Kevin's Review - 100 NCLEX Practice Questions

1. A prenatal nurse is providing instructions to a group of pregnant clients regarding measures to prevent toxoplasmosis. Which statement if made by one of the clients indicates a need for further instructions?

A. “I need to cook meat thoroughly.”

B. “I need to avoid touching mucous membranes of the mouth or eyes while handling raw meat.”

C. “I need to drink unpasteurized milk only.”

D. “I need to avoid contact with materials that are possibly contaminated with cat feces.”

Correct Answer: C. “I need to drink unpasteurized milk only.”

All pregnant women should be advised to do the following to prevent the development of toxoplasmosis. Everyone, including immunocompetent patients, should be educated about toxoplasmosis risk factors and ways to minimize the risks. Preventing toxoplasmosis is particularly important in seronegative immunocompromised patients and in pregnant women.

- **Option A:** Avoid eating raw meat, unpasteurized milk, and uncooked eggs, oysters, clams, and mussels. Rarely, infection by tachyzoites occurs from ingestion of unpasteurized milk or by direct entry into the bloodstream through a blood transfusion or laboratory accident. Transmission can also occur via ingestion of tissue cysts (bradyzoites) in undercooked or uncooked meat or through transplantation of an organ that contains tissue cysts. (Slaughterhouse workers and butchers may be at increased risk of infection.) In Europe and the United States, pork is the major source of T gondii infection in humans.
- **Option B:** Women should be instructed to cook meats thoroughly, avoid touching mucous membranes and eyes while handling raw meat; thoroughly wash all kitchen surfaces that come into contact with uncooked meat, wash the hands thoroughly after handling raw meat; avoid uncooked eggs and unpasteurized milk; wash fruits and vegetables before consumption.
- **Option D:** Avoid contact with materials that possibly are contaminated with cat feces, such as cat litter boxes, sandboxes, and garden soil. T gondii oocysts are ingested in material contaminated by feces from infected cats. Oocysts may also be transported to food by flies and cockroaches. When T gondii is ingested, bradyzoites are released from cysts or sporozoites are released from oocysts, and the organisms enter gastrointestinal cells. Host cell receptors consisting of laminin, lectin, and SAG1 are involved in T gondii tachyzoite attachment and penetration. Tachyzoites multiply, rupture cells, and infect contiguous cells. They are transported via the lymphatics and are disseminated hematogenously throughout the tissues.

2. The client with leukemia is receiving Myleran (busulfan) and Zyloprim (allopurinol). The nurse tells the client that the purpose if the allopurinol is to prevent:

A. Mouth sores

B. Hyperuricemia

C. Nausea

D. Alopecia

Correct Answer: B. Hyperuricemia

- **Option B:** Allopurinol decreases uric acid concentrations in serum and urine. In the client receiving chemotherapy, uric acid levels increase as a result of the massive cell destruction that occurs from the chemotherapy. This medication prevents or treats hyperuricemia caused by chemotherapy.
- **Options A, C, and D:** Allopurinol is not used to prevent alopecia, nausea, or mouth sores.

3. Type A chronic gastritis can be distinguished from type B by its ability to:

A. Cause atrophy of the parietal cells.

B. Affect only the antrum of the stomach.

C. Thin the lining of the stomach walls.

D. Decrease gastric secretions.

Correct Answer: A. Cause atrophy of the parietal cells.

Type A causes changes in parietal cells. Type A is caused by the immune system destroying stomach cells. And it can increase the risk of vitamin deficiencies, anemia, and cancer. Chronic gastritis occurs when the stomach lining becomes inflamed. Bacteria, consuming too much alcohol, certain medications, chronic stress, or other immune system problems can lead to inflammation.

- **Option B:** Type B, the most common type, is caused by Helicobacter pylori bacteria, and can cause stomach ulcers, intestinal ulcers, and cancer. Because chronic gastritis occurs over a long period of time it gradually wears away at the stomach lining. And it can cause metaplasia or dysplasia. These are precancerous changes in the cells that can lead to cancer if untreated.
- **Option C:** Type C is caused by chemical irritants like NSAIDs, alcohol, or bile. And it can also cause stomach lining erosion and bleeding. When inflammation occurs, the stomach lining changes and loses some of its protective cells. It may also cause early satiety. This is where the stomach feels full after eating just a few bites of food.
- **Option D:** A stressful lifestyle or a traumatic experience can decrease the stomach's ability to protect itself. In addition, the risk increases if the patient has autoimmune diseases or certain illnesses like Crohn's disease.

4. A leukemia patient has a relative who wants to donate blood for transfusion. Which of the following donor medical conditions would prevent this?

A. A history of hepatitis C five years previously

B. Cholecystitis requiring cholecystectomy one year previously

C. Asymptomatic diverticulosis

D. Crohn's disease in remission

Correct Answer: A. A history of hepatitis C five years previously

Hepatitis C is a viral infection transmitted through bodily fluids, such as blood, causing inflammation of the liver. Patients with hepatitis C may not donate blood for transfusion due to the high risk of infection in the recipient.

- **Option B:** Cholecystitis is the inflammation of the gallbladder. This condition does not transmit through bodily fluids.

- **Option C:** Diverticulosis is when pockets called diverticula form in the wall of the digestive tract. The inner layer of the intestine pushes through weak spots in the outer lining. This pressure makes them bulge out, making little pouches.
- **Option D:** Crohn's disease is an inflammatory bowel disease. It causes inflammation of the digestive tract. This disease does not transmit through the blood.

5. A client taking the monoamine oxidase inhibitor (MAOI) antidepressant isocarboxazid (Marplan) is instructed by the nurse to avoid which foods and beverages?

A. Aged cheese and red wine

B. Milk and green, leafy vegetables

C. Carbonated beverages and tomato products

D. Lean red meats and fruit juices

Correct Answer: A. Aged cheese and red wine

Aged cheese and red wines contain the substance tyramine which, when taken with an MAOI, can precipitate a hypertensive crisis. Monoamine oxidase inhibitors (MAOIs) were first introduced in the 1950s. They are a separate class from other antidepressants, treating different forms of depression as well as other nervous system disorders such as panic disorder, social phobia, and depression with atypical features. MAOIs prevent the breakdown of tyramine found in the body as well as certain foods, drinks, and other medications. Patients that take MAOIs and consume tyramine-containing foods or drinks will exhibit high serum tyramine level.

- **Option B:** These are foods rich in iron. A high level of tyramine can cause a sudden increase in blood pressure, called the tyramine pressor response. Even though it is rare, a high tyramine level can trigger a cerebral hemorrhage, which can even result in death. Eating foods with high tyramine can trigger a reaction that can have serious consequences. Patients should know that tyramine can increase with the aging of food; they should be encouraged to have foods that are fresh instead of leftovers or food prepared hours earlier.
- **Option C:** Carbonated beverages are unhealthy and tomato products are high in sodium. Eating foods with high tyramine can trigger a reaction that can have serious consequences. Patients should know that tyramine can increase with the aging of food; they should be encouraged to have foods that are fresh instead of leftovers or food prepared hours earlier. Examples of high levels of tyramine in food are types of fish, as well as types of meat, including sausage, turkey, liver, and salami.
- **Option D:** Lean red meats are rich in protein and fruit juices are rich in fiber. Also, certain fruits can contain tyramine like overripe fruits, avocados, bananas, raisins, or figs. Further examples are cheeses, alcohol, and fava beans; all of these should be avoided even after two weeks of stopping MAOIs. Anyone taking MAOIs is at risk for an adverse hypertensive reaction, with accompanying morbidity.

6. A 22 y.o. patient with diabetic nephropathy says, "I have two kidneys and I'm still young. If I stick to my insulin schedule, I don't have to worry about kidney damage, right?" Which of the following statements is the best response?

A. "You have little to worry about as long as your kidneys keep making urine."

B. “You should talk to your doctor because statistics show that you’re being unrealistic.”

C. “You would be correct if your diabetes could be managed with insulin.”

D. “Even with insulin, kidney damage is still a concern.”

Correct Answer: D. “Even with insulin, kidney damage is still a concern.”

Kidney damage is still a concern. Microvascular changes occur in both of the patient’s kidneys as a complication of the diabetes. Diabetic nephropathy is the leading cause of end-stage renal disease. The kidneys continue to produce urine until the end stage. Nephropathy occurs even with insulin management.

- **Option A:** In T2DM, UKPDS (United Kingdom Prospective Diabetes Study) showed that targeting an HbA1C of 7% led to a lower risk of microvascular complications, including nephropathy. However, blood pressure (BP) control also led to a decrease in cardiovascular mortality.
- **Option B:** The benefits of good glycemic control early in the onset of disease carried over even after a long time, despite glycemic control being similar in both groups on longer follow up. This effect is “metabolic memory,” a term coined by DCCT/EDIC investigators.
- **Option C:** Studies in patients with T1DM and overt proteinuria have also shown that ACE inhibitors slow the progress of diabetic nephropathy. The IDNT and RENAAL studies have shown similar benefits in T2DM patients. These studies provide clear evidence of the benefit of RAS-blocking medication on slowing progression of diabetic nephropathy, independent of their effect on BP.

7. A client has been treated with antibiotic therapy for right lower-lobe pneumonia for 10 days and will be discharged today. Which of the following physical findings would lead the nurse to believe it is appropriate to discharge this client?

A. Continued dyspnea

B. Fever of 102*F

C. Respiratory rate of 32 breaths/minute.

D. Vesicular breath sounds in the right base.

Correct Answer: D. Vesicular breath sounds in right base

If the client still has pneumonia, the breath sounds in the right base will be bronchial, not the normal vesicular breath sounds. If the client still has dyspnea, fever, and increased respiratory rate, he should be examined by the physician before discharge because he may have another source of infection or still have pneumonia.

- **Option A:** Assess the rate, rhythm, and depth of respiration, chest movement, and use of accessory muscles. Tachypnea, shallow respirations, and asymmetric chest movement are frequently present because of the discomfort of moving chest wall and/or fluid in the lung due to a compensatory response to airway obstruction. Altered breathing pattern may occur together with the use of accessory muscles to increase chest excursion to facilitate effective breathing.
- **Option B:** Investigate sudden change in condition, such as increasing chest pain, extra heart sounds, altered sensorium, recurring fever, changes in sputum characteristics. Delayed recovery or increase in severity of symptoms suggests resistance to antibiotics or secondary infection.
- **Option C:** Assess and record respiratory rate and depth at least every 4 hours. The average rate of respiration for adults is 10 to 20 breaths per minute. It is important to take action when there is an

alteration in the pattern of breathing to detect early signs of respiratory compromise.

8. 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

Correct Answer: D. Electrocardiogram

The ECG is the quickest, most accurate, and most widely used tool to determine the location of myocardial infarction.

- **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.
- **Option B:** Cardiac enzymes are used to diagnose MI but can't determine the location.
- **Option C:** An echocardiogram is used most widely to view myocardial wall function after an MI has been diagnosed.

9. A male client has just been diagnosed with hepatitis A. On assessment, the nurse expects to note:

A. Severe abdominal pain radiating to the shoulder.

B. Anorexia, nausea, and vomiting.

C. Eructation and constipation.

D. Abdominal ascites.

Correct Answer: B. Anorexia, nausea, and vomiting.

Hallmark signs and symptoms of hepatitis A include anorexia, nausea, vomiting, fatigue, and weakness. Acute hepatitis usually presents as a self-limited illness; development of fulminant hepatitis is rare. Typical symptoms of acute infection include nausea, vomiting, abdominal pain, fatigue, malaise, poor appetite, and fever; management is with supportive care.

- **Option A:** Abdominal pain may occur but doesn't radiate to the shoulder. Extrahepatic manifestations rarely occur but may include pancreatitis, rash, acute kidney injury with interstitial nephritis or glomerulonephritis, pneumonitis, pericarditis, hemolysis, and acute cholecystitis.
- **Option C:** Eructation and constipation are common in gallbladder disease, not hepatitis A. Patients may develop dark urine and pale stools within a week, followed by jaundice, icteric (yellow-tinted) sclera, and pruritus. Patients usually have elevated levels of serum alanine aminotransferase, aspartate aminotransferase, bilirubin, alkaline phosphatase, and lambda-glutamyl transpeptidase.
- **Option D:** Abdominal ascites is a sign of advanced hepatic disease, not an early sign of hepatitis A. Ascites is the pathologic accumulation of fluid within the peritoneal cavity. It is the most common complication of cirrhosis and occurs in about 50% of patients with decompensated cirrhosis in 10 years. The development of ascites denotes the transition from compensated to decompensated

cirrhosis.

10. The nurse is monitoring a female client for the early signs and symptoms of dumping syndrome. Which of the following indicate this occurrence?

A. Sweating and pallor

B. Bradycardia and indigestion

C. Double vision and chest pain

D. Abdominal cramping and pain

Correct Answer: A. Sweating and pallor

Early manifestations of dumping syndrome occur 5 to 30 minutes after eating. Symptoms include vertigo, tachycardia, syncope, sweating, pallor, palpitations, and the desire to lie down. In early dumping, the symptoms usually occur within 10 to 30 minutes after a meal. The rapid transit of hyperosmolar chyme from the stomach into the duodenum causes fluid to shift from the vasculature to the intestinal lumen, leading to increased volume in the small bowel.

- **Option B:** Bradycardia and indigestion are not signs of dumping syndrome. There may be GI or vasomotor symptoms. GI symptoms include nausea, vomiting, diarrhea, or belching. Vasomotor symptoms include shock, syncope, near-syncope, palpitations, dizziness, desire to lie down, or diaphoresis.
- **Option C:** Double vision and chest pain are not signs of dumping syndrome. GI hormones such as enteroglucagon, pancreatic polypeptide, peptide YY, vasoactive intestinal polypeptide, glucagon-like peptide, and neurotensin have been evident with higher values after meals. Hormonal imbalances may cause delayed motility, decreased gastric and intestinal secretions, which delay the digestion and transit of food that arrives at the small bowel.
- **Option D:** Late dumping, also known as postprandial hyperinsulinemic hypoglycemia, usually occurs 1 to 3 hours after a high-carbohydrate meal. There is an association with hypoglycemia, but the exact mechanism is unknown. It is proposed that the rapid absorption of carbohydrates exaggerates the glucose-mediated insulin response.

11. When preparing to administer the vitamin K injection to a neonate, the nurse would select which of the following sites as appropriate for the injection?

A. Deltoid muscle

B. Anterior femoris muscle

C. Vastus lateralis muscle

D. Gluteus maximus muscle

Correct Answer: C. Vastus lateralis muscle

The middle third of the vastus lateralis is the preferred injection site for vitamin K administration because it is free of blood vessels and nerves and is large enough to absorb the medication.

- **Option A:** The deltoid muscle of a newborn is not large enough for a newborn IM injection. Injections into this muscle in a small child might cause damage to the radial nerve.

- **Option B:** The anterior femoris muscle is the next safest muscle to use in a newborn but is not the safest. The rectus femoris (the middle third of the rectus femoris) is no longer a recommended site because it may cause discomfort and pain. A previous study reported that one disadvantage of this site is that nerves and numerous blood vessels run very close to it
- **Option D:** Because of the proximity of the sciatic nerve, the gluteus maximus muscle should not be until the child has been walking 2 years.

12. A client with bipolar disorder, manic type, exhibits extreme excitement, delusional thinking, and command hallucinations. Which of the following is the priority nursing diagnosis?

A. Anxiety

B. Impaired social interaction

C. Disturbed sensory-perceptual alteration (auditory)

D. Risk for other-directed violence

Correct Answer: D. Risk for other-directed violence

A client with these symptoms would have poor impulse control and would therefore be prone to acting-out behavior that may be harmful to either himself or others. All of the remaining nursing diagnoses may apply to the client with mania; however, the priority diagnosis would be risk for violence. Mania, or a manic phase, is a period of 1 week or more in which a person experiences a change in normal behavior that drastically affects their functioning.

- **Option A:** The defining characteristics of mania are increased talkativeness, rapid speech, decreased the need for sleep (unlike depression or anxiety in which the need for sleep exists, but there is an inability to sleep), racing thoughts, distractibility, increase in goal-directed activity, and psychomotor agitation. Some other hallmarks of mania are an elevated or expansive mood, mood lability, impulsivity, irritability, and grandiosity. If the individual experiencing these symptoms requires hospitalization, then this period automatically qualifies as true mania and not hypomania, even if the symptoms are present for less than one week.
- **Option B:** Many families bring their loved ones to the emergency room due to the excessive behavioral changes they have noticed over a brief period. Patients amid a manic phase commonly engage in goal-directed activities that may result in harmful consequences, such as spending excessive money, starting businesses unprepared, traveling, or promiscuity. Many patients engage in property damage or even harm themselves or others through verbal or physical assaults. They may also become highly aggressive, agitated, or irritable.
- **Option C:** Mania also commonly presents with psychotic features, which include delusions or hallucinations. Many patients endorse grandiose delusions, believing they are high-level operatives such as spies, government officials, members of secret agencies, or that they are knowledgeable professionals (even when they have no such background). These individuals may also experience auditory or visual hallucinations, which only present when they are in the manic phases.

13. A 38-year-old female patient with a diagnosis of hyperthyroidism is scheduled to receive Lugol's iodine solution as a preoperative preparation before undergoing a subtotal thyroidectomy. The patient experiences symptoms including rapid heart rate, weight loss, and anxiety. The nurse is preparing to administer the medication and educates the patient on its purpose.

What is the primary reason for administering Lugol's iodine solution to this patient?

A. Decrease the total basal metabolic rate.

B. Maintain the function of the parathyroid glands.

C. Block the formation of thyroxine by the thyroid gland.

D. Decrease the size and vascularity of the thyroid gland.

E. Prevent postoperative hypocalcemia.

F. Stabilize the patient's heart rate.

Correct Answer: D. Decrease the size and vascularity of the thyroid gland.

Lugol's solution provides iodine, which aids in decreasing the vascularity of the thyroid gland, which limits the risk of hemorrhage when surgery is performed.

14. INH treatment is associated with the development of peripheral neuropathies. Which of the following interventions would the nurse teach the client to help prevent this complication?

A. Adhere to a low cholesterol diet.

B. Supplement the diet with pyridoxine (vitamin B6).

C. Get extra rest.

D. Avoid excessive sun exposure.

Correct Answer: B. Supplement the diet with pyridoxine (vitamin B6).

INH competes with the available vitamin B6 in the body and leaves the client at risk for development of neuropathies related to vitamin deficiency. Supplemental vitamin B6 is routinely prescribed. Peripheral neuropathy is avoided and treated with daily pyridoxine administration along with INH. Though there are no specific therapies for INH-induced liver damage, some studies have shown a mortality benefit in using corticosteroids and N-acetylcysteine early in the course of liver injury.

- **Option A:** The treatment is generally supportive with hydration and monitoring. If there is evidence of liver damage, small case studies suggest the use of N-acetyl cysteine and corticosteroids. In rare cases, a liver transplant may be required. Today, peripheral neuropathy is rarely seen because most patients are prescribed pyridoxine at the initiation of isoniazid therapy.
- **Option C:** The patient should be instructed properly on consumption of an adequate dose of the drug at the appropriate time. If the patient is not able to remember properly, the task can be assigned to a family member to dispense the medicine.
- **Option D:** Acute toxicity is approached by strict airway management, activated charcoal if the patient presents early, seizure management with the use of benzodiazepines, and pyridoxine administration. This helps with the rapid restoration of GABA stores.

15. The nurse is assessing a four-month-old infant. The nurse would anticipate finding that the infant would be able to

A. Hold a rattle

B. Bang two blocks

C. Move the small toy from one hand to another

D. Wave “bye-bye”

Correct Answer: A. Hold a rattle

The age at which a baby will develop the skill of grasping a toy with help between the 4th to 6th month. Around the same time that baby learns to reach for an object, which happens by month 4 or so, he’ll learn to grasp an object, such as a rattle, that’s held to his fingers.

- **Option B:** At 9 months, babies repeat different actions with objects. The mouth objects to explore the features. They bang objects with their hand and bang two objects together to create sounds and actions. Banging two objects together is a milestone that can be seen between the age of 9 months and a year.
- **Option C:** By age 6-8 months, they can transfer objects from hand to hand, turn them from side to side, and twist them upside down. Babies’ broadening range of vision is apparent as they concentrate and focus on objects and follow movements.
- **Option D:** Learning how to wave bye-bye is an important milestone for an infant that usually occurs between the age of 10 months and a year. A study in Pediatrics International found premature infants mastered the bye-bye gesture significantly later than full-term babies and used different hand and wrist motions.

16. A nurse, assigned to a client with emphysema, is providing shift report. Which nursing interventions would be appropriate to include? Select all that apply.

A. The nurse should reduce fluid intake to less than 850 ml per shift.

B. The nurse should teach diaphragmatic, pursed-lip breathing.

C. The nurse should administer low-flow oxygen.

D. The nurse should keep the client in a supine position as much as possible.

E. The nurse should encourage alternating activity with rest periods.

F. The nurse should teach the use of postural drainage and chest physiotherapy.

Correct Answer: B, C, E, & F.

Emphysema is the most severe form of COPD, characterized by recurrent inflammation that damages and eventually destroys alveolar walls to create large blebs or bullae (air spaces) and collapsed bronchioles on expiration (air-trapping).

- **Option A:** Fluid intake should be increased to 3,000 ml/day, if not contraindicated, to liquefy secretions and facilitate their removal. Provide warm or tepid liquids. Recommend the intake of fluids between, instead of during, meals. Using warm liquids may decrease bronchospasm. Fluids during meals can increase gastric distension and pressure on the diaphragm.
- **Option B:** Diaphragmatic, pursed-lip breathing strengthens respiratory muscles and enhances oxygenation in clients with emphysema. This provides the client with some means to cope with or control dyspnea and reduce air-trapping.

- **Option C:** Low-flow oxygen should be administered because a client with emphysema has chronic hypercapnia and a hypoxic respiratory drive. Administering humidified oxygen prevents drying out the airways, decreases convective moisture losses, and improves compliance.
- **Option D:** The client should be placed in a high Fowler's position to improve ventilation. Elevation of the head of the bed facilitates respiratory function by use of gravity; however, the client in severe distress will seek the position that most eases breathing.
- **Option E:** Alternating activity with rest allows to perform activities without excessive distress. During severe, acute, or refractory respiratory distress, the patient may be totally unable to perform basic self-care activities because of hypoxemia and dyspnea. Rest interspersed with care activities remains an important part of the treatment regimen.
- **Option F:** If the client has difficulty mobilizing copious secretions, the nurse should teach the client and family members how to perform postural drainage and chest physiotherapy. These techniques will prevent possible aspirations and prevent any untoward complications.

17. A nurse prepares to administer an intramuscular injection to a 6-month-old infant. The nurse selects which site to administer the medication?

A. Rectus femoris

B. Dorsal gluteal

C. Ventrogluteal

D. Vastus lateralis

Correct Answer: D. Vastus lateralis

Intramuscular injection sites are selected based on the child's age and muscle development. The vastus lateralis is the only safe muscle group to use for intramuscular injection in a 6 month-old infant. Muscle has fewer pain-sensing nerves than subcutaneous tissue and is less sensitive to irritating and viscous medications, so pain is lessened.

- **Option A:** I.M. injections are administered in newborns to deliver medications deeply into the muscle without causing injury to the tiny patient. Skeletal muscle can accommodate larger volumes of medication than subcutaneous tissue, and absorption is faster because muscle tissue is highly vascular.
- **Option B:** Never give an IM injection in the buttocks. Using the vastus lateralis muscle avoids the risk of sciatic nerve damage from gluteal injection. Also, the vastus lateralis muscle has a larger muscle mass than the gluteal region and therefore has reduced risk of severe local reactions.
- **Option C:** The ventrogluteal site is unsafe for that age. Avoid subcutaneous and intramuscular injections when intravenous administration is a suitable alternative option. Make sure that infants do not move during the IM injection. This is very important.

18. A client is complaining of severe flank and abdominal pain. A flat plate of the abdomen shows urolithiasis. Which of the following interventions is important?

A. Strain all urine.

B. Limit fluid intake.

C. Enforce strict bed rest.

D. Encourage a high calcium diet.

Correct Answer: A. Strain all urine.

Urine should be strained for calculi and sent to the lab for analysis. Strain all urine. Document any stones expelled and sent to the laboratory for analysis. Retrieval of calculi allows identification of type of stone and influences choice of therapy.

- **Option B:** Fluid intake of three (3) to four (4) L is encouraged to flush the urinary tract and prevent further calculi formation. Promote sufficient intake of fluids. Increased hydration flushes bacteria, blood, and debris and may facilitate stone passage. Offer fruit juices, particularly cranberry juice to help acidify urine.
- **Option C:** Ambulation is encouraged to help pass the calculi through gravity. Encourage the patient to walk if possible to facilitate spontaneous passage. Determine patient's normal voiding pattern and note variations. Calculi may cause nerve excitability, which causes sensations of an urgent need to void. Usually, frequency and urgency increase as calculus nears ureterovesical junctions.
- **Option D:** A low-calcium diet is recommended to help prevent the formation of calcium calculi. Reduces risk of calcium stone formation. Note: Research suggests that restricting dietary calcium is not helpful in reducing calcium-stone formation, and researchers, although not advocating high-calcium diets, are urging that calcium limitation be reexamined.

19. A client exhibits all of the following during a physical assessment. Which of these is considered a primary defense against infection?

A. Fever

B. Intact skin

C. Inflammation

D. Lethargy

Correct Answer: B. Intact skin

Intact skin is considered a primary defense against infection. Usually, the skin prevents invasion by microorganisms unless it is damaged (for example, by an injury, insect bite, or burn). Mucous membranes, such as the lining of the mouth, nose, and eyelids, are also effective barriers. Typically, mucous membranes are coated with secretions that fight microorganisms. For example, the mucous membranes of the eyes are bathed in tears, which contain an enzyme called lysozyme that attacks bacteria and helps protect the eyes from infection. Fever, the inflammatory response, and phagocytosis (a process of killing pathogens) are considered secondary defenses against infection.

- **Option A:** Body temperature increases as a protective response to infection and injury. An elevated body temperature (fever) enhances the body's defense mechanisms, although it can cause discomfort. A part of the brain called the hypothalamus controls body temperature. Fever results from an actual resetting of the hypothalamus's thermostat. The body raises its temperature to a higher level by moving (shunting) blood from the skin surface to the interior of the body, thus reducing heat loss.
- **Option C:** Any injury, including an invasion by microorganisms, causes inflammation in the affected area. Inflammation, a complex reaction, results from many different conditions. During inflammation, the blood supply increases, helping carry immune cells to the affected area. Because of the increased blood flow, an infected area near the surface of the body becomes red and warm. The walls of blood vessels become more porous, allowing fluid and white blood cells to pass into

the affected tissue. The increase in fluid causes the inflamed tissue to swell. The white blood cells attack the invading microorganisms and release substances that continue the process of inflammation.

- **Option D:** Lethargy refers to a state of lacking energy. People who are experiencing fatigue or tiredness can also be said to be lethargic because of low energy. The same medical conditions that can lead to tiredness or fatigue can also lead to lethargy.

20. A nurse is assigned to a patient who is receiving oxytocin (Pitocin) to induce labor. The nurse terminates the oxycontin infusion if which of the following is noted on the assessment of the client?

A. Nausea

B. Fatigue

C. Early decelerations of the fetal heart rate

D. Uterine hyperstimulation

Correct Answer: D. Uterine hyperstimulation.

Oxytocin is used to induce labor by stimulating uterine contraction. Oxytocin infusion must be discontinued if any signs of uterine stimulation are present.

- **Options A & B:** These are probably caused by the labor experience itself.
- **Option C:** Early decelerations of the fetal heart rate are a reassuring sign, but it does not indicate fetal distress.

21. While examining a 2-year-old child, the nurse in charge sees that the anterior fontanel is open. The nurse should:

A. Notify the doctor

B. Look for other signs of abuse

C. Recognize this as a normal finding

D. Ask about a family history of Tay-Sachs disease

Correct Answer: A. Notify the doctor

Because the anterior fontanel normally closes between ages 12 and 18 months, the nurse should notify the doctor promptly of this finding. The fontanel can enlarge in the first few months of life, and the median age of closure is 13.8 months. By three months of age, the anterior fontanel is closed in 1 percent of infants; by 12 months, it is closed in 38 percent; and by 24 months, it is closed in 96 percent.

- **Option B:** An open fontanel does not indicate abuse. Fontanel size is influenced by brain growth, dural attachments, suture development, and osteogenesis. The newborn's skull should be evaluated for shape, circumference, suture ridges, and size of anterior and posterior fontanels. Size is calculated by the average of the anteroposterior and transverse dimensions.
- **Option C:** The key feature of a normal anterior fontanel is variation. On the first day of an infant's life, the normal fontanel ranges from 0.6 cm to 3.6 cm, with a mean of 2.1 cm. The fontanel can enlarge in the first few months of life and the median age of closure is 13.8 months.

- **Option D:** An open fontanel is not associated with Tay-Sachs disease. Achondroplasia, congenital hypothyroidism, Down syndrome, rickets, and increased intracranial pressure are among the most common conditions associated with an open anterior fontanel.

22. A 10-year-old client contracted severe acute respiratory syndrome (SARS) when traveling abroad with her parents. The nurse knows she must put on personal protective equipment to protect herself while providing care. Based on the mode of SARS transmission, which personal protective equipment should the nurse wear?

A. Gloves

B. Gown and gloves

C. Gown, gloves, and mask

D. Gown, gloves, mask, and eye goggles or eye shield

Correct Answer: D. Gown, gloves, mask, and eye goggles or eye shield

The transmission of SARS isn't fully understood. Therefore, all modes of transmission must be considered possible, including airborne, droplet, and direct contact with the virus. For protection from contracting SARS, any health care worker providing care for a client with SARS should wear a gown, gloves, mask, and eye goggles or an eye shield.

- **Option A:** For level 1 or standard infection control precaution wherein there is no suspected or known infectious agent, disposable gloves and disposable apron may be used. If there is a danger or risk of spraying or splashing, eye and face protection should be considered.
- **Option B:** Level 2 or direct/indirect contact precautions require the use of a disposable gown (which is fluid-resistant) and disposable gloves. This is used when there is a suspected or confirmed infectious agent spread by direct or indirect contact.
- **Option C:** Level 2 droplet precautions occur when there is a suspected or confirmed infectious agent spread by droplet route/ Personal protective equipment should include a disposable gown which is fluid-resistant, disposable gloves, and fluid-resistant surgical face mask and goggles.

23. While a female client is being prepared for discharge, the nasogastric (NG) feeding tube becomes clogged. To remedy this problem and teach the client's family how to deal with it at home, what should the nurse do?

A. Irrigate the tube with warm water.

B. Advance the tube into the intestine.

C. Apply intermittent suction to the tube.

D. Withdraw the obstruction with a 30-ml syringe.

Correct Answer: A. Irrigate the tube with warm water.

The American Society for Parenteral and Enteral Nutrition (ASPEN) recommends warm water as the best initial choice for trying to unclog a feeding tube. First, attach a 30- or 60-mL piston syringe to the feeding tube and pull back the plunger to help dislodge the clog. Next, fill the flush syringe with warm water, reattach it to the tube, and attempt a flush.

- **Option B:** Advancing the NG tube is inappropriate because the tube is designed to stay in the stomach and isn't long enough to reach the intestines. If there is still continued resistance, gently move the syringe plunger back and forth to help loosen the clog. Then, clamp the tube to allow the warm water to penetrate the clog for up to 20 minutes.
- **Option C:** Applying intermittent suction or using a syringe for aspiration is unlikely to dislodge the material clogging the tube but may create excess pressure.If the patient's feeding tube becomes clogged, attempt to unclog it before replacing it, which is both costly and uncomfortable for the patient. The belief that carbonated beverages or cranberry juice will unclog a feeding tube is a persistent nursing myth. In fact, these beverages have an acidic pH that can worsen the occlusion by causing proteins in the EN formula to precipitate within the tube.
- **Option D:** Intermittent suction may even collapse the tube. Consistently flushing feeding tubes with water as scheduled during EN therapy and medication administration is the best way to minimize the risk of occlusions.

24. A nurse is caring for a client after a bronchoscopy and biopsy. Which of the following signs if noted in the client should be reported immediately to the physician?

A. Blood-streaked sputum

B. Dry cough

C. Hematuria

D. Bronchospasm

Correct Answer: D. Bronchospasm

If a biopsy was performed during a bronchoscopy, blood-streaked sputum is expected for several hours. The client should be assessed for signs of complications, which would include cyanosis, dyspnea, stridor, bronchospasm, hemoptysis, hypotension, tachycardia, and arrhythmias. Cardiac arrhythmias may also occur especially in patients with pre-existing cardiac disease.

- **Option A:** Frank blood indicates hemorrhage. In most cases, bleeding is usually self-limited. The pulmonologists should carefully ascertain for hemostasis, and in the event of severe bleeding prompt management should be immediately instituted.
- **Option B:** A dry cough may be expected. In 1% to 3% of patients, pneumothorax may occur after transbronchial biopsies. Small pneumothoraces may be managed conservatively, while symptomatic and large pneumothorax will require chest tube insertion and hospitalization.
- **Option C:** Hematuria is unrelated to this procedure. A tension pneumothorax results in hemodynamic instability and should be recognized even without imaging studies. Appropriate life-saving measures such as chest tube insertion should be undertaken immediately.

25. Aubrey thinks about primary nursing as a system to deliver care. Which of the following activities is not done by a primary nurse?

A. Collaborates with the physician.

B. Provides care to a group of patients together with a group of nurses.

C. Provides care for 5-6 patients during their hospital stay.

D. Performs comprehensive initial assessment.

Correct Answer: B. Provides care to a group of patients together with a group of nurses.

This function is done in team nursing where the nurse is a member of a team that provides care for a group of patients. Primary care nursing is when a single nurse is identified as the point of contact and primary caregiver for a patient during his or her particular hospital stay or other episodes of care. As envisioned by staff nurses at the University of Minnesota in 1969, the primary care nursing team is composed of that lead nurse, who directly supervises the engagement of a licensed practical nurse and/or nursing assistant in that patient's care.

- **Option A:** Further, the primary care nurse acts as a care partner, serving as a communications liaison between the patient and his or her doctor and other care team members. (In many facilities and systems, the position of nurse practitioner has been created to fulfill this role.)
- **Option C:** The primary nursing model is hailed by proponents as creating a better bond and trust relationship between patients and caregivers, thanks to that single-source relationship. They say that the patient's care is elevated by having that single nurse overseeing its delivery and that its structure empowers the nurse to utilize managerial abilities as well as deploy their best bedside care.
- **Option D:** Primary health care (PHC) is a principle-based, comprehensive approach. It focuses on the way services are delivered, from birth to death, across the continuum of care in all settings.

26. The assigned LPN of the unit reports to you that a client's blood pressure and heart rate have decreased, and when her face is assessed, one side twitches. What is the most appropriate thing to do as a nurse?

A. Assess the client's pupillary reaction to light.

B. Obtain a neurologic exam request for the client.

C. Review the client's morning calcium level.

D. Retake the client's blood pressure and heart rate.

Correct Answer: C. Review the client's morning calcium level.

Facial twitching of one side of the mouth, nose, and cheek in response to tapping the face just below and in front of the ear is a positive Chvostek sign. It is a neurologic manifestation of hypocalcemia.

- **Option A:** Pupillary light reflex is used to assess the brain stem function. Abnormal pupillary light reflex can be found in optic nerve injury, oculomotor nerve damage, brain stem lesions, such as tumors, and medications like barbiturates.
- **Option B:** The neurological examination is an assessment tool to determine a patient's neurologic function. It is beneficial in a variety of ways as it allows the localization of neurologic diseases and helps in ruling in or ruling out differential diagnoses.
- **Option D:** The LPN is experienced and holds the skills to carefully and accurately measure vital signs. The clinical manifestations of hypocalcemia can range from no symptoms if it is mild to life-threatening symptoms like seizures, heart failure, or laryngospasm if it is severe. Also, the clinical manifestation depends on the rate of development of hypocalcemia and its chronicity.

27. A 50-year-old male patient, who is a known case of congestive heart failure and was recently diagnosed with osteoarthritis, is admitted to the ER. The

patient's wife reports that he might have taken an overdose of aspirin in an attempt to manage his joint pain. Given his medical history and the potential implications of aspirin overdose, which of the following complications should a nurse most closely monitor for during the acute management of this patient.

A. Onset of pulmonary edema

B. Metabolic alkalosis

C. Respiratory alkalosis

D. Parkinson's disease type symptoms

Correct Answer: A. Onset of pulmonary edema

Aspirin overdose can lead to metabolic acidosis and cause pulmonary edema development. Early symptoms of aspirin poisoning also include tinnitus, hyperventilation, vomiting, dehydration, and fever. Late signs include drowsiness, bizarre behavior, unsteady walking, and coma. Abnormal breathing caused by aspirin poisoning is usually rapid and deep. Pulmonary edema may be related to an increase in permeability within the capillaries of the lung leading to "protein leakage" and transudation of fluid in both renal and pulmonary tissues. The alteration in renal tubule permeability may lead to a change in colloid osmotic pressure and thus facilitate pulmonary edema (via Medscape).

- **Option B:** Aspirin overdose causes metabolic acidosis, not alkalosis. Metabolic alkalosis is a primary increase in serum bicarbonate (HCO_3^-) concentration.
- **Option C:** Respiratory alkalosis is a disturbance in acid and base balance due to alveolar hyperventilation.
- **Option D:** Parkinson's type symptoms include tremors, bradykinesia, rigid muscles, impaired posture and balance, speech changes, and loss of automatic movements.

28. A cromolyn sodium (Intal) inhaler is prescribed to a client with asthma. A nurse provides instructions regarding the side effects of this medication. The nurse tells the client to immediately report which of the following side effects?

A. Sore throat

B. Drowsiness

C. Wheezing

D. Hypotension

Correct Answer: C. Wheezing

Cromolyn Sodium (Intal) is used to prevent asthma attacks in people with bronchial asthma. Serious side effects associated with the use of this inhaler are wheezing, chest tightness, skin rash, hives, itching, swelling of the face, lips, throat, or tongue, and joint pain.

- **Options A & B:** These are expected side effects of Intal.
- **Option D:** Hypotension is not directly related to the medication.

29. A client was brought to the emergency room with complaints of slurring of speech, vomiting, dry mucosa, and dry skin turgor. Lab tests showing serum

sodium 125 mEq/L and serum blood glucose of 350 mg/dL. Nurse Sophie will anticipate the physician to initially order which of the following intravenous solutions?

A. 10% dextrose in water (D10W)

B. 0.9% normal saline solution

C. 5% dextrose in water (D5W)

D. 0.45% normal saline solution

Correct Answer: B. 0.9% normal saline solution

The client is experiencing diabetic ketoacidosis. Initial priority in the treatment is to restore the extracellular fluid volume through the intravenous administration of 0.9% normal saline at 15-20 ml/kg/h. Immediate fluid resuscitation is vital to correct hypovolemia, restore tissue perfusion, and to clear ketones. Hydration improves glycemic control independent of insulin.

- **Options A and C:** Intravenous solutions containing dextrose will be given once serum glucose reaches 250 mg/dL. When the plasma glucose reaches 200-250 mg/dl, and if the patient still has an anion gap, then dextrose-containing fluids should be initiated, and the insulin infusion rate may need to be reduced.
- **Option D:** 0.45% normal saline will be given once serum sodium stabilizes. In patients who have high serum sodium levels, 0.45% NaCl infused at 4–14 ml/kg/hour or 250–500 mL/hr is appropriate, and for patients with hyponatremia, 0.9% NaCl at a similar rate is preferred.

30. Which instruction about insulin administration should nurse Kate give to a client?

A. “Always follow the same order when drawing the different insulins into the syringe.”

B. “Shake the vials before withdrawing the insulin.”

C. “Store unopened vials of insulin in the freezer at temperatures well below freezing.”

D. “Discard the intermediate-acting insulin if it appears cloudy.”

Correct Answer: A. “Always follow the same order when drawing the different insulins into the syringe.”

The client should be instructed always to follow the same order when drawing the different insulins into the syringe. Insulin is considered the most potent anabolic hormone known until today, and its effects on the body are necessary for tissue development, growth, and maintenance of glucose homeostasis. Insulin action starts by binding to two cell receptors, which are alpha and beta, that are linked by two disulfide bonds into a complex that is a heterotetrameric membrane.

- **Option B:** Insulin should never be shaken because the resulting froth prevents withdrawal of an accurate dose and may damage the insulin protein molecules. For intravenous infusions, to minimize insulin adsorption to plastic IV tubing, flush the intravenous tube with priming infusion of 20 mL from a 100 mL-polyvinyl chloride bag insulin, every time a new intravenous tubing is added to the insulin infusion container.
- **Option C:** Insulin also should never be frozen because the insulin protein molecules may be damaged. Insulin, regular when administered subcutaneously, it should be injected 30 to 40 minutes before each meal. Avoid cold injections. The injection is in the buttocks, thighs, arms, or

abdomen; it is necessary to rotate injection sites to avoid lipodystrophy.

- **Option D:** Intermediate-acting insulin is normally cloudy. In regular insulin, do not inject if the solution is viscous or cloudy; use only if clear and colorless. When administered intravenously, U-100 administration should be with close monitoring of serum potassium and blood glucose. Do not use if the solution is viscous or cloudy; administration should only take place if it is colorless and clear.

31. Chuck, who is in the hospital, complains of abdominal pain that ranks 9 on a scale of 1 (no pain) to 10 (worst pain). Which interventions should the nurse implement? Select all that apply.

A. Assessing the client's bowel sounds.

B. Taking the client's blood pressure and apical pulse.

C. Obtaining a pulse oximeter reading.

D. Notifying the health care provider.

E. Determining the last time the client received pain medication.

F. Encouraging the client to turn, cough, and deep breathe.

Correct Answers: A, B, & E

The nurse must rule out complications prior to administering pain medication, so her interventions would include assessing to make sure the client has bowel sounds and determining if the client is hemorrhaging by checking the client's blood pressure and pulse. The nurse must also make sure the pain medication is due according to the health care provider's orders. Obtaining a pulse oximeter reading and turning, coughing, and deep breathing will not help the client's pain.

- **Option A:** Additionally, the nurse should ask the following questions during pain assessment to determine its history: (1) effectiveness of previous pain treatment or management; (2) what medications were taken and when; (3) other medications being taken; (4) allergies or known side effects to medications.
- **Option B:** Pain should be screened every time vital signs are evaluated. Many health facilities set pain assessment as the "fifth vital sign" and should be added to during routine vital signs assessment.
- **Option C:** Investigate signs and symptoms related to pain. Bringing attention to associated signs and symptoms may help the nurse in evaluating the pain. In some instances, the existence of pain is disregarded by the patient.
- **Option D:** There is no need to notify the health care provider in this situation. Some patients may be satisfied when pain is no longer intense; others will demand complete elimination of pain. This influences the perceptions of the effectiveness of the treatment modality and their eagerness to engage in further treatments.
- **Option E:** Some patients may be hesitant to try the effectiveness of nonpharmacological methods and may be willing to try traditional pharmacological methods (i.e., use of analgesics). A combination of both therapies may be more effective and the nurse has the duty to inform the patient of the different methods to manage pain.
- **Option F:** Stress correlates to an increase in pain perception by increasing muscle tension and activating the SNS. Eliciting a relaxation response decreases the effects of stress on pain. Examples include directed meditation, music therapy, deep breathing.

32. A 31-year-old multipara is admitted to the birthing room after initial examination reveals her cervix to be at 8 cm, completely effaced (100 %), and at 0 station. What phase of labor is she in?

A. Active phase

B. Latent phase

C. Expulsive phase

D. Transitional phase

Correct Answer: D. Transitional phase

The transitional phase of labor extends from 8 to 10 cm; it is the shortest but most difficult and intense for the patient.

- **Option A:** The active phase extends from 4 to 7 cm; it is moderate for the patient.
- **Option B:** The latent phase extends from 0 to 3 cm; it is mild in nature.
- **Option C:** The expulsive phase begins immediately after the birth and ends with separation and expulsion of the placenta.

33. Which of the following classes of drugs is most widely used in the treatment of cardiomyopathy?

A. Antihypertensives

B. Beta-adrenergic blockers

C. Calcium channel blockers

D. Nitrates

Correct Answer: B. Beta-adrenergic blockers

By decreasing the heart rate and contractility, beta-blockers improve myocardial filling and cardiac output, which are primary goals in the treatment of cardiomyopathy. Therefore, the chronotropic and inotropic effects on the heart undergo inhibition, and the heart rate slows down as a result. Beta-blockers also decrease blood pressure via several mechanisms, including decreased renin and reduced cardiac output.

- **Option A:** Antihypertensives aren’t usually indicated because they would decrease cardiac output in clients who are already hypotensive. Lowering blood pressure does reduce cardiovascular risks, maintaining systolic blood pressure less than 130 mm Hg has shown to prevent complications in patients with heart failure, diabetes, coronary artery disease, stroke, and other cardiovascular diseases.
- **Option C:** Calcium channel blockers are sometimes used for the same reasons as beta-blockers; however, they aren’t as effective as beta-blockers and cause increased hypotension. Dihydropyridines are more potent as vasodilators and used more for HTN treatment. They have less effect on heart contractility and conduction. For this, they are used more for the management of HTN. Nifedipine and amlodipine are the most used medications in this group.

- **Option D:** Nitrates aren't used because of their dilating effects, which would further compromise the myocardium. The venodilation increases the venous capacitance and lowers the preload; this subsequently lowers the left ventricular end-diastolic pressure, resulting in a reduction in myocardium workload, which decreases the oxygen demand of the heart.

34. A 35-year-old client has been receiving chemotherapy to treat cancer. Which assessment finding suggests that the client has developed stomatitis (inflammation of the mouth)?

A. Rust-colored sputum

B. Red, open sores on the oral mucosa

C. Yellow tooth discoloration

D. White, cottage cheese–like patches on the tongue

Correct Answer: B. Red, open sores on the oral mucosa

- **Option B:** The tissue-destructive effects of cancer chemotherapy typically cause stomatitis, resulting in ulcers on the oral mucosa that appear as red, open sores.
- **Option A:** Rust-colored sputum suggests a respiratory disorder, such as pneumonia.
- **Option C:** Yellow tooth discoloration may result from antibiotic therapy, not cancer chemotherapy.
- **Option D:** White, cottage cheese–like patches on the tongue suggest a candidal infection, another common adverse effect of chemotherapy.

35. Which of the following laboratory results indicates hypoparathyroidism?

A. Serum potassium of 3.6 mEq/L.

B. Serum calcium level of 4.3 mEq/L.

C. Serum phosphorus level of 5.7 mg/dL.

D. Serum magnesium level of 1.7 mg/dL.

Correct Answer: C. Serum phosphorus level of 5.7 mg/dL.

The parathyroid is responsible for the absorption of calcium and phosphorus. When a client has hypoparathyroidism, the serum calcium levels are low and the serum phosphorus levels are high. The normal phosphorus level is 2.7 to 4.5 mg/dL. Parathyroid hormone deficiency, also called hypoparathyroidism, results in hypocalcemia, hyperphosphatemia, and increased neuromuscular irritability. Patients may present with myalgias, muscle spasms, and in extreme cases tetany.

- **Option A:** Calcium is maintained within a fairly narrow range from 8.5 to 10.5 mg/dl (4.3 to 5.3 mEq/L or 2.2 to 2.7 mmol/L). Normal values and reference ranges may vary among laboratories as much as 0.5 mg/dl. Aldinger KA, et al., studied a large group of patients of normal renal function with hypercalcemia to determine the prevalence of hypokalemia and reported that 16.9% had hyperparathyroidism, and the degree and frequency of hypokalemia were greatest at the higher serum calcium levels.
- **Option B:** Parathyroid hormone activates the PTH receptor, another G-protein coupled receptor, increasing resorption of calcium and phosphorus from bone, enhancing the distal tubular reabsorption of calcium, and decreasing the renal tubular reabsorption of phosphorus. Deficient

PTH results in hypocalcemia, hyperphosphatemia, while alkaline phosphatase, a marker of bone formation, is normal.

- **Option D:** The normal range for blood magnesium level is 1.7 to 2.2 mg/dL (0.85 to 1.10 mmol/L). Another common cause of hypoparathyroidism is abnormally low levels of magnesium (hypomagnesemia) in the blood. This is often called functional hypoparathyroidism because it resolves when magnesium is restored. Magnesium is a mineral that is very important in the function of the parathyroid glands.

36. Anxiety is caused by:

A. An objective threat.

B. A subjectively perceived threat.

C. Hostility turned to the self.

D. Masked depression.

Correct Answer: B. A subjectively perceived threat.

Anxiety is caused by a subjectively perceived threat. Anxiety is one of the most common mental disorders, with 19.1% of adults in the U.S. being affected in the past year. Anxiety can begin early in life, with an average age of onset of 11 years old, and it may range from mildly uncomfortable symptoms to severe and debilitating panic that can interfere with a person's ability to live normally.

- **Option A:** Fear is caused by an objective threat. Sometimes fear stems from real threats, but it can also originate from imagined dangers. Fear can also be a symptom of some mental health conditions including panic disorder, social anxiety disorder, phobias, and post-traumatic stress disorder (PTSD).
- **Option C:** A depressed client internalizes hostility. The common features of all the depressive disorders are sadness, emptiness, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function.
- **Option D:** Mania is due to masked depression. Some other hallmarks of mania are an elevated or expansive mood, mood lability, impulsivity, irritability, and grandiosity. If the individual experiencing these symptoms requires hospitalization, then this period automatically qualifies as true mania and not hypomania, even if the symptoms are present for less than one week.

37. Dr. Martinez, a 52-year-old astrophysicist, is admitted to the medical ward with a markedly swollen, red, and painful right big toe. He shares that he's had similar episodes in the past, but this current flare-up is the worst he's ever experienced. Laboratory tests confirm elevated uric acid levels, and a diagnosis of gout is made. Given that Dr. Martinez has a keen interest in understanding the science behind his condition and wants to manage it through lifestyle changes in addition to medications, which dietary modification should the nurse suggest as part of a comprehensive management plan?

A. Decreasing the intake of dairy products

B. Limiting the consumption of red meat and seafood

C. Increasing the consumption of purine-rich foods

D. Avoiding all fruits and vegetables

Correct Answer: B. Limiting the consumption of red meat and seafood.

Foods high in purines, like red meat and seafood, can increase uric acid production. Limiting the intake of these foods can help reduce the risk of gout flare-ups.

- **Option A:** Dairy products, especially low-fat dairy, have been shown to have a protective effect against gout. They can help decrease the risk of gout attacks.
- **Option C:** Increasing the intake of purine-rich foods would likely increase uric acid levels and the risk of gout attacks. This recommendation is counterproductive for gout management.
- **Option D:** Most fruits and vegetables can be a part of a balanced diet for individuals with gout. Some, like cherries, have even been suggested to help reduce the risk of gout attacks. Completely avoiding fruits and vegetables is not recommended for gout patients and may lead to nutritional deficiencies.

38. What clinical manifestation indicates that an escharotomy is needed on a circumferential extremity burn?

A. The burn is full thickness rather than partial thickness.

B. The client is unable to fully pronate and supinate the extremity.

C. Capillary refill is slow in the digits and the distal pulse is absent.

D. The client cannot distinguish the sensation of sharp versus dull in the extremity.

Correct Answer: C. Capillary refill is slow in the digits and the distal pulse is absent.

Circumferential eschar can act as a tourniquet when edema forms from the fluid shift, increasing tissue pressure, and preventing blood flow to the distal extremities, and increasing the risk for tissue necrosis. This problem is an emergency and, without intervention, can lead to loss of the distal limb. This problem can be reduced or corrected with an escharotomy.

- **Option A:** The American Burn Association recommends burn center referrals for patients with full-thickness burns. Patients being transferred to burn centers do not need extensive debridement or topical antibiotics before transfer.
- **Option B:** Once established, burn contractures can be treated with serial splinting, release of contracting bands with Z-plasties, incision, and skin grafting or excision, and resurfacing with skin grafts or flaps, local rotation flaps, use of tissue expanders, or with free flap reconstruction.
- **Option D:** After a deep burn injury, cutaneous nerve regeneration will occur with the migration of new nerve fibers from the wound bed or from the collateral sprouting of nerve fibers from adjacent uninjured areas. This nerve regeneration process is imperfect. It was reported that 71% of extensively burned victims suffer from abnormal sensations and 36% from chronic pain. Recent studies on rats have shown that vagus nerve stimulation improved thermal injury-induced shock symptoms.

39. Benjamin was rushed to the emergency department with possible increased intracranial pressure (ICP); which of the following is an early clinical manifestation of increased ICP in older children?

A. Macewen's sign

B. Setting sun sign

C. Papilledema

D. Diplopia

Correct Answer: D. Diplopia

Diplopia is an early sign of increased ICP in an older child. Visual changes can range from blurred vision, double vision from cranial nerve defects, photophobia to optic disc edema and eventually optic atrophy. Clinical suspicion for intracranial hypertension should be raised if a patient presents with the following signs and symptoms: headaches, vomiting, and altered mental status varying from drowsiness to coma.

- **Option A:** Macewen sign refers to a “cracked pot” sound that is noted on percussion of the head. “The cracked pot sound,” Macewen’s sign, was originally described by Macewen in his book, Pyogenic infectious diseases of the brain and spinal cord in 1893. The method of elicitation of differential cranial percussion as an aid to cerebral diagnosis was practiced by him for years, particularly in children.
- **Option B:** The setting sun appearance of the eyes is noted in infants with increased ICP. The sunset eye sign (also known as the setting sun phenomenon) is a clinical phenomenon encountered in infants and young children with raised intracranial pressure (seen in up to 40% of children with obstructive hydrocephalus and 13% of children with shunt dysfunction).
- **Option C:** Papilledema is a late sign of increased ICP. If the raised ICP is not treated, this can lead to optic atrophy and vision loss. The absence of papilledema does not rule out increased intracranial pressure, since it does not develop acutely.

40. The nurse recognizes that an expected change in the hematologic system that occurs during the 2nd trimester of pregnancy is:

A. A decrease in WBC’s

B. Increase in hematocrit.

C. An increase in blood volume.

D. A decrease in sedimentation rate.

Correct Answer: C. An increase in blood volume.

The blood volume increases by approximately 40-50% during pregnancy. The peak blood volume occurs between 30 and 34 weeks of gestation. The hematocrit decreases as a result of the increased blood volume.

- **Option A:** WBC count increases to 6 to 16 million/mL and can be as high as 20 million/mL during and shortly after labor.
- **Option B:** In pregnancy, the RBC volume increases by 20% to 30%, while the plasma volume increases 45 to 55%. This disproportionate volume increase leads to dilutional anemia with decreased hematocrit.
- **Option D:** Fibrinogen and factors VII – X levels increase, but the clotting and bleeding times remain unchanged. However, increased venous stasis and damaged vessel endothelium result in higher rates of thromboembolic events during pregnancy.

41. The nurse is planning care for an 18 month-old child. Which of the following should be included in the child's care?

A. Hold and cuddle the child often

B. Encourage the child to feed himself finger food

C. Allow the child to walk independently on the nursing unit

D. Engage the child in games with other children

Correct Answer: B. Encourage the child to feed himself finger food.

According to Erikson, the toddler is in the stage of autonomy versus shame and doubt. The nurse should encourage increasingly independent activities of daily living. Gaining a sense of personal control over the world is important at this stage of development. Children at this age are becoming increasingly independent and want to gain more control over what they do and how they do it.

- **Option A:** This refers to the Erickson stage of trust vs mistrust where the child develops a sense of trust after receiving consistent and reliable care. Children who learn to trust caregivers in infancy will be more likely to form trusting relationships with others throughout the course of their lives.
- **Option C:** This refers to the Erickson stage of identity vs role confusion where the child is becoming more independent. Those who receive proper encouragement and reinforcement through personal exploration will emerge from this stage with a strong sense of self and a feeling of independence and control.
- **Option D:** This refers to the Erickson stage of initiative vs guilt where the child begins to develop interpersonal skills by spending their time playing with other children. During the initiative versus guilt stage, children begin to assert their power and control over the world through directing play and other social interaction.

42. Which of the following statements about chest X-rays is not true?

A. No contradictions exist for this test.

B. Before the procedure, the patient should remove all jewelry, metallic objects, and buttons above the waist.

C. A signed consent is not required.

D. Eating, drinking, and medications are allowed before this test.

Correct Answer: A. No contradictions exist for this test

Pregnancy or suspected pregnancy is the only contraindication for a chest X-ray. However, if a chest X-ray is necessary, the patient can wear a lead apron to protect the pelvic region from radiation. X-rays during pregnancy don't increase the risk of miscarriage or cause problems in the unborn baby, such as birth defects and physical or mental development problems. However, if a pregnant woman has an X-ray and is exposed to radiation there is a very small increased risk that the baby may go on to develop cancer in childhood. This is why the dose of radiation used in an X-ray is always as low as possible.

- **Option B:** Jewelry, metallic objects, and buttons would interfere with the X-ray and thus should not be worn above the waist. Metal appears as a bright area on an X-ray, blocking visibility of underlying structures. The reason you're asked to remove metal is to give the radiologist an unobstructed view of the area of interest. Basically, you remove metal because it blocks anatomy.

- **Option C:** A signed consent is not required because a chest X-ray is not an invasive examination. Consent is ensuring the patient is aware of the purpose and nature of any procedure to be carried out. The radiographer must ensure that the patient is fully aware of his/her options, including alternatives, the right to refuse and the consequences of refusal.
- **Option D:** Eating, drinking, and medications are allowed because the X-ray is of the chest, not the abdominal region. To create a radiograph, a patient is positioned so that the part of the body being imaged is located between an x-ray source and an x-ray detector. When the machine is turned on, x-rays travel through the body and are absorbed in different amounts by different tissues, depending on the radiological density of the tissues they pass through.

43. A two-year-old child with congestive heart failure has been receiving digoxin for one week. The nurse needs to recognize that an early sign of digitalis toxicity is:

A. Bradypnea

B. Failure to thrive

C. Tachycardia

D. Vomiting

Correct Answer: D. Vomiting

The earliest sign of digitalis toxicity is vomiting, although one episode does not warrant discontinuing the medication. Digitalis is a plant-derived cardiac glycoside commonly used in the treatment of chronic heart failure (CHF), atrial fibrillation, and reentrant supraventricular tachycardia. Digoxin is the only available preparation of digitalis in the United States.

- **Option A:** Bradypnea (slow breathing) is not associated with digitalis toxicity. Bradycardia is associated with digitalis toxicity. The respiratory rate is sometimes increased. Basal crepitations are associated with CHF. Although GI symptoms are common, the abdominal examination is usually nonspecific. An enlarged liver secondary to CHF (ie, hepatic congestion) may be palpated. Hepatojugular reflux is present. Pedal edema is noted if the patient has renal failure or decompensated CHF.
- **Option B:** Although children with congestive heart failure often have a related condition of failure to thrive, it is not directly related to digitalis administration. It is more related to chronic hypoxia. The therapeutic daily dose of digoxin ranges from 5-15 mcg/kg. The absorption of digoxin tablets is 70-80%; its bioavailability is 95%. The kidney excretes 60-80% of the digoxin dose unchanged.
- **Option C:** Tachycardia is not a sign of digitalis toxicity. Bradycardia is a sign of digitalis toxicity. Digoxin and other cardiac glycosides cause direct vasoconstriction in the arterial and venous system in vascular smooth muscle. Bidirectional ventricular tachycardia is particularly characteristic of severe digitalis toxicity and results from alterations in intraventricular conduction, junctional tachycardia with aberrant intraventricular conduction, or, on rare occasions, alternating ventricular pacemakers.

44. A client with a severe corneal ulcer has an order for Gentamicin gtt. q 4 hours and Neomycin 1 gtt q 4 hours. Which of the following schedules should be used when administering the drops?

A. Allow 5 minutes between the two medications.

B. The medications may be used together.

C. The medications should be separated by a cycloplegic drug.

D. The medications should not be used in the same client.

Correct Answer: A. Allow 5 minutes between the two medications.

When using eye drops, allow 5 minutes between the two medications. Antibiotic eye drops are prescribed by a doctor to treat bacterial eye infections. They work by killing the bacteria (microscopic organism) that entered the eye and caused the infection.

- **Option B:** Allow 5 minutes interval before administering the next eyedrops. Take the full course, don't stop early/without consulting your doctor, even if things seem better. Antibiotic eye drops usually help symptoms get better after three days. Call your doctor if your symptoms don't go away.
- **Option C:** It is not necessary to use a cycloplegic with these medications. Eye infections cause redness, tearing and drainage (yellow-green pus or watery), and can be highly contagious. A certain type of eye infection—a bacterial eye infection—may need treatment with a medicine called an antibiotic eye drop.
- **Option D:** These medications can be used by the same client. Don't use anyone else's prescription. Don't keep unused prescriptions around to use later. Ask your ophthalmologist or pharmacist if it's OK to keep the drops in the refrigerator. When the drops are cold it might be easier to feel the drop when it hits the eye, so you can tell where it has landed.

45. During the acute phase, the nurse applied gentamicin sulfate (topical antibiotic) to the burn before dressing the wound. The client has all the following manifestations. Which manifestation indicates that the client is having an adverse reaction to this topical agent?

A. Increased wound pain 30 to 40 minutes after drug application

B. Presence of small, pale pink bumps in the wound beds

C. Decreased white blood cell count

D. Increased serum creatinine level

Correct Answer: D. Increased serum creatinine level

Gentamicin does not stimulate pain in the wound. The small, pale pink bumps in the wound bed are areas of re-epithelialization and not an adverse reaction. Gentamicin is nephrotoxic and sufficient amounts can be absorbed through burn wounds to affect kidney function. Any client receiving gentamicin by any route should have kidney function monitored.

- **Option A:** Gentamicin does not stimulate pain in the wound. The gentamicin is prone to accumulate in the renal proximal tubular cells and can cause damage. Hence, mild proteinuria and reduction of the glomerular filtration rate are potential consequences of gentamicin use, achieving 14% of gentamicin users in a review.
- **Option B:** The small, pale pink bumps in the wound bed are areas of re-epithelialization and not an adverse reaction. Renal function should be evaluated twice-weekly in patients without previous renal disease through serum creatinine and blood urea nitrogen. Periodic microscopic urinalysis is also vital to detect proteinuria and casts, which may indicate kidney injury.
- **Option C:** The possible hypersensitivity manifestations of gentamicin are urticaria, eosinophilia, delayed-type hypersensitivity reaction (Stevens-Johnson syndrome and toxic epidermal

necrolysis), angioedema, and anaphylactic shock. The clinical manifestations should guide the treatment strategy.

46. The following are types of breech presentation, except:

A. Footling

B. Frank

C. Complete

D. Incomplete

Correct Answer: D. Incomplete

Breech presentation means the buttocks of the fetus is the presenting part. If it is only the foot/feet, it is considered footling. If only the buttocks, it is a frank breech. If both the feet and the buttocks are presenting it is called complete breech.

- **Option A:** The footling breech can have any combination of one or both hips extended, also known as footling (one leg extended) breech, or double footling breech (both legs extended).
- **Option B:** In a frank breech, the fetus has flexion of both hips, and the legs are straight with the feet near the fetal face, in a pike position.
- **Option C:** The complete breech has the fetus sitting with flexion of both hips and both legs in a tuck position.

47. Which of the following complications is of greatest concern when caring for a preoperative abdominal aneurysm client?

A. HPN

B. Aneurysm rupture

C. Cardiac arrhythmias

D. Diminished pedal pulses

Correct Answer: B. Aneurysm rupture

Rupture of an aneurysm is a life-threatening emergency and is of the greatest concern for the nurse caring for this type of client. The layers of the aortic wall can also separate (aortic dissection). This produces severe, tearing pain in the chest, back or abdomen. The potential for rupture is the most serious risk associated with an aortic aneurysm. A ruptured aortic aneurysm can cause life-threatening internal bleeding and/or a stroke.

- **Option A:** Hypertension should be avoided and controlled because it can cause the weakened vessel to rupture. Hypertension has been considered a potential risk factor for AAA; but the findings from prospective cohort studies have not been entirely consistent, nor have they been summarised in a comprehensive meta-analysis.
- **Option D:** Diminished pedal pulses, a sign of poor circulation to the lower extremities, are associated with an aneurysm but aren’t life-threatening. The appearance of microembolic lower limb infarcts in a patient with easily palpable pedal pulses may suggest the presence of either popliteal or abdominal aneurysms.

- **Option C:** Cardiac arrhythmias aren't directly linked to an aneurysm. Ventricular aneurysms may cause shortness of breath, chest pain, or an irregular heartbeat (arrhythmia).

48. The rationale for inserting a French catheter every hour for the client with epidural anesthesia is:

A. The bladder fills more rapidly because of the medication used for the epidural.

B. Her level of consciousness is such that she is in a trancelike state.

C. The sensation of the bladder filling is diminished or lost.

D. She is embarrassed to ask for the bedpan that frequently.

Correct Answer: C. The sensation of the bladder filling is diminished or lost.

Epidural anesthesia decreases the urge to void and sensation of a full bladder. A full bladder will decrease the progression of labor. Under the influence of epidural analgesia, patients may not feel the urge to urinate, which can result in urinary retention and bladder overdistension. Overfilling of the bladder can stretch and damage the detrusor muscle. For example, the use of lumbar epidural analgesia for labor and delivery has frequently been implicated as a causative factor for postpartum urinary retention. This is supported by the fact that these patients demonstrate a difficulty voiding.

- **Option A:** The medication used for the epidural does not have a diuretic effect. Spinal and epidural opioid administration influence the function of the lower urinary tract by direct spinal action on the sacral nociceptive neurons and autonomic fibres. Long-acting local anesthetics administered intrathecally rapidly block the micturition reflex. Detrusor contraction is restored approximately 7-8 hours after spinal injection of bupivacaine. For this reason, bladder catheterization is a common practice in patients with spinal or epidural anesthesia.
- **Option B:** An epidural does not create a trancelike state for the client. Acute urinary retention is one of the most common complications after surgery and anesthesia. It can occur in patients of both sexes and all age groups and after all types of surgical procedures. It is linked to several factors including increased intravenous fluids, postoperative pain, and type of anesthesia. Micturition depends on coordinated actions between the detrusor muscle and the external urethral sphincter.
- **Option D:** Embarrassed or not, the client would still need to have a French catheter inserted to manage her voiding. The risk of infection with a single catheterization is 1-2% and can rise by 3 to 7 % for every additional day with an indwelling catheter. Traumatic or prolonged catheterization may lead to urethritis and to urethral strictures. There has yet been no consensus for appropriate catheterization strategy during regional anesthesia.

49. When talking with a pregnant client who is experiencing aching swollen leg veins, the nurse would explain that this is most probably the result of which of the following?

A. Thrombophlebitis

B. Pregnancy-induced hypertension

C. Pressure on blood vessels from the enlarging uterus

D. The force of gravity pulling down on the uterus

Correct Answer: C. Pressure on blood vessels from the enlarging uterus

The pressure of the growing uterus on blood vessels results in an increased risk for venous stasis in the lower extremities. Subsequently, edema and varicose vein formation may occur.

- **Option A:** Thrombophlebitis is an inflammation of the veins due to thrombus formation. The hypercoagulable condition of the immediate antepartum period is responsible, in large part, for the development of superficial thrombophlebitis and DVT in 0.15% and 0.04% of this patient population, respectively.
- **Option B:** Pregnancy-induced hypertension is not associated with these symptoms. Pregnancy-induced hypertension is associated with significant elevations in total peripheral resistance, enhanced responsiveness to angiotensin II, and marked reductions in renal blood flow and glomerular filtration rate, and proteinuria.
- **Option D:** Gravity plays only a minor role with these symptoms. The center of gravity of pregnant women is displaced anteriorly and superiorly, compared to non-pregnant women. Furthermore, changes are seen in body shape. Because the volume of the lower trunk increases structurally, it becomes unstable. Nagai et al. reported that the postural sway of anterior-posterior movements increased during pregnancy because of the increase in the abdominal circumference

50. Which of the following treatments is a suitable surgical intervention for a client with unstable angina?

A. Cardiac catheterization

B. Echocardiogram

C. Nitroglycerin

D. Percutaneous transluminal coronary angioplasty (PTCA)

Correct Answer: D. Percutaneous transluminal coronary angioplasty (PTCA)

PTCA can alleviate the blockage and restore blood flow and oxygenation.

- **Option A:** Cardiac catheterization is a diagnostic tool – not a treatment. It is a procedure used to diagnose and treat certain cardiovascular conditions.
- **Option B:** An echocardiogram is a non-invasive diagnostic test. It is a graphic outline of the heart's movement.
- **Option C:** Nitroglycerin is an oral sublingual medication. It is a vasodilatory drug used primarily to provide relief from anginal chest pain.

51. On the 6th floor of Rosewood Hospital, Nurse Alex is assigned to Mrs. Jackson, a 72-year-old woman with advanced osteoporosis. Mrs. Jackson, who has a history of chronic kidney disease and gastrointestinal reflux, recently started receiving intravenous bisphosphonate therapy due to intolerance to oral bisphosphonates. As Nurse Alex reviews Mrs. Jackson's medical history and current medications, they are reminded of the unique considerations associated with IV bisphosphonates and potential complications they need to be vigilant about. To ensure the patient's safety and treatment effectiveness, which assessments should the nurse prioritize? Select all that apply.

A. Monitoring renal function

B. Assessing for signs of hypocalcemia

C. Monitoring liver function

D. Assessing for signs of esophageal irritation

E. Evaluating for flu-like symptoms

Correct Answers: A, B, and E.

- **Option A:** Bisphosphonates are primarily excreted by the kidneys. Patients, especially those with pre-existing renal conditions like Mrs. Jackson, are at risk for renal toxicity. Therefore, monitoring renal function is essential to prevent further renal damage.
- **Option B:** Bisphosphonates can lead to a decrease in serum calcium levels. Recognizing signs of hypocalcemia, such as muscle twitching, spasms, and numbness around the mouth, is crucial for early intervention.
- **Option E:** Some patients receiving IV bisphosphonates can experience acute phase reactions, manifesting as flu-like symptoms. Recognizing these can help in providing symptomatic relief and ensuring patient comfort.
- **Option D:** Bisphosphonates can cause esophageal irritation or inflammation, particularly if the patient does not follow dosing instructions correctly or if they lie down too soon after taking the medication. The nurse should assess for symptoms such as heartburn, difficulty swallowing, or chest pain.
- **Option C:** While liver toxicity isn't a common side effect of bisphosphonates, other medications or underlying conditions might affect liver function. However, it's not directly a priority when administering IV bisphosphonates.

52. There are four clients with infections in the ED and only one private room is available. Which among the clients is the most appropriate to occupy the private room?

A. A client with a cough who may have tuberculosis

B. A client with toxic shock syndrome and a temperature of 102.4°F (39.1°C)

C. A client with diarrhea caused by C. difficile

D. A client with a wound infected with Vancomycin-resistant enterococci (VRE)

Correct Answer: A. A client with a cough who may have tuberculosis

Private rooms should be occupied mainly for clients with infections that require airborne precautions such as TB. Despite the gains in tuberculosis control and the decline in both new cases and mortality, it still accounts for a huge burden of morbidity and mortality worldwide.

- **Option B:** Standard precautions are required for the client with toxic shock syndrome. Any source of bacteria such as tampons or nasal packing should immediately be removed. Emergent surgical consultation should be obtained for any wound debridement or surgical cause. This is critical in the early management of toxic shock syndrome.
- **Option C:** The primary mode of the disease transmission is the fecal-oral route. Effective prevention of C. difficile infection includes several generalized strategies and certain targeted strategies. General strategies such as early detection of the disease, placing the patient under

isolation with a dedicated toilet and contact precautions, promoting hygiene measures such as improved hand hygiene, and environmental cleaning are effective measures in preventing infections from C. difficile infections.

- **Option D:** Clients with VRE infections that require contact precautions should ideally be placed in private rooms; however, they can be placed in rooms with other clients with the same diagnosis. The primary transmission of vancomycin-resistant Enterococcus in the hospital setting is through the hands of healthcare providers. Basic infection control prevention practices such as hand hygiene can help. Contact precautions such as wearing gowns and gloves also decrease transmission.

53. A nurse is assessing a client in the 4th stage of labor and notes that the fundus is firm but that bleeding is excessive. The initial nursing action would be which of the following?

A. Massage the fundus

B. Place the mother in Trendelenburg's position

C. Notify the physician

D. Record the findings

Correct Answer: C. Notify the physician

If the bleeding is excessive, the cause may be laceration of the cervix or birth canal. Perineal trauma is an extremely common and expected complication of vaginal birth. Lacerations can occur spontaneously or iatrogenically, as with an episiotomy, on the perineum, cervix, vagina, and vulva.

- **Option A:** Massaging the fundus if it is firm will not assist in controlling the bleeding. Perineal massage has been shown to decrease the incidence of lacerations requiring suture, although the reduction was minor. Additional studies have shown a decrease in third- and fourth-degree lacerations when massage was performed during the second stage of labor, however, there is no consistently proven benefit.
- **Option B:** Trendelenburg's position is to be avoided because it may interfere with cardiac function. Delayed or immediate pushing after a woman reached ten centimeters of dilation showed no difference in the incidence of perineal lacerations. However, there was a higher incidence of delivery with intact perineum in women who delivered in the lateral position with delayed pushing compared to immediate pushing in the lithotomy position.
- **Option D:** The most common complication of a perineal laceration is bleeding. Most bleeding can be quickly controlled with pressure and surgical repair. However, hematoma formation can lead to large amounts of blood loss in a very short time. Perineal support or a "hands-on" approach, can be protective of the perineum and decrease the severity of perineal lacerations at the time of delivery. However, studies are conflicting on the significant benefit to this measure.

54. Which nursing action is most appropriate when trying to diffuse a client's impending violent behavior?

A. Place the client in seclusion.

B. Leaving the client alone until he can talk about his feelings.

C. Involving the client in a quiet activity to divert attention.

D. Helping the client identify and express feelings of anxiety and anger.

Correct Answer: D. Helping the client identify and express feelings of anxiety and anger

In many instances, the nurse can diffuse impending violence by helping the client identify and express feelings of anger and anxiety. Such statements as “What happened to get you this angry?” may help the client verbalize feelings rather than act on them. Frequently assess client’s behavior for signs of increased agitation and hyperactivity. Early detection and intervention of escalating mania will prevent the possibility of harm to self or others, and decrease the need for seclusions.

- **Option A:** Alert staff if a potential for seclusion appears imminent. Usual priority of interventions would be: firmly setting limits; chemical restraints (tranquilizers); or seclusion. If nursing interventions (quiet environment and firm limit setting) and chemical restraints (tranquilizers–e.g., haloperidol [Haldol]) have not helped dampen escalating manic behaviors, then seclusion might be warranted.
- **Option B:** Maintain a consistent approach, employ consistent expectations, and provide a structured environment. Clear and consistent limits and expectations minimize potential for client’s manipulation of staff. Remain neutral as possible; Do not argue with the client. The client can use inconsistencies and value judgments as justification for arguing and escalating mania.
- **Option C:** Redirect agitation and potentially violent behaviors with physical outlets in an area of low stimulation (e.g., punching bag); can help to relieve pent-up hostility and relieve muscle tension. Decrease environmental stimuli (e.g., by providing a calming environment or assigning a private room); helps decrease escalation of anxiety and manic symptoms.

55. Amikacin (Amikin) is given to a client with E-coli infection. The nurse advises the client to report which of the following symptoms immediately?

A. Muscle pain

B. Constipation

C. Fatigue

D. Hearing loss

Correct Answer: D. Hearing loss

- **Option D:** Amikacin is an aminoglycoside. Side effects of this medication include ototoxicity (Hearing loss), confusion, disorientation, gastrointestinal irritation, palpitations, blood pressure changes, and nephrotoxicity.
- **Options A, B, and C:** Muscle pain, constipation, and fatigue are not related to the medication.

56. Celia with a history of polysubstance abuse is admitted to the facility. She complains of nausea and vomiting 24 hours after admission. The nurse assesses the client and notes piloerection, pupillary dilation, and lacrimation. The nurse suspects that the client is going through which of the following withdrawals?

A. Alcohol withdrawal

B. Cannabis withdrawal

C. Cocaine withdrawal

D. Opioid withdrawal

Correct Answer: D. Opioid withdrawal

The symptoms listed are specific to opioid withdrawal. According to Diagnostic and Statistical Manual of Mental Disorders (DSM–5) criteria, signs and symptoms of opioid withdrawal include lacrimation or rhinorrhea, piloerection “goose flesh,” myalgia, diarrhea, nausea/vomiting, pupillary dilation and photophobia, insomnia, autonomic hyperactivity (tachypnea, hyperreflexia, tachycardia, sweating, hypertension, hyperthermia), and yawning. Opioid withdrawal syndrome is a life-threatening condition resulting from opioid dependence. Opioids are a group of drugs used for the management of severe pain. They are also commonly used as psychoactive substances around the world.

- **Option A:** Alcohol withdrawal would show elevated vital signs. Alcohol withdrawal symptoms occur when patients stop drinking or significantly decrease their alcohol intake after long-term dependence. Withdrawal has a broad range of symptoms from mild tremors to a condition called delirium tremens, which results in seizures and could progress to death if not recognized and treated promptly. Alcohol withdrawal can range from very mild symptoms to the severe form, which is named delirium tremens. The hallmark is autonomic dysfunction resulting from the excitation of the central nervous system. Mild signs/symptoms can arise within six hours of alcohol cessation.
- **Option B:** There is no real withdrawal from cannabis. Cannabis is considered by the Food and Drug Administration, along with heroin and peyote, as a schedule I drug. It has no accepted medical purpose and has a high potential for abuse. The mental status of the individual is a critical part of the exam and can point at the phase of cannabis use. Intoxication can include euphoria, anxiety, uncontrollable laughter, increased appetite, inattentiveness, forgetfulness, restlessness, tachycardia, conjunctival injection, and dry mouth. And less commonly may include delusions, hallucinations, and derealization.
- **Option C:** Symptoms of cocaine withdrawal include depression, anxiety, and agitation. Central nervous system (CNS) stimulants like cocaine and amphetamine can also produce withdrawal symptoms. Like opioids, the withdrawal symptoms are mild and not life-threatening. Often the individual will develop marked depression, excessive sleep, hunger, dysphoria, and severe psychomotor retardation but all vital functions are well preserved. Recovery is usually slow, and depression can last for several weeks.

57. 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.

58. A nurse is caring for a client who underwent surgical repair of a detached retina in the right eye. Which nursing interventions should the nurse perform? Select all that apply.

A. Place the client in a prone position.

B. Approach the client from the left side.

C. Encourage deep breathing and coughing.

D. Discourage bending down.

E. Orient the client to the environment.

F. Administer a stool softener.

Correct Answer: B, D, E, & F.

Retinal detachment is a serious condition of the eye in which the retina stops receiving oxygen. Retinal detachment repair is a surgery that is used to restore circulation to the retina and preserve vision.

- **Option A:** The client should lie on the back or on the unaffected side to reduce intraocular pressure in the affected eye. The bubble will move to the front of the eye and press against the lens instead of the retina.
- **Option B:** The nurse should approach the client from the left side—the unaffected side—to avoid startling. The client may have to wear a patch or shield over the eye for a day or more.
- **Option C:** Allow the eye to heal. Don't do things where there is a sudden movement of the head. This includes moving quickly, lifting anything heavy, or doing activities such as cleaning or gardening.
- **Option D:** The nurse should also discourage the client from bending down, deep breathing, hard coughing and sneezing, and other activities that can increase intraocular pressure during the postoperative period.
- **Option E:** The client should be oriented to the environment to reduce the risk of injury. More than 90 percent of detachments can be repaired. In less than 10 percent of detachments that cannot be repaired, the patient will have either poor vision or no vision in that eye.
- **Option F:** Stool softeners should be administered to discourage straining during defecation. Stool softeners help prevent constipation. Constipation causes the client to strain. This can increase pressure in your eye and cause damage.

59. Aira has taken amitriptyline HCL (Elavil) for 3 days, but now complains that it "doesn't help" and refuses to take it. What should the nurse say or do?

A. Withhold the drug.

B. Record the client's response.

C. Encourage the client to tell the doctor.

D. Suggest that it takes a while before seeing the results.

Correct Answer: D. Suggest that it takes a while before seeing the results.

The client needs a specific response; that it takes 2 to 3 weeks (a delayed effect) until the therapeutic blood level is reached. Amitriptyline administration comes in various forms, the most common being oral form. The initial dose recommended for depression is 25 mg/day at bedtime, as it can be sedating. For off-label use such as for chronic pain, therapy can initiate at a much lower dose of 10 to 20 mg/day. It can be increased by 25 mg every 3 to 7 days, with a maximum of 150 to 300 mg/day.

- **Option A:** If the dose needs to be adjusted, it is preferable to change the dose at bedtime. Once the patient is stable, amitriptyline should be continued for three months or longer to prevent relapse of depression. In cases of therapy cessation, the clinician should gradually taper to avoid withdrawal.
- **Option B:** In patients with a history of cardiac problems or patients over 50 years of age should have a baseline electrocardiogram. Considering the drug's side effect profile, the following parameters require monitoring – BMI, liver function test, thyroid function test, and serum amitriptyline concentrations. While a patient is on amitriptyline, one should monitor for an increase in suicidality and unusual behavior changes, especially during the first 1 to 2 months of starting medication or during periods of dosage adjustment.
- **Option C:** When a clinician determines to start a patient on amitriptyline, they should consult a pharmacist to verify the absence of drug-drug interactions, which in the case of amitriptyline, can be significant. Nursing can provide medication counseling, evaluate patient adherence, and monitor for side effects on follow-up visits. If the nurse has any concerns, they should be reported to the clinician promptly.

60. A patient who received a kidney transplant returns for a follow-up visit to the outpatient clinic and reports a lump in her breast. Transplant recipients are:

A. At increased risk for cancer due to immunosuppression caused by cyclosporine (Neoral).

B. Consumed with fear after the life-threatening experience of having a transplant.

C. At increased risk for tumors because of the kidney transplant.

D. At decreased risk for cancer, so the lump is most likely benign.

Correct Answer: A. At increased risk for cancer due to immunosuppression caused by cyclosporine (Neoral).

Cyclosporine suppresses the immune response to prevent rejection of the transplanted kidney. The use of cyclosporine places the patient at risk for tumors. Cyclosporine works to suppress cell-mediated immune reactions. Research has detected no effects on phagocytic function in animals, and it does not cause bone marrow suppression in animal or human models.

- **Option B:** Cyclosporine is a widely used immunosuppressive drug, especially in transplant patients. The majority of patients on cyclosporine can be followed as outpatients by the nurse practitioner, primary care provider, an internist, and the specialist. The clinical staff must monitor cyclosporine levels regularly to prevent acute rejection, nephrotoxicity, and predictable dose-dependent adverse reactions.
- **Option C:** Decreases glomerular filtration rate (GFR) due to an increased tone of the glomerular afferent arterioles. Serum creatinine concentration rises and decreases creatinine clearance. The undesirable effects correlate with the duration of treatment and dose.
- **Option D:** Cyclosporine is effective due to specific and reversible inhibition of immunocompetent lymphocytes in the G0 and G1-phase of the cell cycle. The T-helper cell is the primary target, although it may also suppress T-suppressor cells.

61. When caring for a male client with diabetes insipidus, nurse Juliet expects to administer:

A. vasopressin (Pitressin Synthetic).

B. furosemide (Lasix).

C. Regular insulin.

D. 10% dextrose.

Correct Answer: A. vasopressin (Pitressin Synthetic).

Because diabetes insipidus results from decreased antidiuretic hormone (vasopressin) production, the nurse should expect to administer synthetic vasopressin for hormone replacement therapy. DDAVP, an ADH analog, can be administered orally, intranasally, subcutaneously, or intravenously. In adults, the dose is ten mcg by nasal insufflation or 4 mcg subcutaneously or intravenously.

- **Option B:** Furosemide, a diuretic, is contraindicated because a client with diabetes insipidus experiences polyuria. Other treatment options for central diabetes insipidus include a low-solute diet (low salt, low protein), thiazide diuretics, chlorpropamide, carbamazepine, and non-steroidal anti-inflammatory drugs (NSAID).
- **Option C:** Insulin is used to treat diabetes mellitus and its complications, not diabetes insipidus. Regular insulin is a medication used in the management of Diabetes Mellitus and hyperglycemia of a variety of etiologies. It is in the short-acting insulin class of drugs. Insulin, regular, which is short-acting human insulin, is a synthetic protein hormone, which, just as the naturally occurring endogenous insulin, exerts a wide range of physiologic effects. Clinical use of insulin is mainly to its ability to lower down serum glucose.
- **Option D:** Clinicians should avoid using crystalloids containing dextrose (D5%W, D10%W, D5% 0.45% NS, etc.) in patients with hyperglycemia. Crystalloid fluids function to expand intravascular volume without disturbing ion concentration or causing significant fluid shifts between intracellular, intravascular, and interstitial spaces.

62. A 48-year-old male teacher presents to the outpatient rheumatology clinic with a five-year history of rheumatoid arthritis (RA). His main complaint during this visit, besides joint pain, is persistent fatigue which is affecting his ability to keep up with his teaching duties and to engage in social activities. He mentions that fatigue differs from just feeling tired, describing it as an overwhelming

sense of exhaustion. The nurse, after listening to his concerns, prepares to suggest an intervention to address his fatigue. Which nursing intervention is most appropriate for this patient?

A. Encouraging the patient to engage in regular physical exercise

B. Teaching energy conservation techniques

C. Administering caffeine-containing beverages

D. Providing the patient with vitamin B12 supplements

Correct Answer: B. Teaching energy conservation techniques.

This is a highly appropriate intervention for patients with RA experiencing fatigue. Energy conservation techniques can include pacing oneself, taking short breaks during activities, prioritizing tasks, and using adaptive equipment. These techniques help patients manage their energy levels and complete necessary tasks without exacerbating fatigue. For a patient with RA experiencing significant fatigue, teaching them techniques to conserve and manage their energy efficiently is the most direct and appropriate intervention.

- **Option A:** Regular physical exercise can be beneficial but may need to be modified based on the patient's energy levels. While it may seem counterintuitive to recommend exercise to someone feeling fatigued, regular low-impact exercises, such as walking or swimming, can help increase energy levels, improve mood, and promote better sleep in RA patients. Exercise can also help maintain joint function and reduce stiffness. Therefore, this is a beneficial intervention.
- **Option C:** While caffeine can act as a stimulant and temporarily alleviate feelings of tiredness, it's not a long-term solution to the fatigue associated with RA. Additionally, excessive caffeine can lead to other issues like insomnia, increased heart rate, and potential exacerbation of RA symptoms. Relying on caffeine is not the best approach for managing RA-related fatigue.
- **Option D:** While vitamin B12 is crucial for energy production in the body, there is no direct evidence linking RA-related fatigue to a vitamin B12 deficiency. Unless the patient has been diagnosed with a B12 deficiency, this intervention would not be the most appropriate. It's essential to ascertain the cause of fatigue before recommending supplements.

63. A 3-year old boy with vesicoureteral reflux is scheduled for ureteral reimplantation. His father plans to go home during the surgery to get his favorite toy. When the father left, the boy asked the nurse when will his father be back? The nurse's best response is:

A. "Your daddy will be back later this afternoon"

B. "Your daddy will be back at 11 am"

C. "Your daddy will be back after you wake up"

D. "Your daddy will be back within 2 ½ hours"

Correct Answer: C. "Your daddy will be back after you wake up."

A preschool child understands the concept of time through events and symbols. Following and being involved with a familiar sequence of routines and schedules enhances their time awareness of the present, past, and future. Preschoolers also need to build on these experiences, because time is such an abstract concept for young children. For them, it is rather intangible.

- **Option A:** Between ages 4-5, a child begins to have an understanding of time but it is still vague. Before and after are time concepts understood by preschoolers. Although 3- and 4-year-olds have the ability to describe events that happen in the past and know specific words that describe past events (“last week” or “a few days ago”), they may not always get the duration of the time exactly right.
- **Option B:** Between ages 6 to 8 years old, children learn the concept of minutes in an hour, number of hours in a day, and can compare time. Of course, recognizing the parts of the day is the most basic way children become aware of the passage of time. Their capacity to learn about time increases as they become aware of how events reoccur at specific times during the day.
- **Option D:** Kindergartners want to know what time it is and are beginning to understand that certain things (like the start and end of school) happen at a defined time each day. Make a photographic timeline for the day at school, marking each event with a picture of the clock at that time and the time written numerically.

64. Which of the following statements involving Type II diabetes mellitus is correct?

A. It involves inefficient insulin production.

B. It involves cessation of Insulin production by the beta cells of the pancreas.

C. It involves increased insulin receptor responsiveness.

D. It involves the infant client.

Correct Answer: A. It involves inefficient insulin production.

In type II diabetes mellitus, insulin is produced in insufficient amounts along with reduced insulin receptor responsiveness. T2DM involves a more insidious onset where an imbalance between insulin levels and insulin sensitivity causes a functional deficit of insulin. Insulin resistance is multifactorial but commonly develops from obesity and aging.

- **Option B:** In type II diabetes mellitus, the beta cells do produce insulin but in inadequate amounts. A patient with DM has the potential for hyperglycemia. The pathology of DM can be unclear since several factors can often contribute to the disease. Hyperglycemia alone can impair pancreatic beta-cell function and contributes to impaired insulin secretion. Consequentially, there is a vicious cycle of hyperglycemia leading to the impaired metabolic state. Blood glucose levels above 180 mg/dL are often considered hyperglycemic in this context, though because of the variety of mechanisms, there is no clear cutoff point.
- **Option C:** There is decreased rather than increased insulin responsiveness. Insulin resistance is attributable to excess fatty acids and proinflammatory cytokines, which leads to impaired glucose transport and increases fat breakdown. Since there is an inadequate response or production of insulin, the body responds by inappropriately increasing glucagon, thus further contributing to hyperglycemia. While insulin resistance is a component of T2DM, the full extent of the disease results when the patient has inadequate production of insulin to compensate for their insulin resistance.
- **Option D:** T1DM presents in children or adolescents, while T2DM is thought to affect middle-aged and older adults who have prolonged hyperglycemia due to poor lifestyle and dietary choices. The pathogenesis for T1DM and T2DM is drastically different, and therefore each type has various etiologies, presentations, and treatments.

65. In a recumbent, immobilized patient, lung ventilation can become altered, leading to such respiratory complications as:

A. Respiratory acidosis, atelectasis, and hypostatic pneumonia

B. Apneustic breathing, atypical pneumonia and respiratory alkalosis

C. Cheyne-Stokes respirations and spontaneous pneumothorax

D. Kussmaul's respirations and hypoventilation

Correct Answer: A. Respiratory acidosis, atelectasis, and hypostatic pneumonia

Because of restricted respiratory movement, a recumbent, immobilize patient is at particular risk for respiratory acidosis from poor gas exchange; atelectasis from reduced surfactant and accumulated mucus in the bronchioles, and hypostatic pneumonia from bacterial growth caused by stasis of mucus secretions.

- **Option B:** Apneustic respiration (a.k.a. apneusis) is an abnormal pattern of breathing characterized by deep, gasping inspiration with a pause at full inspiration followed by a brief, insufficient release. Pneumonia is acquired when a sufficient volume of a pathogenic organism bypasses the body's cough and laryngeal reflexes and makes its way into the parenchyma. In almost every scenario, respiratory alkalosis is induced by a process involving hyperventilation. These include central causes, hypoxemic causes, pulmonary causes, and iatrogenic causes. Central sources are a head injury, stroke, hyperthyroidism, anxiety-hyperventilation, pain, fear, stress, drugs, medications such as salicylates, and various toxins.
- **Option C:** Cheyne-Stokes respiration is a specific form of periodic breathing (waxing and waning amplitude of flow or tidal volume) characterized by a crescendo-decrescendo pattern of respiration between central apneas or central hypopneas. Unlike obstructive sleep apnea (OSA), which can be the cause of heart failure, Cheyne-Stokes respiration is believed to be a result of heart failure. Spontaneous pneumothorax refers to the abnormal collection of gas in the pleural space between the lungs and the chest wall. Spontaneous pneumothorax occurs without an obvious etiology such as trauma or iatrogenic causes.
- **Option D:** Kussmaul respirations were originally observed and described by Dr. Adolf Kussmaul in 1874. He made his observation in diabetic patients who were comatose and in the late stages of diabetic ketoacidosis. As classically described, Kussmaul respirations are a deep, sighing respiratory pattern. Dr. Kussmaul actually described it as "air hunger." Hypoventilation is breathing that is too shallow or too slow to meet the needs of the body. If a person hypoventilates, the body's carbon dioxide level rises. This causes a buildup of acid and too little oxygen in the blood. A person with hypoventilation might feel sleepy.

66. The nurse is caring for a client with a burn wound on the left knee and an autograft and skin grafting was performed. Which of the following activities will be prescribed for the client post-op?

A. Elevation and immobilization of the affected leg.

B. Placing the affected leg in a dependent position.

C. Dangling of legs.

D. Bathroom privileges.

Correct Answer: A. Elevation and immobilization of the affected leg.

Autograft placed on the lower extremity requires elevation and immobilization for at least 3-7days. This period of immobilization allows the autograft time to adhere to the wound bed. Clinically, skin grafts are secured into place and often bolstered until postoperative day 5 to 7 to allow the skin graft to go through the above steps, ensuring the best skin graft take.

- **Option B:** Do not place the affected leg in a dependent position. Any buildup of fluid between the split-thickness skin graft and wound bed will jeopardize skin graft take, including seroma, hematoma, and infection. Shear or traction injury also disrupts skin graft healing.
- **Option C:** Dangling of legs puts the affected site into a dependent position, which can cause a build-up of fluid that jeopardizes the skin graft. The graft can have incomplete (less than 100%) take or complete nontake.
- **Option D:** Split-thickness skin grafts typically become adherent to the recipient wound bed 5 to 7 days following skin graft placement. The dressings placed intraoperatively are kept in place until 5 to 7 days postoperatively to minimize shear and traction to the healing skin graft.

67. The client returns to the nursing unit following a pyelolithotomy for removal of a kidney stone. A Penrose drain is in place. Which of the following would the nurse include in the client's postoperative care?

A. Sterile irrigation of the Penrose drain.

B. Frequent dressing changes around the Penrose drain.

C. Weighing the dressings.

D. Maintaining the client's position on the affected side.

Correct Answer: B. Frequent dressing changes around the Penrose drain.

Frequent dressing changes around the Penrose drain is required to protect the skin against breakdown from urinary drainage. If urinary drainage is excessive, an ostomy pouch may be placed over the drain to protect the skin. Change the dressing 2 times every day and anytime it's wet or loose. It's best to change it around the same time every day.

- **Option A:** A Penrose drain is not irrigated. A Penrose drain is a soft, flat, flexible tube made of latex. It lets blood and other fluids move out of the area of the surgery. This keeps fluid from collecting under the incision (surgical cut) and causing infection.
- **Option C:** Weighing the dressings is not necessary. Look at the color and amount of drainage and notice any odor before throwing it away. Write down what you see and smell in the drainage log at the end of this resource.
- **Option D:** Placing the client on the affected side will prevent a free flow of urine through the drain. Part of the Penrose drain will be inside the body. One or both ends of the drain will come out of the incision. Some blood and fluid will flow out of the drain onto a dressing (gauze bandage) around it.

68. A complete blood count is commonly performed before Joe goes into surgery. What does this test seek to identify?

A. Potential hepatic dysfunction indicated by decreased blood urea nitrogen (BUN) and creatinine levels.

B. Low levels of urine constituents normally excreted in the urine.

C. Abnormally low hematocrit (HCT) and hemoglobin (Hb) levels.

D. Electrolyte imbalance that could affect the blood's ability to coagulate properly.

Correct Answer: C. Abnormally low hematocrit (HCT) and hemoglobin (Hb) levels.

Low preoperative HCT and Hb levels indicate the client may require a blood transfusion before surgery. If the HCT and Hb levels decrease during surgery because of blood loss, the potential need for a transfusion increases.

- **Option A:** Possible renal failure is indicated by elevated BUN or creatinine levels.
- **Option B:** Urine constituents aren't found in the blood. They are found in urine specimens.
- **Option D:** Coagulation is determined by the presence of appropriate clotting factors, not electrolytes.

69. A client with pleural effusion is scheduled to have a thoracentesis. The nurse on duty will assist the client to which position during the procedure?

A. Lying in bed on the unaffected side with the head of the bed elevated about 45°.

B. Forward side-lying position with head of bed flat.

C. Lying in bed on the affected side with the head of the bed elevated about 45°.

D. Supine position with both arms extended.

Correct Answer: A. Lying in bed on the unaffected side with head of bed elevated about 45°.

During thoracentesis, to facilitate removal of pleural fluid from the pleural space, position the client sitting on the edge of the bed, leaning over a bedside table with the feet supported on a stool, or lying in bed on the unaffected side with head of bed elevated about 45°.

- **Option B:** Patient lies between supine and prone with legs flexed in front of the patient. Arms should be comfortably placed beside the patient, not underneath. However, the head of the bed should be elevated to facilitate drainage of pleural fluid from the pleural space.
- **Option C:** The patient should lie on the unaffected side. The patient is moved to the extreme side of the bed, the ipsilateral hand is placed behind the head, and a towel roll is placed under the contralateral shoulder. This measure facilitates dependent drainage and provides good access to the posterior axillary space.
- **Option D:** Patients who are alert and cooperative are most comfortable in a seated position, leaning slightly forward and resting the head on the arms or hands or on a pillow, which is placed on an adjustable bedside table. This position facilitates access to the posterior axillary space, which is the most dependent part of the thorax. Unstable patients and those who are unable to sit up may be supine for the procedure.

70. For which of the following clients would the nurse expect that an intrauterine device would not be recommended?

A. Woman over age 35

B. Nulliparous woman

C. Promiscuous young adult

D. Postpartum client

Correct Answer: C. Promiscuous young adult

An IUD may increase the risk of pelvic inflammatory disease, especially in women with more than one sexual partner, because of the increased risk of sexually transmitted infections. An IUD should not be used if the woman has an active or chronic pelvic infection, postpartum infection, endometrial hyperplasia or carcinoma, or uterine abnormalities.

- **Option A:** Age is not a factor in determining the risks associated with IUD use. Most IUD users are over the age of 30.
- **Option B:** Although there is a slightly higher risk for infertility in women who have never been pregnant, the IUD is an acceptable option as long as the risk-benefit ratio is discussed.
- **Option D:** IUDs may be inserted immediately after delivery, but this is not recommended because of the increased risk and rate of expulsion at this time.

71. What assessment finding of a patient with acute pancreatitis would indicate a bluish discoloration around the umbilicus?

A. Grey-Turner's sign

B. Homan's sign

C. Rovsing's sign

D. Cullen's sign

Correct Answer: D. Cullen’s sign

Cullen’s sign is associated with pancreatitis when a hemorrhage is suspected. Cullen’s sign is described as superficial edema with bruising in the subcutaneous fatty tissue around the periumbilical region. It is also known as periumbilical ecchymosis. It is most often recognized as a result of hemorrhagic pancreatitis. The sign can take 2–3 days before appearance and may be used as a clinical sign to help the diagnosis of acute pancreatitis.

- **Option A:** Grey-Turner’s sign is ecchymosis in the flank area suggesting retroperitoneal bleed. Grey Turner’s sign is an uncommon subcutaneous manifestation of intra-abdominal pathology that manifests as ecchymosis or discoloration of the flanks. Classically it correlates with severe acute necrotizing pancreatitis, often in association with Cullen’s sign (periumbilical ecchymosis).
- **Option B:** Homan’s sign is called pain elicited by the dorsiflexion of the foot and suggests deep vein thrombosis. Homan’s sign test also called dorsiflexion sign test is a physical examination procedure that is used to test for deep vein thrombosis (DVT). A positive Homan’s sign in the presence of other clinical signs may be a quick indicator of DVT. Clinical evaluation alone cannot be relied on for patient management, but when carefully performed, it remains useful in determining the need for additional testing (like D-dimer test, ultrasonography, multidetector helical computed axial tomography (CT), and pulmonary angiography).
- **Option C:** Rovsing’s sign is associated with appendicitis when pain is felt with pressure at McBurney’s point. Rovsing’s sign is a clinical finding that is indicative of acute appendicitis (the inflammation and possible infection of the appendix). A positive Rovsing’s sign is characterized by right lower abdominal pain upon palpation of the left side of the lower abdomen

72. Which document addresses the client's right to information, informed consent, and treatment refusal?

A. Standard of Nursing Practice

B. Patient's Bill of Rights

C. Nurse Practice Act

D. Code for Nurses

Correct Answer: B. Patient's Bill of Rights

The Patient's Bill of Rights addresses the client's right to information, informed consent, timely responses to requests for services, and treatment refusal. A legal document, it serves as a guideline for the nurse's decision making. Standards of Nursing Practice, the Nurse Practice Act, and the Code for Nurses contain nursing practice parameters and primarily describe the use of the nursing process in providing care.

- **Option A:** Standards of nursing practice developed by the American Nurses' Association (ANA) provide guidelines for nursing performance. They are the rules or definition of what it means to provide competent care. The registered professional nurse is required by law to carry out care in accordance with what other reasonably prudent nurses would do in the same or similar circumstances. Thus, provision of high-quality care consistent with established standards is critical.
- **Option C:** Every state and territory in the US set laws to govern the practice of nursing. These laws are defined in the Nursing Practice Act (NPA). The NPA is then interpreted into regulations by each state and territorial nursing board with the authority to regulate the practice of nursing care and the power to enforce the laws.
- **Option D:** The ANA Code of Ethics for Nurses serves the following purposes: It is a succinct statement of the ethical obligations and duties of every individual who enters the nursing profession. It is the profession's nonnegotiable ethical standard. It is an expression of nursing's own understanding of its commitment to society.

73. What is the best intervention to teach the client when she feels the need to starve?

A. Allow her to starve to relieve her anxiety.

B. Do a short-term exercise until the urge passes.

C. Approach the nurse and talk out her feelings.

D. Call her mother on the phone and tell her how she feels.

Correct Answer: C. Approach the nurse and talk out her feelings

The client with anorexia nervosa uses starvation as a way of managing anxiety. Talking out feelings with the nurse is adaptive coping. Establish a therapeutic nurse-patient relationship. Within a helping relationship, the patient can begin to trust and try out new thinking and behaviors. Encourage the patient to express anger and acknowledge when it is verbalized. Important to know that anger is part of self and as such is acceptable. Expressing anger may need to be taught to the patient because anger is generally considered unacceptable in the family, and therefore the patient does not express it.

- **Option A:** Starvation should not be encouraged. Physical safety is a priority. Without adequate nutrition, a life-threatening situation exists. Assist the patient to assume control in areas other than

dieting and weight loss such as management of their own daily activities, work, and leisure choices. Feelings of personal ineffectiveness, low self-esteem, and perfectionism are often part of the problem. The patient feels helpless to change and requires assistance to problem-solve methods of control in life situations.

- **Option B:** The client with anorexia nervosa is preoccupied with losing weight due to disturbed body image. Limits should be set on attempts to lose more weight. Monitor exercise programs and set limits on physical activities. Chart activity and level of work (pacing and so on). Moderate exercise helps in maintaining muscle tone, weight and combating depression; however, the patient may exercise excessively to burn calories. Maintain a regular weighing schedule, such as Monday and Friday before breakfast in the same attire, and graph results. Provides an accurate ongoing record of weight loss or gain. Also diminishes obsessing about changes in weight.
- **Option D:** The client may have a domineering mother which causes the client to feel ambivalent. The client will not discuss her feelings with her mother. Discourage members from asking for approval from each other. Be alert to verbal or nonverbal checking with others for approval. Acknowledge the competent actions of the patient. Each individual needs to develop their own internal sense of self-esteem. The individual often is living up to others' (family's) expectations rather than making their own choices. Acknowledgment provides recognition of self in positive ways.

74. A patient is taking insulin glargine injection daily. The nurse instructed the client that the onset of action will likely happen?

A. 2-4 hours after administration

B. 4-12 hours after administration

C. 6-12 hours after administration

D. 18-24 hours after administration

Correct Answer: A. 2-4 hours after administration

Insulin glargine is a long-acting insulin with an onset of 2-4 hours, no peak, and its duration of action is 24 hours.

75. A 55-year old client with benign prostatic hyperplasia doesn't respond to medical treatment and is admitted to the facility for prostate gland removal. Before providing preoperative and postoperative instructions to the client, Nurse Gerry asks the surgeon which prostatectomy procedure will be done. What is the most widely used procedure for prostate gland removal?

A. Transurethral resection of the prostate (TURP)

B. Suprapubic prostatectomy

C. Retropubic prostatectomy

D. Transurethral laser incision of the prostate

Correct Answer: A. Transurethral resection of the prostate (TURP)

TURP is the most widely used procedure for prostate gland removal. Because it requires no incision, TURP is especially suitable for men with relatively minor prostatic enlargements and for those who are

poor surgical risks. Transurethral resection of the prostate is a procedure used in the management of bladder outlet obstruction caused by prostatic hypertrophy and prostatic abscess management. This procedure should be performed if the patient desires to be of medical management for bladder outlet obstruction or who fails medical management.

- **Option B:** Suprapubic means that the surgery is done through an incision in the lower abdomen, above the pubic bone. An incision is made in the bladder, and the center of the prostate gland is removed. This part of the prostate gland is known as the transition zone. Suprapubic prostatectomy is an inpatient procedure.
- **Option C:** Surgery to remove the entire prostate and some of the tissue around it, including the seminal vesicles (a gland that helps make semen). Nearby lymph nodes may also be removed. During a radical retropubic prostatectomy, an incision (cut) is made in the wall of the lower abdomen, behind the pubic bone. An attempt is made to protect the nerves that control penile erection and the bladder from damage.
- **Option D:** Transurethral incision of the prostate (TUIP) may be done to treat benign prostatic hyperplasia (BPH). The surgeon uses an instrument inserted into the urethra that generates an electric current or laser beam to make incisions in the prostate where the prostate meets the bladder.

76. A clinical instructor asks a nursing student about an aldosterone antagonist. The student is correct by saying that aldosterone antagonists:

A. Create an osmotic gradient.

B. Inhibit the exchange of sodium for potassium.

C. Cause metabolic acidosis.

D. Work poorly in the presence of endogenous aldosterone.

Correct Answer: B. Inhibit the exchange of sodium for potassium.

Aldosterone antagonists compete with endogenous aldosterone and prevent sodium reabsorption in exchange for potassium elimination. Potassium supplements should be discontinued and combination therapy with other drugs that cause hyperkalemia, such as ACE-I and nonsteroidal anti-inflammatory drugs (NSAID), should prompt enhanced electrolyte surveillance. Specifically, serum K+ levels should be reassessed within one week after a change in the prescribed dose of a medication that increases the risk for hyperkalemia when coadministered with an aldosterone receptor antagonist or if there is a change in the patient's clinical status that influences serum electrolyte levels or fluid balance

- **Option A:** Aldosterone antagonists work on inhibiting the action of aldosterone rather than creating an osmotic gradient. The pathobiological effects of hyperaldosteronism on the cardiovascular system extend beyond increased intravascular fluid retention and volume overload. Hyperaldosteronism causes endothelial dysfunction and impairs vascular reactivity, in part, by decreasing vascular antioxidant capacity, increasing oxidant stress, and limiting bioavailable nitric oxide.
- **Option C:** Aldosterone antagonists do not cause metabolic acidosis. Hyperaldosteronism also activates inflammation; alters fibrinolysis by increasing plasminogen activator inhibitor-1 expression; and promotes tissue fibrosis. Other adverse effects attributed to hyperaldosteronism that may influence cardiovascular function include sympathetic nervous system activation, decreased baroreceptor sensitivity, increased electrolyte excretion (K+, Mg+), and cardiomyocyte apoptosis.

- **Option D:** Aldosterone antagonists must work in the presence of endogenous aldosterone. Aldosterone is synthesized by the adrenal glands to preserve intravascular sodium, potassium, and water homeostasis. Aldosterone binds to mineralocorticoid receptors in the kidney, colon, and sweat glands and induces sodium (and water) reabsorption with concomitant potassium excretion.

77. A client with schizophrenia is referred for psychosocial rehabilitation. Which of the following are typical of this type of program? Select all that apply.

A. Analyzing family issues and past problems

B. Developing social skills and supports

C. Learning how to live independently in a community

D. Learning job skills for employment

E. Treating family members affected by the illness

F. Participating in in-depth psychoanalytical counseling

Correct Answer: B, C, D

The goal of psychosocial rehabilitation as a treatment method is to help the client develop the skills and supports necessary for successful living, learning, and working in the community. Analysis of family issues and past problems and treatment of family members are not commonly part of this type of program. The emphasis of psychosocial rehabilitation is on the client's development of skills in the here and now; consequently, psychoanalytic counseling is not part of the approach.

- **Option A:** People may be left feeling demoralized as a result of their condition; rehabilitation focuses on helping clients feel hopeful about the future. Each individual needs to feel that they are able to set their own goals and have the power and autonomy to pursue those aims.
- **Option B:** PSR is a treatment approach designed to help improve the lives of people with disabilities. The goal of psychosocial rehabilitation is to teach emotional, cognitive, and social skills that help those diagnosed with mental illness live and work in their communities as independently as possible.
- **Option C:** PSR utilizes what is known as the recovery model of mental illness. Full recovery is frequently the goal, but full recovery is seen as a process rather than an outcome. This approach is centered on the person's potential for recovery and focused on providing empowerment, social inclusion, support, and coping skills.
- **Option D:** Rehabilitation aims to teach people skills to help them manage their condition and live the life they want to live. This includes living skills, work skills, social skills, and others. Mental health professionals should offer support and help clients build relationships and social connections in their community.
- **Option E:** PSR treatments are multidisciplinary and often biopsychosocial in nature. This perspective recognizes that mental illness impacts multiple areas of life including the biological, social, and psychological systems. Not only are each of these systems affected by mental conditions but they are also inextricably interlinked. When something affects one area, it is bound to have an influence on other areas as well.
- **Option F:** PSR takes a whole-person approach and recognizes that other mental health professionals and physicians may be needed to make contributions to the treatment process. Individual care may require a mixture of services and effective treatment. This often requires the facilitation of access to care from different domains. A team approach ensures that the person has access to the tools and resources needed to achieve the stated goals.

78. A student nurse is asked to give an example of a long-acting nitrate. He is correct by saying:

A. Nitroglycerin sublingual

B. Nitroglycerin IV

C. Isosorbide PO

D. Nitroglycerin transmucosal

Correct Answer: C. Isosorbide PO

Isosorbide is one of the most frequently administered long-acting nitrates. PO nitrates are longer acting than IV or SL agents. Other forms of commonly used nitrates include isosorbide dinitrate, isosorbide mononitrate, and isosorbide mononitrate sustained-release (SR). These forms are taken orally and have a longer duration of action.

- **Option A:** Sublingual nitroglycerin is the therapy of choice for acute anginal episodes since it avoids first-pass metabolism, allowing for immediate and short anginal relief. The capsule form of nitroglycerin has a longer duration of action and requires larger doses.
- **Option B:** Intravenous nitroglycerin is useful for hypertensive emergencies. For patients with acute anginal pain, short-acting nitrates are useful for symptom relief.
- **Option D:** Nitroglycerin transmucosal is used for acute relief of an attack or acute prophylaxis of angina pectoris due to coronary artery disease.

79. Which information is most important for the nurse to include in a teaching plan for a schizophrenic client taking clozapine (Clozaril)?

A. Monthly blood tests will be necessary.

B. Report a sore throat or fever to the physician immediately.

C. Blood pressure must be monitored for hypertension.

D. Stop the medication when symptoms subside.

Correct Answer: B. Report a sore throat or fever to the physician immediately.

A sore throat and fever are indications of an infection caused by agranulocytosis, a potentially life-threatening complication of clozapine. The risk of developing agranulocytosis is around 1% in patients who take clozapine, which may be independent of dosing. Most cases occur early in the treatment, within six weeks to six months, and require extensive monitoring of blood absolute neutrophil counts. The definition of neutropenia is an ANC level below 1500/mm, and agranulocytosis is an ANC level below 500/mm.

- **Option A:** Because of the risk of agranulocytosis, white blood cell (WBC) counts are necessary weekly, not monthly. If the WBC count drops below 3,000/µl, the medication must be stopped. Weekly complete blood count (CBC) to measure ANC levels. ANC levels less than 1500 indicate neutropenia. Levels less than 500 indicate agranulocytosis. A complete blood count should be taken weekly for the first six months, then every other week for the next six months. A national registry is in place to monitor for safe use.

- **Option C:** Hypotension may occur in clients taking this medication. Warn the client to stand up slowly to avoid dizziness from orthostatic hypotension. Clozapine-induced myocarditis is a rare complication, affecting less than 3% of patients. This lethal dose-independent side effect appears more frequently during the first four weeks of treatment. In these patients, signs and symptoms of myocarditis may vary from having a flu-like illness to respiratory and cardiovascular symptoms.
- **Option D:** The medication should be continued, even when symptoms have been controlled. If the medication must be stopped, it should be slowly tapered over 1 to 2 weeks and only under the supervision of a physician. Slow titration is essential for reducing the many side effects associated with clozapine. With the persistent partial response, clozapine may be augmented with ECT to increase the drug's efficacy. Other methods of augmentation include lamotrigine and other antipsychotics.

80. Tywin has come to the nursing clinic for a comprehensive health assessment. Which statement would be the best way to end the history interview?

A. "What brought you to the clinic today?"

B. "Would you describe your overall health as good?"

C. "Do you understand what is happening?"

D. "Is there anything else you would like to tell me?"

Correct Answer: D. "Is there anything else you would like to tell me?"

By asking the client if there is anything else, the nurse allows the client to end the interview by discussing feelings and concerns. The purpose of obtaining a health history is to gather subjective data from the patient and/or the patient's family so that the health care team and the patient can collaboratively create a plan that will promote health, address acute health problems, and minimize chronic health conditions.

- **Option A:** Asking about what brought the client to the clinic is an ambiguous question to which the client may answer "my car" or any similarly disingenuous reply. The health history is typically done on admission to the hospital, but a health history may be taken whenever additional subjective information from the patient may be helpful to inform care (Wilson & Giddens, 2013).
- **Option B:** Asking if the client describes his overall health as good is a leading question that puts words in his mouth. Objective data is information that the health care professional gathers during a physical examination and consists of information that can be seen, felt, smelled, or heard by the health care professional. Taken together, the data collected provides a health history that gives the health care professional an opportunity to assess health promotion practices and offer patient education (Stephen et al., 2012).
- **Option C:** Asking if the client understands what is happening is a yes-or-no question that can elicit little information. Data gathered may be subjective or objective in nature. Subjective data is information reported by the patient and may include signs and symptoms described by the patient but not noticeable to others. Subjective data also includes demographic information, patient and family information about past and current medical conditions, and patient information about surgical procedures and social history.

81. A client with a diagnosis of major depression, recurrent with psychotic features is admitted to the mental health unit. To create a safe environment for

the client, the nurse most importantly devises a plan of care that deals specifically with the client's:

A. Disturbed thought processes

B. Imbalanced nutrition

C. Self-care deficit

D. Deficient knowledge

Correct Answer: A. Disturbed thought processes

Major depression, recurrent, with psychotic features alerts the nurse that in addition to the criteria that designate the diagnosis of major depression, one also must deal with the client's psychosis. Psychosis is defined as a state in which a person's mental capacity to recognize reality and to communicate and relate to others is impaired, thus interfering with the person's capacity to deal with the demands of life. Altered thought processes generally indicate a state of increased anxiety in which hallucinations and delusions prevail. Although all of the nursing diagnoses may be appropriate because the client is experiencing psychosis, option A is correct.

- **Option B:** In Imbalanced nutrition, the patient will regain a more normal elimination pattern with aid of foods high in roughage, increased fluid intake, and exercise daily (also with the aid of medications). Encourage small, high-calorie, and high-protein snacks and fluids frequently throughout the day and evening if weight loss is noted; minimizes weight loss, constipation, and dehydration.
- **Option C:** In Self-care deficit, the patient will demonstrate progress in the maintenance of adequate hygiene and be appropriately groomed and dressed (shave/makeup, clothes clean and neat). Encourage the use of soap, washcloth, toothbrush, shaving equipment, make-up etc. Give step-by-step reminders such as "Brush the teeth "Clean the outer surfaces of your upper teeth, then your lower teeth. . ." Slowed thinking and difficulty concentrating make organizing simple tasks difficult.
- **Option D:** In Deficient Knowledge, the patient and significant other will verbalize accurate information about at least two of the possible causes of depression, three-four of the signs and symptoms of depression, and use of medications, psychotherapy, and electroconvulsive therapy as treatment.

82. A 3-year-old had a hip spica cast applied 2 hours ago. In order to facilitate drying, the nurse should:

A. Expose the cast to air and turn the child frequently.

B. Use a heat lamp to reduce the drying time.

C. Handle the cast with the abductor bar.

D. Turn the child as little as possible.

Correct Answer: A. Expose the cast to air and turn the child frequently

The child should be turned every 2 hours, with the surface exposed to the air. Casts and splints hold the bones in place while they heal. They also reduce pain, swelling, and muscle spasm.

- **Option B:** Heat lamps may cause burns in the skin inside the cast. Inspect the skin around the cast. If the skin becomes red or raw around the cast, contact a doctor.

- **Option C:** Do not handle the cast until it is dry because it might still break. It takes about one hour for fiberglass, and two to three days for plaster to become hard enough to walk on. Some physicians will give a “cast shoe” to wear over a walking cast. The cast shoe will help protect the bottom of the cast.
- **Option D:** Turning the child would ensure equal drying of the cast at all sides. Keep the cast dry. If the cast becomes wet, it can hurt the child’s skin. Do not try to dry cast with something warm (i.e., a blow dryer) this may cause burns.

83. A 40-year-old divorced mother of four school-age children is hospitalized with metastatic cancer of the ovary. The nurse finds the patient crying, and she tells the nurse that she does not know what will happen to her children when she dies. The most appropriate response by the nurse is

A. "Why don't we talk about the options you have for the care of your children?"

B. "Many patients with cancer live for a long time, so there is time to plan for your children."

C. "For now you need to concentrate on getting well, not worry about your children."

D. "Perhaps your ex-husband will take the children when you can't care for them."

Correct Answer: A. “Why don’t we talk about the options you have for the care of your children?”

- **Option A:** This response expresses the nurse’s willingness to listen and recognizes the patient’s concern.
- **Options B and C:** The responses beginning “Many patients with cancer live for a long time” and “For now you need to concentrate on getting well” close off discussion of the topic and indicate that the nurse is uncomfortable with the topic. In addition, the patient with metastatic ovarian cancer may not have a long time to plan.
- **Option D:** Although it is possible that the patient’s ex-husband will take the children, more assessment information is needed before making plans.

84. A man is admitted to the nursing care unit with a diagnosis of cirrhosis. He has a long history of alcohol dependence. During the late evening following his admission, he becomes increasingly disoriented and agitated. Which of the following would the client be least likely to experience?

A. Diaphoresis and tremors

B. Increased blood pressure and heart rate

C. Illusions

D. Delusions of grandeur

Correct Answer: D. Delusions of grandeur.

Delusions of grandeur are symptomatic of manic clients, not clients withdrawing from alcohol. The symptoms and history of alcohol abuse suggest this client is in alcohol withdrawal. Mania also commonly presents with psychotic features, which include delusions or hallucinations. Many patients endorse grandiose delusions, believing they are high-level operatives such as spies, government

officials, members of secret agencies, or that they are knowledgeable professionals (even when they have no such background).

- **Option A:** Diaphoresis and tremors occur in the first phase of alcohol withdrawal. Alcohol withdrawal symptoms occur when patients stop drinking or significantly decrease their alcohol intake after long-term dependence. Withdrawal has a broad range of symptoms from mild tremors to a condition called delirium tremens, which results in seizures and could progress to death if not recognized and treated promptly.
- **Option B:** The blood pressure and heart rate increase in the first phase of alcohol withdrawal. Mild signs/symptoms can arise within six hours of alcohol cessation. If symptoms do not progress to more severe symptoms within 24 to 48 hours, the patient will likely recover. However, the time to presentation and range of symptoms can vary greatly depending on the patient, their duration of alcohol dependence, and volume typically ingested.
- **Option C:** Illusions are common in persons withdrawing from alcohol. Illusions occur most often in dim artificial lighting where the environment is not perceived accurately. Delirium tremens is the most severe form of alcohol withdrawal, and its hallmark is that of an altered sensorium with significant autonomic dysfunction and vital sign abnormalities. It includes visual hallucinations, tachycardia, hypertension, hyperthermia, agitation, and diaphoresis. Symptoms of delirium tremens can last up to seven days after alcohol cessation and may last even longer.

85. Mucosal barrier fortifiers are used in peptic ulcer disease management for which of the following indications?

A. To inhibit mucus production.

B. To neutralize acid production.

C. To stimulate mucus production.

D. To stimulate hydrogen ion diffusion back into the mucosa.

Correct Answer: C. To stimulate mucus production.

The mucosal barrier fortifiers stimulate mucus production and prevent hydrogen ion diffusion back into the mucosa, resulting in accelerated ulcer healing. Sucralfate, a polymer of sucrose with aluminum hydroxide, forms a protective coating on the mucosal lining, particularly in ulcerated areas. In the presence of acid, it becomes a gel that adheres to epithelial cells and ulcer craters.

- **Option A:** Misoprostol is a prostaglandin analog that increases the release of bicarbonate and mucin (a component of mucus) and reduces acid secretion by binding to prostaglandin receptors on parietal cells. Because NSAIDs (nonsteroidal anti-inflammatory drugs) inhibit prostaglandin formation, a synthetic prostaglandin such as misoprostol is sometimes given to reduce NSAID-induced damage.
- **Option B:** Antacids neutralize acid production. The antacids reduce the acid reaching the duodenum by neutralizing the acid present in the stomach. The salts' mechanism of neutralization of acid varies, and each salt has a different mechanism with the ultimate goal of acid neutralization.
- **Option D:** The mucosal barrier is the name given to the barrier in the stomach that resists the back-diffusion of hydrogen ions. The barrier is a layer of thick mucus secreted together with an alkaline fluid. Since the mucus is a gel, it entraps the alkaline fluid so that the stomach is coated.

86. The nurse is providing care for a client who has had a stroke. Since the onset of symptoms, the client has been experiencing left-sided hemianopsia.

Which nursing interventions would be appropriate? Select all that apply.

A. Place the client's belongings on the right side of the bed.

B. Approach the client from the left side. 3. Refuse to acknowledge the condition to promote the client's independence.

C. Refuse to acknowledge the condition to promote the client's independence.

D. Stand on the right side of the bed when providing care.

E. Provide the client with an eye patch for the right eye.

F. Dim the lights in the room to prevent eye strain.

Correct Answer: A & D.

Hemianopsia is a condition in which the client has lost half of the visual field. It is most often associated with stroke. Homonymous hemianopsia may result from stroke, head trauma, mass occupying lesions, invasive surgical procedures, or neurologic conditions such as multiple sclerosis, Alzheimer's disease, and epilepsy.

- **Option A:** In this case, the stroke has affected the client's left side; therefore, placing belongings on the right side of the bed will enable the client to best see them. In order to improve patients' ability to compensate for their visual loss, several researchers have developed training schemes designed to teach patients more efficient strategies for visual scanning.
- **Option B:** Approaching the client from the left side is counterproductive because the client would not be able to adequately see the nurse. The compensatory training approaches typically use target-localization tasks to train patients to make large eye movements and use visual search tasks to teach patients to use systematic scanning strategies when searching their visual world.
- **Option C:** Due to the enjoyment which can be gained from reading and other leisure activities requiring visual search skills, any impairment in these has obvious consequences for the emotional well-being of the patient.
- **Option D:** Standing on the right side of the bed when providing care will ensure the client is able to see the nurse. Optical aids such as prism glasses can be used to reduce the apparent visual field loss by shifting visual stimuli from the blind field into the patient's seeing field. These prisms are fitted to spectacles but need to be restricted to just one-half of each of the lenses (typically on the side of the blind field).
- **Option E:** Using an eye patch will not help with treating or managing the condition. Patient recovery may benefit from a multifaceted approach that includes visual training, visual assist devices (prism correction), occupational therapy, and psychological rehabilitation.
- **Option F:** Dimming the lights would further decrease seeing the visual field. Some patients can respond quite accurately to visual stimuli presented to their blind field (for example by pointing to it) even though they insist that they cannot see it. This phenomenon has been called blindsight.

87. A nurse is evaluating the developmental level of a two (2)-year-old. Which of the following does the nurse expect to observe in this child?

A. Uses a fork to eat

B. Uses a cup to drink

C. Uses a knife for cutting food

D. Pours own milk into a cup

Correct Answer: B. Uses a cup to drink

By age 2 years, the child can use a cup and can use a spoon correctly but with some spilling. Children can start learning how to use a cup without a lid when they are 9 months old. Most experts recommend introducing utensils between 10 and 12 months, as an almost-toddler starts to show signs that she's interested. A spoon should be first on the child's tray since it's easier to use.

- **Option A:** By ages 3 to 4, the child begins to use a fork. She'll have more success with a fork as her fine motor skills get a little sharper, starting around 15 months.
- **Option C:** By the end of the preschool period, the child should be able to begin to use a knife for cutting. The child can hold onto the helper's hands as they cut the food using the knife and fork.
- **Option D:** Preschoolers can pour their own drinks. Pouring is a great hand-eye exercise. It requires self-control in the form of motor control. Autonomy is something children crave at this age, and this is certainly an activity they can do on their own when appropriate parameters are set.

88. Which of the following potentially serious complications could occur with therapy for hypothyroidism?

A. Acute hemolytic reaction

B. Angina or cardiac arrhythmia

C. Retinopathy

D. Thrombocytopenia

Correct Answer B. Angina or cardiac arrhythmia

Precipitation of angina or cardiac arrhythmia is a potentially serious complication of hypothyroidism treatment.

- **Option A:** Acute hemolytic reaction is a complication of blood transfusions.
- **Option C:** Retinopathy typically is a complication of diabetes mellitus.
- **Option D:** Thrombocytopenia doesn't result from treating hypothyroidism.

89. The nurse is performing a voice test to assess hearing. Which of the following describes the accurate procedure for performing this test?

A. Stand 4 feet away from the client to ensure that the client can hear at this distance.

B. Whisper a statement and ask the client to repeat it.

C. Whisper a statement with the examiners back facing the client.

D. Whisper a statement while the client blocks both ears.

Correct Answer: B. Whisper a statement and ask the client to repeat it.

The examiner stands 1-2 feet away from the client and asks the client to block one external ear canal. The nurse whispers a statement and asks the client to repeat it. Each ear is tested separately. Before the examination, one must first ask the patient if they are in any pain. The patient should also be asked whether they have any ear-related symptoms (specifically discharge, pain, hearing loss) – and which

they think is their better hearing ear.

- **Option A:** The patient should be sat on a chair suited to their habitus and comfort. The chair should ideally be in the center of the room, as part of the examination requires the examiner to stand behind the patient.
- **Option C:** Explain to the patient that they will be required to repeat words or phrases they hear back to the examiner. To eliminate the possibility of lip-reading, stand behind the patient, and say a test word to be repeated back. The examiner then stands to the side of the test ear (conventionally the better hearing ear) and gently presses on the tragus of the non-test ear to mask it.
- **Option D:** The examiner then speaks several test words at arm's length and then half arm's length. At each distance, the test words are spoken at three volumes: whispered, conversational, and loud.

90. A client has been taking isoniazid (INH). The client went to the health care facility with complaints of numbness and tingling sensation in the extremities. The nurse determines that the client is most likely suffering from?

A. Impaired peripheral circulation

B. Hypercalcemia

C. Peripheral neuritis

D. Guillain Barre syndrome

Correct Answer: C. Peripheral neuritis

Isoniazid (INH) causes peripheral neuritis characterized by numbness, tingling, and paresthesias in the extremities.

- **Options A & B:** These are not related to the use of the medication.
- **Option D:** Guillain-Barre syndrome is a rare condition in which your immune system attacks your nerves, leading to muscle weakness and even paralysis.

91. Which situation would Nurse Sally identify as placing a client at high risk for caregiver abuse?

A. Antonia, an adult child, quits her job to move in and care for a parent with severe dementia.

B. Mr. Wright, an elderly man with severe heart disease, resides in a personal care home and is frequently visited by his adult child.

C. Mrs. Hale, an elderly parent with limited mobility, lives alone and receives help from several adult children.

D. Antoinette cares for her husband who is in early stages of Alzheimer's disease and has a network of available support persons.

Correct Answer: A. Antonia quits her job to move in and care for a parent with severe dementia.

In this situation, the adult child has given up her usual role as well as moved her place of residence to care for her parents. Caring for someone with severe dementia is very stressful, requiring almost 24-hour vigilance to ensure safety and meet needs. This situation places the caregiver at high risk for stress and abuse. A combination of individual, relational, community, and societal factors contribute to the risk of becoming a perpetrator of elder abuse. They are contributing factors and may or may not be

direct causes.

- **Option B:** The caregivers in option B are the staff working in the personal care home; the adult child does not have primary responsibility and, therefore, would not be a high risk for severe stress and abuse. Elder abuse is a serious problem that can have harmful effects on victims. The goal for elder abuse prevention is to stop it from happening in the first place. However, the solutions are as complex as the problem.
- **Option C:** The caregivers are receiving support and no one person has primary responsibility. This will decrease the risk for severe caregiver stress. Knowledge about what works to prevent elder abuse is growing. However, most prevention strategies and practices have not yet been rigorously evaluated to determine their effectiveness.
- **Option D:** Elder abuse is an intentional act or failure to act that causes or creates a risk of harm to an older adult. An older adult is someone age 60 or older. The abuse often occurs at the hands of a caregiver or a person the elder trusts. Abuse, including neglect and exploitation, are experienced by about 1 in 10 people aged 60 and older who live at home. From 2002 to 2016, more than 643,000 older adults were treated in the emergency department for nonfatal assaults and over 19,000 homicides occurred.

92. A patient who has been diagnosed with vasospastic disorder (Raynaud's disease) complains of cold and stiffness in the fingers. Which of the following descriptions is most likely to fit the patient?

A. An adolescent male

B. An elderly woman

C. A young woman

D. An elderly man

Correct Answer: C. A young woman

Raynaud's disease is most common in young women and is frequently associated with rheumatologic disorders, such as lupus and rheumatoid arthritis. Secondary Raynaud phenomenon is associated with different etiologies. It is most commonly associated with connective tissue disorders such as scleroderma, systemic lupus erythematosus, Sjogren syndrome, and antiphospholipid syndrome.

- **Option A:** Primary Raynaud phenomenon usually occurs in the second or third decade of life, with a baseline prevalence rate of 8% in men. Occupations that result in overt vibrational exposure from vibrating machinery mostly affect males. This is known as hand-arm vibration syndrome. Exposure to polyvinyl chloride, cold injury from work, or ammunition work are other occupational-associated causes of secondary Raynaud phenomenon.
- **Option B:** Primary Raynaud phenomenon usually occurs in the second or third decade of life. Secondary Raynaud phenomenon occur more frequently in women (about 20% to 30%), particularly in younger age populations (teens to 20s). The female to male ratio is 9 to 1.
- **Option D:** Primary Raynaud phenomenon occurs more frequently in women than in men. In the population of patients older than 60 years, obstructive vascular disease is a frequent cause of the Raynaud phenomenon. Obstructive vascular disease causes include thromboangiitis obliterans, microemboli, diabetic angiopathy, or atherosclerosis

93. A client with tuberculosis is receiving ethambutol (Myambutol). All of which are laboratories to be examined, except?

A. Complete blood count

B. Liver function test

C. Triglyceride level

D. Uric acid level

Correct Answer: C. Triglyceride level

Triglyceride level is not monitored during the treatment.

- **Option A:** This is to monitor for thrombocytopenia.
- **Option B:** This is to check for hepatotoxicity.
- **Option D:** This is to monitor for hyperuricemia.

94. Which of the following may happen if the uterus becomes overstimulated by oxytocin during the induction of labor?

A. Weak contraction prolonged to more than 70 seconds.

B. Tetanic contractions prolonged to more than 90 seconds.

C. Increased pain with bright red vaginal bleeding.

D. Increased restlessness and anxiety.

Correct Answer: B. Tetanic contractions prolonged to more than 90 seconds

Hyperstimulation of the uterus such as with oxytocin during the induction of labor may result in tetanic contractions prolonged to more than 90seconds, which could lead to such complications as fetal distress, abruptio placentae, amniotic fluid embolism, laceration of the cervix, and uterine rupture.

- **Option A:** With some methods, the uterus can be overstimulated, causing it to contract too frequently. Too many contractions may lead to changes in the fetal heart rate, umbilical cord problems, and other problems.
- **Option C:** Painless vaginal bleeding during the second or third trimester of pregnancy is the usual presentation in placenta previa. The bleeding may be provoked from intercourse, vaginal examinations, labor, and at times there may be no identifiable cause. On speculum examination, there may be minimal bleeding to active bleeding.
- **Option D:** Synthetic oxytocin, also known as Pitocin, is frequently administered during delivery for the purpose of inducing labor and preventing excessive post-delivery bleeding. One might hypothesize, based on the role that natural oxytocin plays, that women receiving oxytocin might receive some degree of benefit from the peri-partum use of Pitocin; however, a recent study calls this hypothesis into question. This study used population-based data available through the Massachusetts Integrated Clinical Academic Research Database (MiCARD) in order to retrospectively examine the relationship between peripartum synthetic oxytocin administration and the development of depressive and anxiety disorders within the first year postpartum. While the authors expected to observe that women exposed to synthetic oxytocin in this cohort would have a reduced risk of postpartum depressive and/or anxiety disorders than those without any exposure, they actually found the opposite.

95. What is the most important nursing action when measuring a pulmonary capillary wedge pressure (PCWP)?

A. Have the client bear down when measuring the PCWP.

B. Deflate the balloon as soon as the PCWP is measured.

C. Place the client in a supine position before measuring the PCWP.

D. Flush the catheter with heparin solution after the PCWP is determined.

Correct Answer: B. Deflate the balloon as soon as the PCWP is measured.

While the balloon must be inflated to measure the capillary wedge pressure, leaving the balloon inflated will interfere with blood flow to the lung. Once the catheter is advanced into the pulmonary artery to the point where the waveform changes into a wedge form, the balloon should be deflated. The catheter will then show the PA pressures. After obtaining the appropriate PA pressures, a PCWP/pulmonary artery occlusion pressure can now be measured.

- **Option A:** Bearing down will increase intrathoracic pressure and alter the reading. The balloon is inflated only until the PA pressure waveform changes into a wedged waveform. When the balloon is inflated, it creates a static column of blood between the artery distal to the catheter and the pulmonary vein. This post-capillary pressure, known as the PCWP, is an indirect estimate of the pressure in the left atrium.
- **Option C:** While a supine position is preferred; it is not essential. The first step of the procedure is to clean the area with an antiseptic solution, and the patient is draped to make a sterile working field. Using a vascular probe, the position of the vessel is confirmed again. Following this, local anesthesia is provided at the site of insertion.
- **Option D:** Agency protocols relative to flushing of unused ports must be followed. Once the procedure is done, a chest X-ray should be ordered to confirm the position of the catheter and to check for any complications. The tip of the PA catheter should not extend beyond 2 cm of the hilum and is usually within the mediastinal shadow.

96. A client with a peptic ulcer is scheduled for a vagotomy. The client asks the nurse about the purpose of this procedure. The nurse tells the client that the procedure:

A. Decreases food absorption in the stomach.

B. Heals the gastric mucosa.

C. Halts stress reactions.

D. Reduces the stimulus to acid secretions.

Correct Answer: D. Reduces the stimulus to acid secretions.

A vagotomy, or cutting the vagus nerve, is done to eliminate parasympathetic stimulation of gastric secretion. A vagotomy is a type of surgery that removes all or part of the vagus nerve. This nerve runs from the bottom of the brain, through the neck, and along the esophagus, stomach, and intestines in the gastrointestinal (GI) tract.

- **Option A:** The indications for vagotomy are few with the advancements of medical therapy. Generally, acid-reducing operations are reserved for complicated ulcer disease in a stable patient who has failed maximum medical therapy. The type of surgery performed depends on the type of

ulcer (duodenal versus gastric), the complication of PUD (bleeding, perforation, obstruction, intractability), and the location of the ulcer (types I to V gastric ulcers as described by the Modified Johnson Classification system).

- **Option B:** The relevant physiology revolves around the mechanisms relating to stomach acid secretion. Intraluminal gastric acid is released by the parietal cells, mainly located in the body of the stomach. Parietal cells are stimulated via 3 mechanisms: gastrin, acetylcholine, and histamine. All 3 mechanisms activate the hydrogen-potassium ATPase-releasing hydrogen ion into the stomach lumen.
- **Option C:** Vagotomy was once commonly performed to treat and prevent PUD; however, with the availability of excellent acid secretion control with H2-receptor antagonists, proton pump inhibitors, and anti–Helicobacter pylori medications, the need for surgical management of this condition has greatly decreased.

97. Referencing the image below, what is the name of the structure marked #15.

A. Minor calyx

B. Major calyx

C. Ureter

D. Bile duct

E. Renal column

F. Renal vein

G. Renal nerve

H. Renal artery

I. Renal pelvis

J. Renal pyramid

Correct answer is #15 is the C. Ureter

- The ureters are a pair of muscular tubes that transport urine from the kidneys to the bladder. Each ureter is connected to a kidney at one end and the bladder at the other. They use peristaltic contractions to move urine downward, preventing its backflow to the kidneys and ensuring its proper flow into the bladder for storage.

98. Elsa is being treated in a chemical dependency unit. She tells the nurse that she only uses drugs when under stress and therefore does not have a substance problem. Which defense mechanism is the client using?

A. Compensation

B. Denial

C. Suppression

D. Undoing

Correct Answer: B. Denial

Individuals who have substance problems often use denial. Denial is probably one of the best-known defense mechanisms, used often to describe situations in which people seem unable to face reality or admit an obvious truth (e.g., “He’s in denial”). Addiction is one of the best-known examples of denial. People who are living with a substance use problem will often flat-out deny that their behavior is problematic. In other cases, they might admit that they do use drugs or alcohol but will claim that their substance use is not problematic.

- **Option A:** Compensation is overachieving in one area to compensate for failures in another. This psychological strategy allows people to disguise inadequacies, frustrations, stresses, or urges by directing energy toward excelling or achieving in other areas.
- **Option C:** Sometimes we do this consciously by forcing the unwanted information out of our awareness, which is known as suppression. In most cases, however, this removal of anxiety-provoking memories from our awareness is believed to occur unconsciously.
- **Option D:** Undoing is trying to make up for what one feels are inappropriate thoughts, feelings, or behaviors (e.g., if you hurt someone’s feelings, you might offer to do something nice for them in order to assuage your anxiety or guilt).

99. A 68-year-old male patient with a history of chronic emphysema presents in the clinic with symptoms of increasing restlessness and confusion. He has a history of smoking and reports difficulty in breathing. The nurse is assessing the patient to determine the best immediate course of action. What step should the nurse take next?

A. Encourage the client to perform pursed-lip breathing.

B. Check the client’s temperature.

C. Assess the client’s potassium level.

D. Increase the client’s oxygen flow rate.

Correct Answer: A. Encourage the client to perform pursed-lip breathing.

Pursed lip breathing prevents the collapse of the lung unit and helps client control the rate and depth of breathing.

- **Option B:** Checking the temperature is unnecessary especially if the client is restless.
- **Option C:** Emphysema does not significantly affect potassium levels.
- **Option D:** Do not increase the oxygen levels in a client with emphysema.

100. Your patient with peritonitis is NPO and complaining of thirst. What is your priority?

A. Increase the I.V. infusion rate.

B. Use diversion activities.

C. Provide frequent mouth care.

D. Give ice chips every 15 minutes.

Correct Answer: C. Provide frequent mouth care.

Frequent mouth care helps relieve dry mouth. Maintain NPO with nasogastric or intestinal aspiration. This reduces hyperactivity of bowel and diarrhea losses. Observe skin or mucous membrane dryness, turgor. Note peripheral and sacral edema. Hypovolemia, fluid shifts, and nutritional deficits contribute to poor skin turgor, taut edematous tissues.

- **Option A:** Administer plasma or blood, fluids, electrolytes, diuretics as indicated. Replenishes circulating volume and electrolyte balance. Colloids (plasma, blood) help move water back into the intravascular compartment by increasing the osmotic pressure gradient. Diuretics may be used to assist in the excretion of toxins and to enhance renal function.
- **Option B:** Change position frequently, provide frequent skincare, and maintain dry or wrinkle-free bedding. Edematous tissue with compromised circulation is prone to breakdown.
- **Option D:** Eliminate noxious sights and smells from the environment. Limit intake of ice chips. This reduces gastric stimulation and vomiting response. Excessive use of ice chips during gastric aspiration can increase gastric washout of electrolytes.