

Kevin's Review - 35 NCLEX Practice Questions

1. Ralph has a history of alcohol abuse and has acute pancreatitis. Which lab value is most likely to be elevated?

- A. Calcium
- B. Glucose
- C. Magnesium
- D. Potassium

Correct Answer: B. Glucose

Glucose level increases and diabetes mellitus may result d/t the pancreatic damage to the islets of Langerhans. Acute pancreatitis is associated with damage to both the endocrine and exocrine pancreas. Glucose intolerance seen with this disease appears to be the result of hyperglucagonemia and relative hypoinsulinemia.

- **Option A:** Initial evaluation of suspected acute pancreatitis involves laboratory abnormalities suggesting biliary cholestasis, hypercalcemia or severe hyperlipidemia will help in determining the etiology of pancreatitis. An abdominal ultrasound is recommended in all the patients to assess for choledocholithiasis and bile duct dilatation.
- **Option C:** The diagnosis of acute pancreatitis has been defined by the Revised Atlanta Classification and requires at least 2 of 3 criteria be met: 1) a lipase or amylase level that is three times the upper limit of normal 2) abdominal pain that is consistent with pancreatitis 3) abdominal imaging consistent with acute pancreatitis.
- **Option D:** A thorough history regarding alcohol use and medications should be gathered, keeping in mind that over five years of heavy alcohol use is often needed to induce alcohol-related pancreatitis. Smoking history is also important as a risk factor for acute pancreatitis.

2. A nurse is caring for a client requiring surgery and is ordered to have a standby blood secured if in case a blood transfusion is needed during or after the procedure. The nurse suggests to the client to do which of the following to lessen the risk of possible transfusion reaction?

- A. Request that any donated blood be screened twice by the blood bank.
- B. Take iron supplements prior to the surgery and eat green leafy vegetables.
- C. Do an autologous blood donation.
- D. Have a family member donate their own blood.

Correct Answer: C. Do an autologous blood donation.

A donation of your own blood is autologous. Doing this will prevent the risk of transfusion reaction. Autologous blood transfusion is the collection of blood from a single patient and retransfusion back to the same patient when required. This is in contrast to allogeneic blood transfusion where blood from unrelated/anonymous donors is transfused to the recipient. The primary driving forces for the use of autologous blood transfusion are to reduce the risk of transmission of infection and to protect an increasingly scarce resource.

- **Option A:** More recently, concerns have focussed on the blood-borne transmission of variant Creutzfeldt–Jakob disease (vCJD). In 2004, case reports emerged of presumed transmission of vCJD via allogeneic blood transfusion. Unlike hepatitis and HIV, there is no effective screening test

and the disease has a variable and often prolonged asymptomatic incubation period.

- **Option B:** As oral iron supplementation requires a significant amount of time, when the interval before surgery is sufficient (at least 6–8 weeks) and no contraindications are present, supplementation with oral iron and nutritional advice may be appropriate for mild-to-moderate IDA and/or nonanemic ID or insufficient iron stores.
- **Option D:** Allogeneic donor blood is becoming an increasingly costly and scarce resource. As demand for blood is outstripping donation, there is a real social and economic pressure to increase the proportion of blood transfused by autologous transfusion.

3. Meperidine hydrochloride (Demerol) is given to a client who is experiencing post-operative pain. Which of the following are the side effects of the medication, except?

- A. Tremors
- B. Diarrhea
- C. Sweating
- D. Dizziness

Correct Answer: B. Diarrhea

Meperidine hydrochloride is an opioid analgesic. Side effects of this medication are as follows: nausea, vomiting, tremors, sweating, hypotension, urinary retention, confusion, and respiratory depression. Constipation, not diarrhea, is a known side effect of the medication.

4. Marie Joy's lab test revealed that her serum calcium is 2.5 mEq/L. Which assessment data does the nurse document when a client diagnosed with hypocalcemia develops a carpopedal spasm after the blood-pressure cuff is inflated?

- A. Positive Trousseau's sign
- B. Positive Chvostek's sign
- C. Tetany
- D. Paresthesia

Correct Answer: A. Positive Trousseau's sign

In a client with hypocalcemia, a positive Trousseau's sign refers to carpopedal spasm that develops usually within 2 to 5 minutes after applying and inflating a blood pressure cuff to about 20 mm Hg higher than systolic pressure on the upper arm. This spasm occurs as the blood supply to the ulnar nerve is obstructed.

- **Option B:** Chvostek's sign refers to twitching of the facial nerve when tapping below the earlobe. In the late 1800s, Dr. Chvostek noticed that mechanical stimulation of the facial nerve (as with the fingertip of the examiner, for example) could lead to twitching of the ipsilateral facial muscles. The long-accepted explanation is that this resulted from hypocalcemia, and this relationship became known as the Chvostek sign.

- **Option C:** Tetany is a clinical manifestation of hypocalcemia denoted by tingling in the tips of the fingers around the mouth and muscle spasms in the extremities and face. Tetany is generally induced by a rapid decline in serum ionized calcium. Tetany is usually most dangerous and most commonly seen in the presence of respiratory alkalosis causing hypocalcemia.
- **Option D:** Paresthesia refers to numbness or tingling. Paresthesia is an abnormal sensation of the skin (tingling, pricking, chilling, burning, numbness) with no apparent physical cause. Paresthesia may be transient or chronic and may have any of dozens of possible underlying causes.

5. With a fetus in the left anterior breech presentation, the nurse would expect the fetal heart rate would be most audible in which of the following areas?

- A. Above the maternal umbilicus and to the right of the midline.
- B. In the lower-left maternal abdominal quadrant.
- C. In the lower-right maternal abdominal quadrant.
- D. Above the maternal umbilicus and to the left of the midline.

Correct Answer: D. Above the maternal umbilicus and to the left of midline

With this presentation, the fetal upper torso and back face the left upper maternal abdominal wall. The fetal heart rate would be most audible above the maternal umbilicus and to the left of the middle. The other positions would be incorrect.

- **Option A:** The fetal heart rate would be most audible above the maternal umbilicus but to the left of the midline.
- **Option B:** It should not be at the lower-left of the maternal abdominal quadrant. Fetal heart rate heard in this area may be inaccurate or maybe the maternal heart rate.
- **Option C:** This would be an inaccurate area to check for the fetal heart rate. Since the baby is in breech position, the fetal back may be located at the upper maternal abdominal wall.

6. Which of the following snacks would be suitable for the child with gluten-induced enteropathy?

- A. Ice cold ale
- B. Pumpkin loaf cake
- C. Buckwheat kasha
- D. Oatmeal cookies
- E. Linguine with lemon and tomatoes

Correct Answer: C. Buckwheat kasha

7. The client using a diaphragm should be instructed to:

- A. Refrain from keeping the diaphragm in longer than 4 hours
- B. Keep the diaphragm in a cool location

- C. Have the diaphragm resized if she gains 5 pounds
- D. Have the diaphragm resized if she has any surgery

Correct Answer: B. Keep the diaphragm in a cool location

The client using a diaphragm should keep the diaphragm in a cool location. The diaphragm is a birth control (contraceptive) device that prevents sperm from entering the uterus. The diaphragm is a small, reusable rubber or silicone cup with a flexible rim that covers the cervix. Before sex, the diaphragm is inserted deep into the vagina so that part of the rim fits snugly behind the pubic bone.

- **Option A:** She should refrain from leaving the diaphragm in longer than 8 hours, not 4 hours. Always use the diaphragm with spermicidal cream, foam or gel. Avoid use of body lotions near the vagina and vaginal medications when using the diaphragm. If using a diaphragm and douche, wait until at least six hours after sex to avoid washing away spermicide.
- **Option C:** The traditional dome-shaped diaphragm comes in different sizes, and the woman needs to be fitted for one by her healthcare provider. A newer diaphragm option — the Caya diaphragm — comes in one size. To get either type of diaphragm, the woman needs a prescription from her healthcare provider.
- **Option D:** She should have the diaphragm resized when she gains or loses 10 pounds or has abdominal surgery. The woman will require an internal examination to assess what size of diaphragm will be suitable for her. A diaphragm should be replaced at least every 2 years. It should be examined regularly for holes or weak spots, and replaced as needed. She will need to be 'resized' for a diaphragm if she lost or gained more than 7 pounds in weight or have had a pregnancy.

8. The nurse is teaching the client how to use a metered-dose inhaler (MDI) to administer a Corticosteroid drug. Which of the following client actions indicates that he is using the MDI correctly? Select all that apply.

- A. The inhaler is held upright.
- B. Head is tilted down while inhaling the medication.
- C. Client waits 5 minutes between puffs.
- D. Mouth is rinsed with water following administration.
- E. Client lies supine for 15 minutes following administration.

Correct Answer: A & D.

In using a corticosteroid MDI, remove the cap and hold the inhaler upright, stand or sit up straight, shake the inhaler, tilt your head back slightly, put the inhaler in the mouth, press down on the inhaler quickly, breathe in slowly for 3 to 5 seconds, hold the breath for 10 seconds, breathe out slowly, repeat puffs as prescribed, rinse the mouth, and gargle using water or mouthwash after each use.

- **Option A:** Keep the chin up and the inhaler upright (not aimed at the roof of the mouth or the tongue). Use a spacer/valve-holding chamber (the best way, useful for all patients) by putting the inhaler into the end with the hole and the mouthpiece end in the mouth. If there is no spacer, hold the inhaler 1 to 2 inches (or two-finger widths) in front of an open mouth.
- **Option B:** Head is tilted up during inhalation of the medication. Start breathing in slowly through the mouth and press down on the inhaler one time. If using a spacer or valved-holding chamber, press down on the inhaler before starting to breathe in. Breathe in slowly.

- **Option C:** For inhaled quick-relief medicine (like albuterol), wait about 1 minute between puffs. There is no need to wait between puffs for other medicines.
- **Option D:** If the client is using this inhaler for a corticosteroid preventer medication, with or without a spacer, rinse the mouth with water and spit after inhaling the last dose to reduce the risk of side effects.
- **Option E:** There is no need to lie supine after administration of the medication. If more than one dose is needed, repeat all the steps.

9. A nurse is caring for a client with a healthcare-associated infection caused by methicillin-resistant *Staphylococcus aureus* who is on contact precautions. The nurse prepares to provide colostomy care to the client. Which of the following protective items will be required to perform this procedure? Select all that apply.

- A. Gloves
- B. Goggles
- C. A gown
- D. Shoe protectors

Correct Answer: A, B, & C.

MRSA infection is one of the leading causes of hospital-acquired infections and is commonly associated with significant morbidity, mortality, length of stay, and cost burden. Prevention and control of MRSA infections include necessary infection-control steps like strict hand hygiene and adequate contact precautions.

- **Option A:** Contact precautions require the use of gloves. Hand hygiene means washing hands with soap and water or an alcohol-based cleanser before and after contact with patients who have MRSA infections.
- **Option B:** Goggles are worn to protect the mucous membranes of the eye during interventions that may produce splashes of blood, body fluids, secretions, and excretions. Besides the standard precautions, the CDC recommends contact precautions. The patient should be in an isolated room if available.
- **Option C:** A gown should be worn if direct client contact is anticipated. Contact precautions include the use of gowns, gloves, and possibly masks during clinical encounters with patients with MRSA infection.
- **Option D:** Shoe protectors are not necessary. Instead, everyone should gown and glove when coming into contact with the patient. The transport of MRSA patients should be minimized and dedicated medicated equipment should be used on them.

10. While looking out the window, a client with schizophrenia remarks, "That school across the street has creatures in it that are waiting for me." Which of the following terms best describes what the creatures represent?

- A. Anxiety attack
- B. Projection

C. Hallucination

D. Delusion

Correct Answer: D. Delusion

A delusion is a false belief based on a misrepresentation of a real event or experience. Delusions are defined as fixed, false beliefs that conflict with reality. Despite contrary evidence, a person in a delusional state can't let go of their convictions. Delusions are often reinforced by the misinterpretation of events. Many delusions also involve some level of paranoia. For example, someone might contend that the government is controlling our every move via radio waves despite evidence to the contrary. Delusions are often part of psychotic disorders. They may occur along with hallucinations, which involve perceiving something that isn't really there, like hearing voices or feeling bugs crawling on your skin.

- **Option A:** Although anxiety can increase delusional responses, it isn't considered the primary symptom. An anxiety attack usually involves a fear of some specific occurrence or problem that could happen. Symptoms include worry, restlessness, and possibly physical symptoms, such as changes in heart rate. Anxiety is different from a panic attack, but it can occur as part of an anxiety or panic disorder.
- **Option B:** Projection is falsely attributing to another person one's own unacceptable feelings. Projection is a defense mechanism that involves taking our own unacceptable qualities or feelings and ascribing them to other people. For example, if you have a strong dislike for someone, you might instead believe that they do not like you. Projection works by allowing the expression of the desire or impulse, but in a way that the ego cannot recognize, therefore reducing anxiety.
- **Option C:** Hallucinations, which characterize most psychoses, are perceptual disorders of the five senses; the client may see, taste, feel, smell, or hear something in the absence of external stimulation. The word "hallucination" comes from Latin and means "to wander mentally." Hallucinations are defined as the "perception of a nonexistent object or event" and "sensory experiences that are not caused by stimulation of the relevant sensory organs."

11. Where would nurse Kristine place the call light for a male client with a right-sided brain attack and left homonymous hemianopsia?

- A. On the client's right side
- B. On the client's left side
- C. Directly in front of the client
- D. Where the client like

Correct Answer: A. On the client's right side

The client has left visual field blindness. The client will see only from the right side. Homonymous hemianopsia is a condition in which a person sees only one side—right or left—of the visual world of each eye. The person may not be aware that the vision loss is happening in both eyes, not just one. An injury to the right part of the brain produces loss of the left side of the visual world of each eye.

- **Option B:** The client would not be able to see the call light on his right side because he can only see the left side.
- **Option C:** Only the right half of the visual world can be seen by the client.
- **Option D:** The most ideal place to put the call light is on the client's right side to avoid any injuries.

12. The nurse is performing a mental status examination on a male client diagnosed with a subdural hematoma. This test assesses which of the following?

- A. Cerebellar function
- B. Intellectual function
- C. Cerebral function
- D. Sensory function

Correct Answer: C. Cerebral function

The mental status examination assesses functions governed by the cerebrum. Some of these are orientation, attention span, judgment, and abstract reasoning. Cerebrum is the largest part of the brain and is composed of right and left hemispheres. It performs higher functions like interpreting touch, vision, and hearing, as well as speech, reasoning, emotions, learning, and fine control of movement.

- **Option A:** Cerebellar function testing assesses coordination, equilibrium, and fine motor movement. Cerebellum is located under the cerebrum. Its function is to coordinate muscle movements, maintain posture, and balance.
- **Option B:** Intellectual functioning isn't the only cerebral activity. When assessing intelligence to make decisions about individuals, attention has been paid almost exclusively to general intelligence, as reflected in a composite intelligence quotient, or IQ. That is, a single number, embodied in the IQ, is used to portray an individual's mental ability.
- **Option D:** Sensory function testing involves assessment of pain, light-touch sensation, and temperature discrimination. Assessment of sensory function helps to identify the different pathways for light touch, proprioception, vibration, and pain. Use a pinprick to evaluate pain sensation.

13. Situation: A 29-year-old client newly diagnosed with breast cancer is pacing, with rapid speech headache and inability to focus on what the doctor was saying. The nurse assesses the level of anxiety as:

- A. Mild
- B. Moderate
- C. Severe
- D. Panic

Correct Answer: C. Severe

The client's manifestations indicate severe anxiety. Severe anxiety is intensely debilitating, and symptoms of severe anxiety meet key diagnostic criteria for clinically-significant anxiety disorders. People with severe anxiety typically score higher on scales of distress and lower on functioning. Severe anxiety symptoms also frequently co-occur with major depression, which can contribute to greater disability.

- **Option A:** Mild anxiety is manifested by slight muscle tension, slight fidgeting, alertness, the ability to concentrate, and capable of problem-solving. Although often described as sub-clinical or clinically non-significant, mild anxiety can impact emotional, social, and professional functioning. Mild anxiety symptoms may present as social anxiety or shyness and can be experienced in early childhood through to adulthood. If left unaddressed, mild anxiety can lead to maladaptive coping

strategies or more severe mental conditions.

- **Option B:** Moderate muscle tension, increased vital signs, periodic slow pacing, increased rate of speech, and difficulty in concentrating are noted in moderate anxiety. People with moderate levels of anxiety have more frequent or persistent symptoms than those with mild anxiety, but still have better daily functioning than someone with severe anxiety or panic disorder. For example, people with moderate anxiety may report experiencing symptoms such as feeling on edge, being unable to control their worrying, or being unable to relax several days or the majority of days in a week, but not every day.
- **Option D:** Panic anxiety is characterized by immobilization, incoherence, a feeling of being overwhelmed, and disorganization. Panic level anxiety, or panic disorder, is characterized by frequent, recurring, and unexpected panic attacks. Panic attacks usually last around 10 minutes. The triggers for panic attacks vary from person to person, and the cause of an attack may be familiar to a person or unknown.

14. A client with heart failure has been told to maintain a low sodium diet. A nurse who is teaching this client about foods that are allowed includes which food item in a list provided to the client?

- A. Pretzels
- B. Whole wheat bread
- C. Tomato juice canned
- D. Dried apricot

Correct Answer: D. Dried apricot

Foods that are lower in sodium include fruits and vegetables like dried apricot. Dried apricots are sodium-free. Dried apricots, as part of a low sodium diet, may reduce the risk of high blood pressure. Apricots contain numerous antioxidants, most notably flavonoids. They help protect the body from oxidative stress, which is linked to many chronic diseases.

- **Option A:** These classic snacks are high in sodium — almost 20 percent of the recommended daily intake is in one serving of pretzels. Too much sodium leads to increased water retention, which can lead to bloating and puffiness, and too much sodium over time can lead to heart disease.
- **Option B:** Sodium is finding its way into a lot of whole wheat bread brands in amounts that average 240 to 400 mg per slice. If your serving usually contains two slices, the sodium can add up quickly.
- **Option C:** Many tomato juice products contain added salt — which bumps up the sodium content. For example, a 1.4-cup (340-ml) serving of Campbell's 100% tomato juice contains 980 mg of sodium — which is 43% of the DV. Research shows that diets high in sodium may contribute to high blood pressure.

15. A with tumor lysis syndrome (TLS) is taking Zylprim (allopurinol). Which laboratory value should the nurse monitor to determine the effectiveness of the medication?

- A. Blood urea nitrogen (BUN)
- B. Serum phosphate

- C. Serum potassium
- D. Uric acid level

Correct Answer: D. Uric acid level

- **Option D:** Allopurinol is used to decrease uric acid levels so a monitoring of serum uric acid is essential.
- **Options A, B, and C:** UN, potassium, and phosphate levels are also increased in TLS but are not affected by allopurinol therapy.

16. Which of the following statements refers to criteria?

- A. Agreed on level of nursing care.
- B. Characteristics used to measure the level of nursing care.
- C. Step-by-step guidelines.
- D. Statement which guides the group in decision making and problem-solving.

Correct Answer: B. Characteristics used to measure the level of nursing care.

Criteria are specific characteristics used to measure the standard of care. Criteria is the plural of criterion—a standard or principle for judging, evaluating, or selecting something. Criteria are the ideals or requirements on which a judgment, evaluation, or selection is based.

- **Option A:** Level of care can be defined as the intensity of effort required to diagnose, treat, preserve or maintain an individual's physical or emotional status. An alternate level of care is a level of care that can safely be used in place of the current level and determined based on the acuity and complexity of the patient's condition and the type of needed services and resources.
- **Option C:** The nursing process functions as a systematic guide to client-centered care with 5 sequential steps. These are assessment, diagnosis, planning, implementation, and evaluation.
- **Option D:** Decision-making in acute care nursing requires an evaluation of many complex factors. While decision-making research in acute care nursing is prevalent, errors in decision-making continue leading to poor patient outcomes.

17. The most appropriate time for the nurse to obtain a sputum specimen for culture is:

- A. Early in the morning
- B. After the patient eats a light breakfast
- C. After aerosol therapy
- D. After chest physiotherapy

Correct Answer: A. Early in the morning

Obtaining a sputum specimen early in this morning ensures an adequate supply of bacteria for culturing and decreases the risk of contamination from food or medication. A sputum culture is a test to detect and identify bacteria or fungi that infect the lungs or breathing passages. Sputum is a thick fluid produced in the lungs and in the adjacent airways. Normally, a fresh morning sample is preferred for the bacteriological examination of sputum.

- **Option B:** A sputum culture is a test that checks for bacteria or another type of organism that may be causing an infection in your lungs or the airways leading to the lungs. Sputum, also known as phlegm, is a thick type of mucus made in your lungs. If you have an infection or chronic illness affecting the lungs or airways, it can make you cough up sputum.
- **Option C:** Sputum is not the same as spit or saliva. Sputum contains cells from the immune system that help fight the bacteria, fungi, or other foreign substances in your lungs or airways. The thickness of sputum helps trap the foreign material. This allows cilia (tiny hairs) in the airways to push it through the mouth and be coughed out.
- **Option D:** A sputum culture is often done with another test called a Gram stain. A Gram stain is a test that checks for bacteria at the site of a suspected infection or in body fluids such as blood or urine. It can help identify the specific type of infection you may have.

18. A client receiving fluphenazine decanoate (Prolixin Decanoate) therapy develops pseudoparkinsonism. The physician is likely to prescribe which drug to control this extrapyramidal effect?

- A. diphenhydramine (Benadryl)
- B. phenytoin (Dilantin)
- C. benztropine (Cogentin)
- D. amantadine (Symmetrel)

Correct Answer: D. amantadine (Symmetrel)

An antiparkinsonian agent, such as amantadine, may be used to control pseudoparkinsonism. Amantadine is now used mostly for Parkinson's disease. Clinical trials have shown that amantadine decreases symptoms of bradykinesia, rigidity, and tremor. There is a combined synergistic effect with added levodopa, which is converted to dopamine by striatal enzymes in the CNS. There can be a transient benefit to the drug, so short-term therapy for patients with mild disease is best.

- **Option A:** Diphenhydramine may be used to control other extrapyramidal effects. Diphenhydramine, which is available as an over-the-counter medication, is a first-generation antihistamine that is used in a variety of conditions to treat and prevent dystonias, insomnia, pruritus, urticaria, vertigo, and motion sickness. The H1 receptor is similar to muscarinic receptors. Therefore, diphenhydramine also acts as an antimuscarinic; it is a competitive antagonist of muscarinic acetylcholine receptor, resulting in its use as an antiparkinson medication.
- **Option B:** Phenytoin is used to treat seizure activity. The FDA approved phenytoin in 1939 for the treatment of epilepsy. Despite its narrow therapeutic index, the drug has seen robust use in the treatment of generalized tonic-clonic seizures, complex partial seizures, status epilepticus, trigeminal neuralgia, and behavior disorders. Phenytoin is a hydantoin derivative, a first-generation anticonvulsant drug that is effective in the treatment of generalized tonic-clonic seizures, complex partial seizures, and status epilepticus without significantly impairing neurological function.
- **Option C:** Benztropine belongs to the synthetic class of muscarinic receptor antagonists (anticholinergic drug). It is also useful for drug-induced extrapyramidal symptoms and the prevention of dystonic reactions and acute treatment of dystonic reactions. It also induces less CNS stimulation effect compared to that of trihexyphenidyl, making it a preferable drug of choice for geriatric patients. Moreover, benztropine is FDA approved as adjunctive therapy of all forms of parkinsonism.

19. Tara is an 11-year-old girl diagnosed with type 1 diabetes mellitus (DM). She asks her attending nurse why she can't take a pill rather than shots like her grandmother does. Which of the following would be the nurse's best reply?

- A. "If your blood glucose levels are controlled, you can switch to using pills."
- B. "The pills correct fat and protein metabolism, not carbohydrate metabolism."
- C. "Your body does not make insulin, so the insulin injections help to replace it."
- D. "The pills work on the adult pancreas, you can switch when you are 18."

Correct Answer: C. "Your body does not make insulin, so the insulin injections help to replace it."

The child has type 1 DM, indicating a lack of functioning pancreatic beta cells and an absolute insulin deficiency. Type 1 diabetes is an autoimmune condition that leads to the destruction of pancreatic beta cells which in turn causes insufficient insulin production, resulting in hyperglycemia. Type 1 diabetes is a chronic disease requiring insulin replacement and intensive effort by the patient.

- **Option A:** Oral antidiabetics are indicated only for those with some functioning beta cells, as in those with type 2 DM. Therefore, injections are indicated to supply insulin that is lacking in type 1 diabetes.
- **Option B:** Oral antidiabetics do not correct metabolism. Healthcare practitioners encourage patients to combine lifestyle modifications with oral pharmacologic agents for optimal glycemic control, particularly as type 2 diabetes mellitus progresses with continued loss of pancreatic beta-cell function and insulin production.
- **Option D:** A child with type 1 DM cannot substitute an oral antidiabetic for insulin, regardless of age. Insulin delivery is by multiple daily injections (MDI) or an insulin pump to simulate endogenous insulin physiology. Multiple daily injections include basal insulin once or twice daily, and bolus insulin typically is given at meals three or more times daily and is based on carbohydrate content and current blood glucose.

20. John Joseph was scheduled for a physical assessment. When percussing the client's chest, the nurse would expect to find which assessment data as a normal sign over his lungs?

- A. Dullness
- B. Resonance
- C. Hyperresonance
- D. Tympany

Correct Answer: B. Resonance

Normally, when percussing a client's chest, percussion over the lungs reveals resonance, a hollow or loud, low-pitched sound of long duration. Since lungs are mostly filled with air that we breathe in, percussion performed over most of the lung area produces a resonant sound, which is a low-pitched, hollow sound. Therefore, any dullness or hyper-resonance is indicative of lung pathology, such as pleural effusion or pneumothorax, respectively.

- **Option A:** Dullness is typically heard on percussion of solid organs, such as the liver or areas of consolidation. Dullness to percussion indicates denser tissue, such as zones of effusion or

consolidation. Once an abnormality is detected, percussion can be used around the area of interest to define the extent of the abnormality. Normal areas of dullness are those overlying the liver and spleen at the anterior bases of the lungs.

- **Option C:** Hyperresonance would be evidenced by percussion over areas of overinflation such as an emphysematous lung. Hyperresonant sounds may also be heard when percussing lungs hyperinflated with air, such as may occur in patients with COPD, or patients having an acute asthmatic attack. An area of hyper resonance on one side of the chest may indicate a pneumothorax.
- **Option D:** Tympany is typically heard on percussion over such areas as a gastric air bubble or the intestine. Tympanic sounds are hollow, high, drumlike sounds. Tympany is normally heard over the stomach but is not a normal chest sound. Tympanic sounds heard over the chest indicate excessive air in the chest, such as may occur with pneumothorax.

21. A characteristic that would suggest to Nurse Anne that an adolescent may have bulimia would be:

- A. Frequent regurgitation & re-swallowing of food.
- B. Previous history of gastritis
- C. Badly stained teeth
- D. Positive body image

Correct Answer: C. Badly stained teeth

Dental enamel erosion occurs from repeated self-induced vomiting. Patients with bulimia nervosa who purge by vomiting often brush their teeth immediately after purging, which can accelerate dental erosion. The clinician should instruct the patients who persist in vomiting to rinse their mouths with water or fluoride rather than brushing their teeth within 30 minutes of each episode.

- **Option A:** A review of systems in patients with bulimia nervosa demonstrates sore throat, irregular menstruation, constipation, headache, fatigue, lethargy, abdominal pain, and bloating. When conducting a physical exam on a patient with diagnosed or suspected bulimia nervosa, obtain the height, weight, vital signs, and orthostatic blood pressures. It is also necessary to examine a patient's skin, mouth, and abdomen. A neurological examination is essential to check for primary neurological causes of weight loss or vomiting before diagnosing bulimia nervosa.
- **Option B:** Bulimia nervosa can lead to a variety of general medical complications, including metabolic alkalosis, dehydration, constipation, and cardiac arrhythmias. The most common cause of metabolic alkalosis in patients with bulimia nervosa is fluid volume depletion, for which saline administration is indicated in addition to the cessation of the purging behavior.
- **Option D:** Common physical exam signs associated with bulimia nervosa include hypotension, dry skin, parotid gland swelling, dental erosion, and calluses on the dorsal aspect of the hand (known as "Russel's sign.") Bulimia nervosa can also be associated with hair loss, edema, and epistaxis.

22. A client with diabetes mellitus has an above-knee amputation because of severe peripheral vascular disease, Two days following surgery, when preparing the client for dinner, it is the nurse's primary responsibility to:

- A. Check the client's serum glucose level

- B. Assist the client out of bed to the chair
- C. Place the client in a High-Fowler's position
- D. Ensure that the client's residual limb is elevated

Correct Answer: A. Check the client's serum glucose level

Because the client has diabetes, it is essential that the blood glucose level is determined before meals to evaluate the success of control of diabetes and the possible need for insulin coverage. Integrating CGMs as part of a glycemic control protocol can lead to better management of glucose levels with fewer hyperglycemia episodes and lower glucose level variability resulting in better post-surgical outcome.

- **Option B:** Physical therapy will begin soon after surgery when the client's condition is stable and the doctor clears the client for rehabilitation. The first 2 to 3 days of treatment may include gentle stretching and range-of-motion exercises, learning to roll in bed, sit on the side of the bed, and move safely to a chair.
- **Option C:** In clients who have undergone transtibial and transfemoral amputations, prolonged sitting with the hip and knee flexed should be avoided. Clients who have undergone transfemoral amputations should be instructed to lie in the prone position multiple times during the day to stretch the hip musculature.
- **Option D:** Elevate the stump for the first 24 to 48 hours. Move and turn the client gently and slowly to prevent severe muscle spasms. Reposition the client every 2 hours, turning the patient from side to side and prone, if possible.

23. A client's ABG analysis reveals a pH of 7.18, PaCO₂ of 72 mm Hg, PaO₂ of 77 mm Hg, and HCO₃⁻ of 24 mEq/L. What do these values indicate?

- A. Metabolic acidosis
- B. Respiratory alkalosis
- C. Metabolic alkalosis
- D. Respiratory acidosis

Correct Answer: D. Respiratory acidosis

Respiratory acidosis is a state in which there is usually a failure of ventilation and an accumulation of carbon dioxide. The primary disturbance of elevated arterial PCO₂ is the decreased ratio of arterial bicarbonate to arterial PCO₂, which leads to a lowering of the pH. To compensate for the disturbance in the balance between carbon dioxide and bicarbonate (HCO₃⁻), the kidneys begin to excrete more acid in the forms of hydrogen and ammonium and reabsorb more base in the form of bicarbonate. This compensation helps to normalize the pH.

- **Option A:** Metabolic acidosis is characterized by an increase in the hydrogen ion concentration in the systemic circulation resulting in a serum HCO₃ less than 24 mEq/L. Blood pH distinguishes between acidemia (pH less than 7.35) and alkalemia (pH greater than 7.45). Metabolic acidosis is due to alterations in bicarbonate, so the pCO₂ is less than 40 since it is not the cause of the primary acid-base disturbance. In metabolic acidosis, the distinguishing lab value is a decreased bicarbonate (normal range 21 to 28 mEq/L).
- **Option B:** A decrease in pH below this range is acidosis, an increase above this range is alkalosis. Respiratory alkalosis is by definition a disease state where the body's pH is elevated to greater than 7.45 secondary to some respiratory or pulmonary process.

- **Option C:** A decrease in pH below this range is acidosis, an increase over this range is alkalosis. Metabolic alkalosis is defined as a disease state where the body's pH is elevated to greater than 7.45 secondary to some metabolic process.

24. Which of the following tests is most effective in diagnosing hemophilia?

- A. Bleeding time
- B. Complete blood count (CBC)
- C. Partial thromboplastin time (PTT)
- D. Platelet count

Correct Answer: C. Partial thromboplastin time (PTT)

PTT is abnormal in hemophilia. Therefore, this test will be the most helpful in diagnosing the disorder. In both hemophilia A and B, PTT will be prolonged (intrinsic pathway disruption), whereas PT and BT will be normal. The PTT could be as prolonged as 2 to 3 times the high normal range. Once PTT is found to be prolonged, it should be followed by a mixing study.

- **Option A:** Bleeding time is normal in hemophilia. Kaneshiro in 1969 confirmed that the mean bleeding time was normal in hemophilia. However, 2 of 11 patients with severe hemophilia A had prolonged baseline bleeding times of 12 and 15 min, respectively.
- **Option B:** The CBC is not affected in hemophilia. After the prenatal period, the initial laboratory work includes but is not limited to complete blood count, prothrombin time (PT), partial thromboplastin time (PTT), and bleeding time (BT).
- **Option D:** The severity of the disease correlates with remaining factor levels, although individual differences in bleeding tendency are seen despite similar factor levels. While thrombin generation is severely impaired in persons with hemophilia, primary hemostasis, i.e. platelet function has been generally considered to be normal.

25. A nursing diagnosis for a male client with a diagnosed multiple personality disorder is chronic low self-esteem probably related to childhood abuse. The most appropriate short-term client outcome would be:

- A. Verbalizing the need for anxiety medications.
- B. Recognizing each existing personality.
- C. Engaging in object-oriented activities.
- D. Eliminating defense mechanisms and phobia.

Correct Answer: B. Recognizing each existing personality

The client must recognize the existence of the sub-personalities so that interpretation can occur. Review intervention guidelines for each personality disorder in this chapter. All clients are individuals, even within the same diagnostic category. However, guidelines for specific categories are helpful for planning. Identify behavioral limits and behaviors that are expected. Client needs a clear structure. Expect frequent testing of limits initially. Maintaining limits can enhance feelings of safety in the client.

- **Option A:** Regardless of the clinical setting, the nurse must provide structure and limit setting in the therapeutic relationship; in a clinic setting, this may mean seeing the client for scheduled appointments of a predetermined length rather than whenever the client appears and demands the

nurse's immediate attention.

- **Option C:** Minimizing unstructured time by planning activities can help clients to manage time alone; clients can make a written schedule that includes appointments, shopping, reading the paper, and going for a walk.
- **Option D:** Cognitive restructuring is a technique useful in changing patterns of thinking by helping clients to recognize negative thoughts and feelings and to replace them with positive patterns of thinking; thought stopping is a technique to alter the process of negative or self-critical thought patterns.

26. A client with allergic rhinitis asks the nurse what he should do to decrease his symptoms. Which of the following instructions would be appropriate for the nurse to give the client?

- A. "Use your nasal decongestant spray regularly to help clear your nasal passages."
- B. "Ask the doctor for antibiotics. Antibiotics will help decrease the secretion."
- C. "It is important to increase your activity. A daily brisk walk will help promote drainage."
- D. "Keep a diary when your symptoms occur. This can help you identify what precipitates your attacks."

Correct Answer: D. "Keep a diary when your symptoms occur. This can help you identify what precipitates your attacks."

It is important for clients with allergic rhinitis to determine the precipitating factors so that they can be avoided. Keeping a diary can help identify these triggers. Patients often underestimate the severity of this condition and fail to seek medical therapy. It is important to adequately control AR, especially due to the link between AR and asthma, with poor control of rhinitis predicting poor control of asthma.

- **Option A:** Nasal decongestant sprays should not be used regularly because they can cause a rebound effect. If removing a pet from home is not feasible, isolating the pet to a single room in the house may be an option to minimize dander exposure. It may take up to 20 weeks to eliminate cat dander from home even after removing the animal.
- **Option B:** Antibiotics are not appropriate. Intranasal corticosteroid therapy can be as monotherapy or in combination with oral antihistamines in patients with mild, moderate, or severe symptoms. Studies have shown intranasal corticosteroids are superior to antihistamines in effectively reducing nasal inflammation and improving mucosal pathology.
- **Option C:** Increasing activity will not control the client's symptoms; in fact, walking outdoors may increase them if the client is allergic to pollen. Avoidance of triggers, especially in those with seasonal symptoms, is encouraged, although it is not always practical. Precautions can be taken to avoid dust mites, animal dander, and upholstery, though this can require significant lifestyle changes that may not be acceptable to the patient.

27. Referencing the image below, what is the name of the structure marked #13.

- A. Minor calyx
- B. Major calyx
- C. Cortical blood vessels
- D. Interlobal blood vessels

- E. Arcuate blood vessels
- F. Renal vein
- G. Renal nerve
- H. Renal cortex
- I. Renal calyx
- J. Renal pyramid

Correct answer: #13 is the renal cortex.

The renal cortex is the outer layer of the kidney, situated just beneath the renal capsule and extending down between the renal pyramids of the medulla. It contains the renal corpuscles and the convoluted tubules of the nephrons, playing a central role in the filtration and initial processing of blood to form urine.

28. In a renowned dermatology conference, Dr. Simmons presents a case study of a patient with a genetic condition that hampers the skin's natural renewal process, making the skin appear prematurely aged. Citing this case, Dr. Simmons postulates the importance of the skin's regenerative capacity and asks the attendees to identify the specific layer in the skin where the majority of mitotic division takes place, facilitating the continuous renewal and repair of the epidermis. Which of the following is the correct layer?

- A. Stratum spinosum
- B. Stratum granulosum
- C. Stratum corneum
- D. Stratum basale

Correct Answer: D. Stratum basale

Stratum basale is the deepest layer of the epidermis, also known as the "basal layer." It contains columnar to cuboidal keratinocytes, melanocytes, Merkel cells, and stem cells. The stem cells in this layer undergo continuous mitotic division, providing new cells that differentiate and mature as they migrate to the surface of the epidermis. This is the primary site for the renewal and repair of the epidermis.

- **Option A:** Stratum spinosum, also known as the "spiny layer," is positioned above the stratum basale. Keratinocytes in this layer are connected by desmosomes, giving them a spiny appearance. While some cell division does occur here, the primary site of mitosis is in the stratum basale.
- **Option B:** The stratum granulosum is the "granular layer" where keratinocytes produce keratohyalin and lamellated granules. These cells are in the process of dying and don't undergo mitotic division.
- **Option C:** The stratum corneum is the outermost layer of the epidermis, comprised of dead, flattened keratinocytes called corneocytes. These cells are continuously shed from the surface and replaced by cells from the deeper layers. No cell division occurs in this layer.

29. The primary purpose of a platelet count is to evaluate the:

- A. Potential for clot formation
- B. Potential for bleeding
- C. Presence of an antigen-antibody response
- D. Presence of cardiac enzymes

Correct Answer: A. Potential for clot formation

Platelets are disk-shaped cells that are essential for blood coagulation. A platelet count determines the number of thrombocytes in blood available for promoting hemostasis and assisting with blood coagulation after injury. Platelets, also called thrombocytes, are tiny fragments of cells that are essential for normal blood clotting. They are formed from very large cells called megakaryocytes in the bone marrow and are released into the blood to circulate. The platelet count is a test that determines the number of platelets in your sample of blood.

- **Option B:** It also is used to evaluate the patient's potential for bleeding; however, this is not its primary purpose. The normal count ranges from 150,000 to 350,000/mm³. A count of 100,000/mm³ or less indicates a potential for bleeding; count of less than 20,000/mm³ is associated with spontaneous bleeding.
- **Option C:** Platelets, the smallest of our blood cells, can only be seen under a microscope. They're literally shaped like small plates in their inactive form. A blood vessel will send out a signal when it becomes damaged. When platelets receive that signal, they'll respond by traveling to the area and transforming into their "active" formation. To make contact with the broken blood vessel, platelets grow long tentacles and then resemble a spider or an octopus.
- **Option D:** If you have too many platelets, it can increase your risk for clotting. But often your cardiovascular risk has more to do with platelet function than platelet number. For example, you could have a healthy number of platelets, but if they're sticking together too much it can increase your chance of having a heart attack or stroke.

30. A client receiving haloperidol (Haldol) complains of a stiff jaw and difficulty swallowing. The nurse's first action is to:

- A. Reassure the client and administer as needed lorazepam (Ativan) I.M.
- B. Administer as needed dose of benztropine (Cogentin) I.M. as ordered.
- C. Administer as needed dose of benztropine (Cogentin) by mouth as ordered.
- D. Administer as needed dose of haloperidol (Haldol) by mouth.

Correct Answer: B. Administer as needed dose of benztropine (Cogentin) I.M. as ordered.

The client is most likely suffering from muscle rigidity due to haloperidol. I.M. benztropine should be administered to prevent asphyxia or aspiration. The extrapyramidal symptoms are muscular weakness or rigidity, a generalized or localized tremor that may be characterized by the akinetic or agitation types of movements, respectively. Haloperidol overdose is also associated with ECG changes known as torsade de pointes, which may cause arrhythmia or cardiac arrest.

- **Option A:** Lorazepam treats anxiety, not extrapyramidal effects. Lorazepam is a benzodiazepine medication developed by DJ Richards. It went on the market in the United States in 1977. Lorazepam has common use as the sedative and anxiolytic of choice in the inpatient setting owing to its fast (1 to 3 minute) onset of action when administered intravenously. Lorazepam is also one of the few sedative-hypnotics with a relatively clean side effect profile. Lorazepam is FDA approved

for short-term (4 months) relief of anxiety symptoms related to anxiety disorders, anxiety-associated insomnia, anesthesia premedication in adults to relieve anxiety, or to produce sedation/amnesia, and treatment of status epilepticus.

- **Option C:** Benztropine belongs to the synthetic class of muscarinic receptor antagonists (anticholinergic drugs). Thus, it has a structure similar to that of diphenhydramine and atropine. However, it is long-acting so that its administration can be with less frequency than diphenhydramine. It also induces less CNS stimulation effect compared to that of trihexyphenidyl, making it a preferable drug of choice for geriatric patients.
- **Option D:** Another dose of haloperidol would increase the severity of the reaction. Since there is no specific antidote, supportive treatment is the mainstay of haloperidol toxicity. If a patient develops signs and symptoms of toxicities, the clinician should consider gastric lavage or induction of emesis as soon as possible, followed by the administration of activated charcoal. Maintenance of Airway, Breathing, and circulation are the most important factors for survival.

31. Mario is complaining to other clients about not being allowed by staff to keep food in his room. Which of the following interventions would be most appropriate?

- A. Allowing a snack to be kept in his room.
- B. Reprimanding the client.
- C. Ignoring the client's behavior.
- D. Setting limits on the behavior.

Correct Answer: D. Setting limits on the behavior

The nurse needs to set limits on the client's manipulative behavior to help the client control dysfunctional behavior. A consistent approach by the staff is necessary to decrease manipulation. Interventions such as employing limit-setting techniques help reduce stress and hostility for both patients and staff. To successfully limit problem behavior, limits must be consistent and reinforced by everyone, including the family and all health care personnel. Staff working with manipulative patients are best prepared when they establish firm rules that are rigidly interpreted and consistently enforced among all members of the health care team. Frequent discussions regarding the patient's progress can help reduce staff frustration and isolation and minimize the patient's attempts at staff splitting.

- **Option A:** State limits and the behavior you expect from the patient in a matter-of-fact, non-threatening tone. State the consequences if behaviors are not forthcoming. Written limits and consequences can be useful (one copy for the patient and one for the staff). Be direct and assertive, if necessary, in a neutral, factual manner, not in anger.
- **Option B:** Anger is a natural response to being manipulated. Deal with your own feelings of anger toward the patient. Peer supervision can be useful. Assess your feelings toward patients who use manipulation, and work on being assertive in stating limits. Workshops in assertiveness can be very helpful for nurses.
- **Option C:** Confronting unacceptable, inappropriate, or harmful behavior needs to be done immediately, and setting limits on patient behaviors is the pivotal intervention when working with manipulative patients. Clear, enforceable consequences of continuing unacceptable behaviors need to be spelled out and consistently and matter-of-factly enforced by all staff involved in the patient's care. The most effective approach with the patient is to maintain a professional therapeutic relationship with clear boundaries. A professional relationship is based on the patient's therapeutic needs, not on being liked or the nurse's personal feelings. People who manipulate

others need clear and firm boundaries with clear and firm consequences identified for overstepping those boundaries.

32. To establish an open and trusting relationship with a female client who has been hospitalized with severe anxiety, the nurse in charge should?

- A. Encourage the staff to have frequent interaction with the client.
- B. Share an activity with the client.
- C. Give client feedback on behavior.
- D. Respect client's need for personal space.

Correct Answer: D. Respect client's need for personal space

Moving to a client's personal space increases the feeling of threat, which increases anxiety. Lessen sensory stimuli by keeping a quiet and peaceful environment; keep "threatening" equipment out of sight. Anxiety may intensify to a panic state with excessive conversation, noise, and equipment around the patient. Increasing anxiety may become frightening to the patient and others.

- **Option A:** Interact with the patient in a peaceful manner. The nurse or health care provider can transmit his or her own anxiety to the hypersensitive patient. The patient's feeling of stability increases in a calm and non-threatening environment. Help the patient determine precipitants of anxiety that may indicate interventions. Obtaining insight allows the patient to reevaluate the threat or identify new ways to deal with it.
- **Option B:** Allow the patient to talk about anxious feelings and examine anxiety-provoking situations if they are identifiable. Talking about anxiety-producing situations and anxious feelings can help the patient perceive the situation realistically and recognize factors leading to the anxious feelings.
- **Option C:** If the situational response is rational, use empathy to encourage the patient to interpret the anxiety symptoms as normal. Anxiety is a normal response to actual or perceived danger. Avoid unnecessary reassurance; this may increase undue worry. Reassurance is not helpful for the anxious individual.

33. Clinical manifestations of acute glomerulonephritis include which of the following?

- A. Chills and flank pain
- B. Oliguria and generalized edema
- C. Hematuria and proteinuria
- D. Dysuria and hypotension

Correct Answer: C. Hematuria and proteinuria

Hematuria and proteinuria indicate acute glomerulonephritis. These findings result from increased permeability of the glomerular membrane due to the antigen-antibody reaction. Generalized edema is seen most often in nephrosis. The most common presenting symptom is gross hematuria as it occurs in 30 to 50% of cases with acute PSGN; patients often describe their urine as smoky, tea-colored, cola-colored, or rusty. The hematuria can be described as postpharyngitic (hematuria seen after weeks of infection).

- **Option A:** Approximately 50% of children with PSGN are asymptomatic and are discovered accidentally during routine urine analysis. The classic triad of glomerulonephritis includes hematuria, edema, and hypertension. Typically, patients give a history of a recent streptococcal infection such as pharyngitis, tonsillitis, or impetigo.
- **Option B:** The incidence of edema is seen in about 65-90% of the cases. Puffiness of the eyelids (periorbital edema) is typical for the nephritic syndrome. It is most prominent in the morning and tends to resolve at the end of the day. Generalized edema is also a common feature.
- **Option D:** Renal involvement is common and is transient with recovery in 1-2 weeks. Less than half of the patients experience oliguria. Depending on the severity of renal involvement, signs, and symptoms suggestive of anuric renal failure or life-threatening acid-base imbalance, electrolyte abnormalities (especially hyperkalemia), and fluid overload would require RRT. About 60-80% of the patients experience high blood pressure which typically resolves in 10 days.

34. Nurse Chael is performing a skin assessment on a new resident in a long-term care facility. Which finding is of most concern?

- A. All the toenails are thickened and yellow.
- B. Silver scaling is present on the elbows and knees.
- C. An irregular border is seen on a black mole on the scalp.
- D. Numerous striae are noted across the abdomen and buttocks.

Correct Answer: C. An irregular border is seen on a black mole on the scalp.

Irregular borders and a black mole or variegated color are characteristics associated with malignant skin lesions.

- **Options A and D:** Striae and toenail thickening are common with elderly individuals.
- **Option B:** Silver scaling is associated with psoriasis, which may need treatment but is not as urgent a concern as the appearance of the mole.

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

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

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

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

- **Option A:** Anti-contracture positioning and splinting must start from day one and may continue for many months post-injury. Legs should be positioned in a neutral position ensuring that the patient is not externally rotating at the hips.

- **Option C:** Patients rest in a position of comfort; this is generally a position of flexion and also the position of contracture. Without ongoing advice and help with positioning, the patient will continue to take the position of contracture and can quickly lose ROM in multiple joints. Once contracture starts to develop it can be a constant battle to achieve full movement, so preventative measures to minimize contracture development are necessary.
- **Option D:** Splinting helps maintain anti-contracture positioning particularly for those patients experiencing a great deal of pain, difficulty with compliance, or with burns in an area where positioning alone is insufficient. If the injured site is over joint surfaces, special precautions should be taken to identify all possible joint contractures.