Check the position of the catheter and drainage bag. Ensure the bag is positioned below the bladder when the client is lying, sitting, or standing.

- **Option C:** The catheter should not fall out because it is held in place by a small balloon which is inflated with sterile water after the catheter is inserted into the bladder. On rare occasions the balloon might be faulty and deflate and the catheter will fall out.
- **Option D:** Check that the leg bag straps are fitted correctly and are not causing drainage bag obstruction. Remind the patient to relax and check the positioning. Place the catheter in at the correct angle.

79. A male client with type 1 diabetes is scheduled to receive 30 U of 70/30 insulin. There is no 70/30 insulin available. As a substitution, the nurse may give the client:

- A. 9 U regular insulin and 21 U neutral protamine Hagedorn (NPH).
- B. 21 U regular insulin and 9 U NPH.
- C. 10 U regular insulin and 20 U NPH.
- D. 20 U regular insulin and 10 U NPH.

Correct Answer: A. 9 U regular insulin and 21 U neutral protamine Hagedorn (NPH).

A 70/30 insulin preparation is 70% NPH and 30% regular insulin. Therefore, a correct substitution requires mixing 21 U of NPH and 9 U of regular insulin.

- **Option B:** Using this dosage would be incorrect and may produce no effect on the client's blood sugar level.
- **Option C:** This is an incorrect insulin dose. Incorrect administration can result in transient and serious hypoglycemia and hyperglycemia, wide glycemic excursions, and diabetic ketoacidosis.
- **Option D:** This is an incorrect dosage for the prescribed insulin. Glycemic control is poorer in those who lacked confidence in their ability to choose correct doses.

80. Mr. Rodriguez is admitted with severe pain in the knees. Which form of arthritis is characterized by urate deposits and joint pain, usually in the feet and legs, and occurs primarily in men over age 30?

- A. Septic arthritis
- B. Traumatic arthritis
- C. Intermittent arthritis
- D. Gouty arthritis

Correct Answer: D. Gouty arthritis

Gouty arthritis, a metabolic disease, is characterized by urate deposits and pain in the joints, especially those in the feet and legs. Urate deposits don't occur in septic or traumatic arthritis.

- **Option A:** Septic arthritis results from bacterial invasion of a joint and leads to inflammation of the synovial lining.
- **Option B:** Traumatic arthritis results from blunt trauma to a joint or ligament.

- **Option C:** Intermittent arthritis is a rare, benign condition marked by regular, recurrent joint effusions, especially in the knees.

81. Which of the following conditions most commonly causes acute glomerulonephritis?

- A. A congenital condition leading to renal dysfunction.
- B. Prior infection with group A Streptococcus within the past 10-14 days.
- C. Viral infection of the glomeruli.
- D. Nephrotic syndrome.

Correct Answer: B. Prior infection with group A Streptococcus within the past 10-14 days.

Acute glomerulonephritis is most commonly caused by the immune response to a prior upper respiratory infection with group A Streptococcus. PSGN most commonly presents in children 1 to 2 weeks after a streptococcal throat infection, or within 6 weeks following a streptococcal skin infection. Group A Streptococcus (GAS) has been subtyped depending on the surface M protein and opacity factor, which are known to be nephrogenic and can cause PSGN.

- **Option A:** Glomerulonephritis is not a congenital condition. Nephrogenic streptococci infection precedes PSGN, which initially affects skin or oropharynx. More recently, PSGN is associated with skin infections (impetigo) more frequently than throat infections (pharyngitis).
- **Option C:** Glomerular lesions in acute GN are the result of glomerular deposition or in situ formation of immune complexes. Poor hygiene, overcrowding, and low socioeconomic status are important risk factors for streptococci outbreaks, and this explains the higher incidence of PSGN in impoverished countries. Genetic factors are expected to predispose to the condition since almost 40% of patients with PSGN gave a positive family history. There is no specific gene found to cause PSGN.
- **Option D:** Nephrotic syndrome is the combination of nephrotic-range proteinuria with a low serum albumin level and edema. It is caused by increased permeability through the damaged basement membrane in the renal glomerulus, especially infectious or thrombo-embolic. It is the result of an abnormality of glomerular permeability that may be primary with a disease-specific to the kidneys or secondary to congenital infections, diabetes, systemic lupus erythematosus, neoplasia, or certain drug use.

82. In acid-base balance, the normal plasma PCO₂ and bicarbonate levels are disturbed. Match the changes in this parameter with the disorders in the given choices: Low plasma PaCO₂

- A. Metabolic Acidosis
- B. Respiratory Alkalosis
- C. Metabolic Alkalosis
- D. Respiratory Acidosis

Correct Answer: B. Respiratory Alkalosis

Excessive pulmonary ventilation decreases hydrogen ion concentration and thus causes respiratory alkalosis. It can become dangerous when it leads to cardiac dysrhythmias caused partly by a decrease

in serum potassium levels.

83. A client with a diagnosis of borderline personality disorder has negative feelings toward the other clients on the unit and considers them all to be “bad.” The nurse understands this defense is known as:

- A. Splitting
- B. Ambivalence
- C. Passive aggression
- D. Reaction formation

Correct Answer: A. Splitting

Splitting is the compartmentalization of opposite-affect states and failure to integrate the positive and negative aspects of self or others. Splitting is a term used in psychiatry to describe the inability to hold opposing thoughts, feelings, or beliefs. Some might say that a person who splits sees the world in terms of black or white—all or nothing. It’s a distorted way of thinking in which the positive or negative attributes of a person or event are neither weighed nor cohesive.

- **Option B:** The simultaneous existence of contradictory feelings and attitudes, such as pleasantness and unpleasantness or friendliness and hostility, toward the same person, object, event, or situation. Eugen Bleuler, who first defined ambivalence in a psychological sense and referred to it as affective ambivalence, regarded extreme ambivalence, such as an individual expressing great love for his or her mother while also asking how to kill her, as a major symptom of schizophrenia.
- **Option C:** Passive-aggressive behaviors are those that involve acting indirectly aggressive rather than directly aggressive. Passive-aggressive people regularly exhibit resistance to requests or demands from family and other individuals often by procrastinating, expressing sullenness, or acting stubborn.
- **Option D:** Reaction formation is a psychological defense mechanism in which a person goes beyond denial and behaves in the opposite way to which he or she thinks or feels. Conscious behaviors are adopted to overcompensate for the anxiety a person feels regarding their socially unacceptable unconscious thoughts or emotions. Usually, a reaction formation is marked by exaggerated behavior, such as showiness and compulsiveness.

84. Which question will critique the purpose of a research project?

- A. Is the strategy used for analysis compatible with the purpose of the study?
- B. What is the projected significance of the work to nursing?
- C. Are the informants who were chosen appropriate to inform the research?
- D. What are the philosophical underpinnings of the research method?

Correct Answer: B. What is the projected significance of the work to nursing?

This question will critique the purpose of a research project. Read the research article or report in its entirety to get a sense of the study and its contribution to knowledge development.

- **Option A:** A research critique is an analysis of a research undertaking that focuses on its strengths and limitations. Critiquing is a systematic process for evaluating research studies and the results

reported.

- **Option C:** This question will critique the sampling of a research project. Read the article or report again, paying attention to the questions appropriate to each stage of the critiquing process.
- **Option D:** This question will critique the philosophy of a research project. “The necessary elements in a research critique can be compiled in a series of questions for the process of critiquing research” (Boswell & Cannon, 2009, p. 308).

85. A 20-year old college student has been brought to the psychiatric hospital by her parents. Her admitting diagnosis is borderline personality disorder. When talking with the parents, which information would the nurse expect to be included in the client’s history? Select all that apply.

- A. Impulsiveness
- B. Lability of mood
- C. Ritualistic behavior
- D. Psychomotor retardation
- E. Self-destructive behavior

Correct Answer: A, B, & E.

Bipolar affective disorder is a chronic and complex disorder of mood that is characterized by a combination of manic (bipolar mania), hypomanic and depressive (bipolar depression) episodes, with substantial subsyndromal symptoms that commonly present between major mood episodes.

- **Option A:** With BPD, the client may engage in harmful, sensation-seeking behaviors, especially when upset. The client may impulsively spend money he or she can’t afford, binge eats, drive recklessly, shoplift, engage in risky sex, or overdo it with drugs or alcohol.
- **Option B:** Unstable emotions and moods are also common with BPD. Affect is often heightened, intense, and extremely labile. Implicit with the affective lability of mania are hyperactivity and severe mobility. When presenting in a depressive state, the patient will report a sad or elegiac mood, while expressing a congruent affect (often tearful).
- **Option C:** Ritualistic behavior is common in clients with Obsessive-Compulsive Disorder (OCD). To reduce the anxiety and distress associated with these thoughts, the patient may employ compulsions or rituals. These rituals may be personal and private, or they may involve others to participate; the rituals are to compensate for the ego-dystonic feelings of the obsessional thoughts and can cause a significant decline in function.
- **Option D:** Psychomotor retardation occurs commonly during depressive episodes of bipolar disorder as well as major depressive disorder. Major depressive disorder is diagnosed when an individual has a persistently low or depressed mood, anhedonia or decreased interest in pleasurable activities, feelings of guilt or worthlessness, lack of energy, poor concentration, appetite changes, psychomotor retardation or agitation, sleep disturbances, or suicidal thoughts.
- **Option E:** Extremely depressed patients demonstrate avolition and abulia—lack of willpower. It has been postulated that suicidal ideation originates during the depressive phases and is made manifest upon the transition to baseline or a subsequent manic state. Manic patients are threatening and assaultive.