

Kevin's Review - 35 NCLEX Practice Questions

1. A nurse is caring for a client hospitalized with acute exacerbation of COPD. Which of the following would the nurse expect to note on assessment of this client?

- A. Increased oxygen saturation with exercise.
- B. Hypocapnia
- C. A hyperinflated chest on x-ray film.
- D. A widened diaphragm noted on chest x-ray film.

Correct Answer: C. A hyperinflated chest on x-ray film.

Clinical manifestations of COPD include hypoxemia, hypercapnia, dyspnea on exertion and at rest, oxygen desaturation with exercise, and the use of accessory muscles of respiration. Chest x-ray films reveal a hyperinflated chest and a flattened diaphragm as the disease is advanced. The inflammatory response and obstruction of the airways cause a decrease in the forced expiratory volume (FEV1) and tissue destruction leads to airflow limitation and impaired gas exchange. Hyperinflation of the lungs is often seen on imaging studies and occurs due to air trapping from airway collapse during exhalation.

- **Option A:** Patients may have acute respiratory failure and physical findings of hypoxemia and hypercapnia. Arterial blood gas analysis, chest imaging, and pulse oximetry are indicated. A 6-minute walk test is commonly performed to assess the submaximal functional capacity of a patient. This test is performed indoors on a flat and straight surface. The length of the hallway is usually 100 feet and the test measures the distance the patient walks over a period of 6 minutes.
- **Option B:** The inability to fully exhale also causes elevations in carbon dioxide (CO₂) levels. As the disease progresses, impairment of gas exchange is often seen. The reduction in ventilation or increase in physiologic dead space leads to CO₂ retention. Pulmonary hypertension may occur due to diffuse vasoconstriction from hypoxemia.
- **Option D:** Radiographic imaging includes a chest x-ray and computed tomography (CT). Chest x-rays may show hyperinflation, flattening of the diaphragm, and increased anterior-posterior diameter. In cases of chronic bronchitis, bronchial wall thickening may be present.

2. Nurse Marty is monitoring a client for adverse reactions to dantrolene (Dantrium). Which adverse reaction is most common?

- A. Excessive tearing
- B. Urine retention
- C. Muscle weakness
- D. Slurred speech

Correct Answer: C. Muscle weakness

The most common adverse reaction to dantrolene is muscle weakness. The drug also may depress liver function or cause idiosyncratic hepatitis. The intravenous administration of dantrolene in healthy volunteers has resulted in skeletal muscle weakness, dyspnea, respiratory muscle weakness, and decreased inspiratory capacity. These are expected symptoms given the mechanism of action of the medication.

- **Option A:** For those taking the oral capsule for muscle spasticity, liver function tests require monitoring, and dantrolene discontinued if signs and symptoms of liver injury appear. These

include elevated LFTs, jaundice, right upper quadrant pain, etc. These symptoms typically resolve upon the discontinuation of dantrolene. If dantrolene is to be reinstated, per recommendations, the patient should be inpatient, and the drug initiated in very small doses with gradual increases.

- **Option B:** Although urine retention is an adverse reaction associated with dantrolene use; they aren't as common as muscle weakness. When using the lyophilized form of dantrolene, large volumes of sterile water are administered with the medication. Although mannitol is included with the dantrolene, monitoring fluid status and output is paramount to the ongoing care of resuscitation of these patients.
- **Option D:** Muscle weakness is rarely severe enough to cause slurring of speech, drooling, and enuresis. Oral dantrolene carries a black box warning for the potential for hepatotoxicity, including overt hepatitis. Hepatic function should be evaluated before the administration of the oral capsule form and require monitoring throughout the course of treatment. The medication should stop immediately if liver function becomes impaired.

3. When developing an initial nursing care plan for a male client with a Bipolar I disorder (manic episode) nurse Ron should plan to?

- A. Isolate his gym time.
- B. Encourage his active participation in unit programs.
- C. Provide foods, fluids, and rest.
- D. Discourage his participation in programs.

Correct Answer: C. Provide foods, fluids, and rest

The client in a manic episode of the illness often neglects basic needs, these needs are a priority to ensure adequate nutrition, fluid, and rest. Decreasing environmental stimulation may assist the client to relax; the nurse must provide a quiet environment without noise, television, and other distractions; finger foods or things the client can eat while moving around are the best options to improve nutrition.

- **Option A:** A primary nursing responsibility is to provide a safe environment for the client and others; for clients who feel out of control, the nurse must establish external controls emphatically and nonjudgmentally. The nurse can direct their need for movement into socially acceptable, large motor activities such as arranging chairs for a community meeting or walking.
- **Option B:** When less manic, the client might join one or two other clients in quiet, non stimulating activities (e.g., drawing, board games, cards). As mania subsides, involvement in activities that provide a focus and social contact becomes more appropriate. Competitive games can stimulate aggression and can increase psychomotor activity. When possible, provide an environment with minimum stimuli (e.g., quiet, soft music, dim lighting). Reduction in stimuli lessens distractibility.
- **Option D:** Solitary activities requiring short attention spans with mild physical exertion are best initially (e.g., writing, taking photos, painting, or walks with staff). Solitary activities minimize stimuli; mild physical activities release tension constructively.

4. When caring for a client taking parathyroid medication, which of the following nursing interventions is a priority?

- A. Monitor serum calcium levels
- B. Evaluate bowel function

- C. Measure serum acid phosphatase
- D. Check for side effects

Correct Answer: A. Monitor serum calcium levels

Serum calcium levels are altered when pathology exists in this gland. This is because the gland regulates the balance of calcium and phosphorus. In the bones, PTH stimulates the release of calcium in an indirect process through osteoclasts which ultimately lead to resorption of the bones. Most of the physiologic calcium reabsorption in the nephron takes place in the proximal convoluted tubule and additionally at the ascending loop of Henle.

- **Option B:** In the small intestine, vitamin D allows the absorption of calcium through an active transcellular pathway and a passive paracellular pathway. The transcellular pathway requires energy, while the paracellular pathway allows for the passage of calcium through tight junctions.
- **Option C:** Parathyroid hormone decreases phosphate reabsorption at the proximal convoluted tubule. Phosphate ions in the serum form salts with calcium that are insoluble, resulting in a decreased plasma calcium. The reduction of phosphate ions, therefore, results in more ionized calcium in the blood.
- **Option D:** The 2 umbrella categorizations of parathyroid dysfunctions are hyperparathyroidism and hypoparathyroidism. The inappropriately high secretion of PTH is classified as hyperparathyroidism while the inappropriately low secretion of PTH is designated as hypoparathyroidism.

5. A client arrives in the emergency room with a tricyclic antidepressant overdose. Which of the following measures should the nurse do, except?

- A. Maintain a patent airway
- B. Administration of sodium bicarbonate
- C. Gastric lavage with activated charcoal
- D. Obtain an electrocardiogram
- E. Administration of an antipyretic

Correct Answer: E. Administration of an antipyretic

One of the signs and symptoms of a tricyclic antidepressant overdose is hypothermia, so an administration of an antipyretic will not help in the treatment.

- **Option A:** Maintain a patent airway by providing measures such as oxygen.
- **Option B:** Sodium bicarbonate resolves metabolic acidosis and cardiovascular complications.
- **Option C:** Gastric lavage with activated charcoal is done for GI decontamination.
- **Option D:** An ECG is done to check for dysrhythmias.

6. FHR can be auscultated with a fetoscope as early as which of the following?

- A. 5 weeks gestation
- B. 10 weeks gestation
- C. 15 weeks gestation

D. 20 weeks gestation

Correct Answer: D. 20 weeks gestation

The FHR can be auscultated with a fetoscope at about 20 week's gestation. FHR usually is auscultated at the midline suprapubic region with a Doppler ultrasound transducer at 10 to 12 week's gestation. FHR, cannot be heard any earlier than 10 weeks' gestation.

- **Option A:** A fetal heartbeat may first be detected by a vaginal ultrasound as early as 5 1/2 to 6 weeks after gestation. That's when a fetal pole, the first visible sign of a developing embryo, can sometimes be seen.
- **Option B:** With all the rapid growth, the woman will probably be able to hear her baby's heartbeat for the first time around week 9 or week 10 of pregnancy, though it can vary a bit. It will be about 170 beats per minute by this time, a rate that will slow from here on out. Her doctor or midwife will place a handheld ultrasound device called a Doppler on your belly to amplify the sound.
- **Option C:** The baby's heartbeat may be heard as early as the twelfth week of pregnancy using a highly sensitive Doppler that allows hearing the baby's heartbeat. The normal range for the baby's heart rate is 115 to 160 beats per minute.

7. Nurse John is aware that the therapy that has the highest success rate for people with phobias would be:

- A. Psychotherapy aimed at rearranging maladaptive thought processes.
- B. Psychoanalytical exploration of repressed conflicts of an earlier development phase.
- C. Systematic desensitization using relaxation techniques.
- D. Insight therapy to determine the origin of the anxiety and fear.

Correct Answer: C. Systematic desensitization using relaxation technique

The most successful therapy for people with phobias involves behavior modification techniques using desensitization. Behavior therapy is the most effective treatment for phobias is behavioral therapy. This includes systematic desensitization and flooding. In methodical desensitization, the patient is exposed to a list of stimuli ranking from the least to the most anxiety-provoking. With this method, patients are taught various techniques to deal with anxiety such as relaxation, breathing control, and cognitive approaches.

- **Option A:** The cognitive-behavioral approach includes reinforcing the realization that the phobic stimulus is safe. As the patient masters these techniques, they are taught to use them in the face of anxiety-provoking stimuli and induce relaxation. As the patients become desensitized to each stimulus on the scale, they keep moving up until the most anxiety-provoking stimuli no longer elicit any fear or anxiety.
- **Option B:** Psychoanalytic treatment involves exploring the organization of the personality and reorganizing it in a way that addresses deep conflicts and defenses. According to the principles of psychoanalysis, curing the phobia is only possible by rooting out and solving the original conflict. Psychoanalysis is the form of therapy often seen in old movies. The client generally lies on a couch with the psychoanalyst seated near his or her head. The psychoanalyst does not inject his or her own opinions but allows the client to transfer feelings onto the analyst.
- **Option D:** Psychodynamic therapy (talk therapy, or insight therapy) is rarely used for phobia treatment unless the phobia is combined with other disorders such as personality disorders. Insight Therapy is a type of psychotherapy in which the therapist helps their patient understand how their

feelings, beliefs, actions, and events from the past are influencing their current mindset.

8. The client experiencing eighth cranial nerve damage will most likely report which of the following symptoms?

- A. Vertigo
- B. Facial paralysis
- C. Impaired vision
- D. Difficulty swallowing

Correct Answer: A. Vertigo

The eighth cranial nerve is the vestibulocochlear nerve, which is responsible for hearing and equilibrium. Streptomycin can damage this nerve. Ototoxicity and vestibular impairment are often thought to be the hallmark of streptomycin toxicity. In extreme cases, deafness may occur due to ototoxicity, thus caution must be exercised when combining streptomycin with other potentially ototoxic drugs. Vestibular impairment usually manifests during the course of treatment and is typically permanent.

- **Option B:** Isoniazid can cause pyridoxine deficiency that may lead to peripheral neuropathy in patients. The patient can supplement vitamin B6 to prevent this from happening. Neuropathy symptoms are usually sensory which include numbness, tingling, burning sensation in all the extremities. Rarely seen are central features like ataxia, nystagmus.
- **Option C:** The manifestation of EMB-induced optic neuropathy appears to be from EMB's chelation of copper. A study with 60 patients undergoing treatment with ethambutol monitored their serum copper levels. Statistical analysis confirmed there was a significant change in copper concentration, supporting the copper chelation effect by EMB.
- **Option D:** Aminoglycoside-induced nephrotoxicity is reversible when stopping the medication. Renal toxicity depends on the patient if any underlying renal disease is present, and on the dose of the medication being administered. Renal insufficiency is avoidable in most patients.

9. What are the uses of qualitative research methods? Select all that apply.

- A. Guiding nursing practice.
- B. Studying the effects of nursing care on an outcome variable.
- C. Developing survey instruments.
- D. Developing nursing theory.

Correct Answers: A, C, D

Qualitative research refers to a method of inquiry in which the researcher, acting as a data collection instrument, seeks to answer questions about how or why a particular phenomenon occurs. Questions regarding what a phenomenon is comprised may also guide qualitative research

- **Option A:** The most fundamental assumption underlying qualitative research is that reality is something socially constructed on an individual basis. Varied methods of qualitative research exist. Examples of qualitative methods employed in nursing research include grounded theory, phenomenology, ethnography, and qualitative description.

- **Option B:** Regardless of method, participants are purposefully enrolled based on their familiarity with the phenomenon. Data are generally collected via one or a combination of three mechanisms: interviews, observation, or document/photograph review.
- **Option C:** Qualitative findings provide idiographic knowledge about human experiences to readers, who can apply qualitative findings to the care of individuals who are in situations similar to that of those in the sample from which findings came
- **Option D:** Qualitative findings are not generalizable in the prevalent sense of the word—they do not provide laws or relationships that can be taken from a single sample and applied to entire populations. Rather, they are generalizable in a way that is particularly pertinent to nursing practice, in which there is an expectation that scientific findings, and nursing care itself, be tailored to unique individuals in their distinct contexts.

10. A patient comes to the emergency department with abdominal pain. Work-up reveals the presence of a rapidly enlarging abdominal aortic aneurysm. Which of the following actions should the nurse expect?

- A. The patient will be admitted to the medicine unit for observation and medication.
- B. The patient will be admitted to the day surgery unit for sclerotherapy.
- C. The patient will be admitted to the surgical unit and resection will be scheduled.
- D. The patient will be discharged home to follow-up with his cardiologist in 24 hours.

Correct Answer: C. The patient will be admitted to the surgical unit and resection will be scheduled.

A rapidly enlarging abdominal aortic aneurysm is at significant risk of rupture and should be resected as soon as possible. No other appropriate treatment options currently exist.

- **Option A:** Admitting the patient for observation will be a delay and may result in the rupture of the aneurysm. Immediate surgery is the only recommended management.
- **Option B:** Sclerotherapy, in which a solution is injected into a vein, causing it to collapse, scar, and fade, remains the primary treatment for the small-vessel varicose disease of the lower extremities.
- **Option D:** The patient should not be discharged because the abdominal aneurysm may rupture at any time and place the patient's life at risk.

11. A client with group AB blood whose husband has group O has just given birth. The major sign of ABO blood incompatibility in the neonate is which complication or test result?

- A. Negative Coombs test
- B. Bleeding from the nose and ear
- C. Jaundice after the first 24 hours of life
- D. Jaundice within the first 24 hours of life

Correct Answer: D. Jaundice within the first 24 hours of life.

- **Option D:** The neonate with ABO blood incompatibility with its mother will have jaundice (pathologic) within the first 24 hours of life. The neonate would have a positive Coombs test result.

12. Which of the following nursing interventions would the nurse perform during the third stage of labor?

- A. Obtain a urine specimen and other laboratory tests.
- B. Assess uterine contractions every 30 minutes.
- C. Coach for effective client pushing.
- D. Promote parent-newborn interaction.

Correct Answer: D. Promote parent-newborn interaction.

During the third stage of labor, which begins with the delivery of the newborn, the nurse would promote parent-newborn interaction by placing the newborn on the mother's abdomen and encouraging the parents to touch the newborn.

- **Option A:** Collecting a urine specimen and other laboratory tests is done on admission during the first stage of labor.
- **Option B:** Assessing uterine contractions every 30 minutes is performed during the latent phase of the first stage of labor.
- **Option D:** Coaching the client to push effectively is appropriate during the second stage of labor.

13. The nurse manager is planning the clinical assignments for the day. Which staff members can be assigned to care for a client with herpes zoster? Select all that apply

- A. The nurse who never had German Measles.
- B. The nurse who never received the varicella zoster vaccine.
- C. The nurse who never had mumps.
- D. The nurse who never had roseola.
- E. The nurse who never had chicken pox.

Correct Answer: A, C, & D

Herpes zoster (shingles) is caused by a reactivation of the varicella-zoster virus, the causative virus for chickenpox. Individuals who have not been exposed to the varicella-zoster virus or who did not receive the varicella-zoster vaccine are susceptible to chickenpox. Health workers who are unsure of their immune status should have varicella titers done before exposure to a person with herpes zoster.

14. Tranylcypromine sulfate (Parnate) is prescribed for a depressed client who has not responded to the tricyclic antidepressants. After teaching the client about the medication, Nurse Marian evaluates that learning has occurred when the client states, "I will avoid:

- A. Citrus fruit, tuna, and yellow vegetables."
- B. Chocolate milk, aged cheese, and yogurt"

C. Green leafy vegetables, chicken, and milk.”

D. Whole grains, red meats, and carbonated soda.”

Correct Answer: B. Chocolate milk, aged cheese, and yogurt”

These high-tyramine foods, when ingested in the presence of an MAO inhibitor, cause a severe hypertensive response. 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. 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.

- **Option A:** 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.
- **Option C:** Tyramine occurs naturally in small amounts in protein-containing foods. As these foods age, the tyramine levels increase. Tyramine amounts can vary among foods due to different processing, storage, and preparation methods. You can't reduce the amount of tyramine in food by cooking it.
- **Option D:** 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.

15. Dr. Martinez prescribes an emollient for a client with pruritus of recent onset. The client asks why the emollient should be applied immediately after a bath or shower. How should the nurse respond?

A. “This makes the skin feel soft.”

B. “This prevents evaporation of water from the hydrated epidermis.”

C. “This minimizes cracking of the dermis.”

D. “This prevents inflammation of the skin.”

Correct Answer: B. “This prevents evaporation of water from the hydrated epidermis.”

Applying an emollient immediately after taking a bath or shower prevents evaporation of water from the hydrated epidermis, the skin's upper layer. The water content of the stratum corneum ranges from 10% to 30% in healthy skin, as compared to 75% to 85% water content of stratum basale. This gradient is a key feature in its function as a barrier.

- **Option A:** Although emollients make the skin feel soft, this effect occurs whether or not the client has just bathed or showered. The role of water within the stratum corneum is pivotal to the maintenance of normal skin integrity and turnover. Water allows for the increased flexibility of the tissues and is a crucial component of the enzymatic reactions responsible for cleavage of the corneodesmosome connections between corneocytes during the desquamation process.
- **Option C:** An emollient minimizes cracking of the epidermis, not the dermis (the layer beneath the epidermis). The stratum corneum contains high concentrations of osmotically active molecules, including amino acids and their derivatives, lactic acid, urea, and electrolytes. These molecules

form from the breakdown of filaggrin and are referred to as natural moisturizing factor (NMF). The molecules that make up NMF are hygroscopic and absorb atmospheric water at concentrations as low as 50%.

- **Option D:** An emollient doesn't prevent skin inflammation. The goals of moisturizing the skin are to improve the appearance and function of the skin. In patients with medical conditions associated with impaired barrier function of the skin, like atopic dermatitis, the diligent use of moisturizers is a fundamental component of their treatment.

16. Which of the following factors causes the nausea associated with renal failure?

- A. Oliguria
- B. Gastric ulcers
- C. Electrolyte imbalances
- D. Accumulation of waste products

Correct Answer: D. Accumulation of waste products

Although clients with renal failure can develop stress ulcers, the nausea is usually related to the poisons of metabolic wastes that accumulate when the kidneys are unable to eliminate them. Nausea and vomiting are very common in kidney patients and have many causes. These causes include the build-up of uremic toxins, medications, gastroparesis, ulcers, gastroesophageal reflux disease, gallbladder disease, and many many more.

- **Option A:** The client has oliguria, but this doesn't directly cause nausea. In patients with acute oliguria, one of the most common functional derangements that are observed is the sudden fall in the GRF, leading to acute renal failure. It results in rapid increment in plasma urea and creatinine levels, metabolic acidosis with hyperkalemia, other electrolyte abnormalities, and volume overload.
- **Option B:** The occurrence and pathophysiology of peptic ulcer was studied in 117 uraemic patients. Ulcer disease was unusually frequent, and the highest incidence was found in patients on regular dialysis (48%). Factors implicated were hyperacidity, hypergastrinemia, and the effect of dialysis itself.
- **Option C:** In renal failure, acute or chronic, one most commonly sees patients who have a tendency to develop hypervolemia, hyperkalemia, hyperphosphatemia, hypocalcemia, and bicarbonate deficiency (metabolic acidosis). Sodium is generally retained, but may appear normal, or hyponatremic, because of dilution from fluid retention.

17. What is meant by the "fittingness" of a research study?A. Truth of findings as judged by the participants.

- A. Truth of findings as judged by the participants.
- B. The appropriateness of the interview questions posed.
- C. Faithfulness to everyday reality of the participants.
- D. The adequacy of the coding system used.

Correct Answer: C. Faithfulness to everyday reality of the participants.

Fittingness is the meaningfulness of the everyday findings to everyday reality of that situation. Are the results described in enough detail so that one may evaluate them for their own practice?

- **Option A:** Credibility is the truth of findings as judged by the participants. To help establish, the researcher should return to the original participants and get them to validate the findings. Others within the discipline may also help establish by review of the data and findings.
- **Option B:** Auditability assists the reader to judge the appropriateness of the interview questions posed. Auditability is established by the reader being able to follow the steps of the research from the research questions, to the data collection, to the data, and then to the findings (categories, themes, model).
- **Option D:** Auditability assists the reader to judge the adequacy of the coding system used. By the steps for interpretation and synthesis and data examples provided, the reader should be able to follow the researcher's thinking.

18. A patient admitted voluntarily for the treatment of an anxiety disorder demands to be released from the hospital. Which action should the nurse take initially?

- A. Contact the patient's health care provider (HCP).
- B. Call the patient's family to arrange for transportations.
- C. Attempt to persuade the patient to stay for only a few more days.
- D. Tell the patient that leaving would likely result in an involuntary commitment.

Correct Answer: A. Contact the patient's health care provider (HCP).

In general, patients seek voluntary admission. Voluntary patients have the right to demand and obtain release. The nurse needs to be familiar with the state and facility policies and procedures. The best nursing action is to contact the HCP, who has the authority to discuss discharge with the patient.

- **Option B:** While arranging for safe transportation is appropriate it is premature in this situation and should be done only with the patient's permission. If the patient later requests discharge, the hospital can hold the patient on the unit for up to 72 hours until a mental health professional can evaluate the patient for safety concerns. The patient will be discharged if the evaluating mental health professional determines that the patient is safe for discharge.
- **Option C:** While it is appropriate to discuss why the patient feels the need to leave and the possible outcomes of leaving against medical advice, attempting to get the patient to agree to stay "a few more days" has little value and will not likely be successful.
- **Option D:** Many states require that the patient submits a written release notice to the facility staff members, who reevaluate the patient's condition for possible conversion to involuntary status if necessary, according to criteria established by law. While this is a possibility, it should not be used as a threat to the patient.

19. In a postoperative unit, a nurse is caring for a client who has recently undergone a laminectomy to relieve spinal cord compression. The client is alert but has been instructed to minimize movement to prevent post-surgical complications. In addition to monitoring for the usual postoperative signs such as infection or bleeding, which technique should the nurse use to reposition the client to promote comfort and prevent injury safely?

- A. Logroll the client carefully to maintain spinal alignment, ensuring that the head, back, and legs move as one unit.
- B. Assist the client to dangle on the side of the bed before standing to promote circulation and reduce the risk of orthostatic hypotension.
- C. Encourage the client to use an overhead trapeze when self-repositioning to enhance independence and strengthen upper body muscles.
- D. Instruct the client to perform gentle range-of-motion exercises to the lower extremities to prevent venous stasis and deep vein thrombosis.
- E. Utilize a transfer board when moving the client from the bed to a chair to reduce shearing forces on the healing spine.
- F. Apply gentle traction to the client's legs when turning to decrease pressure on the surgical site and alleviate pain.

Correct Answer: A. Logroll the client carefully to maintain spinal alignment, ensuring that the head, back, and legs move as one unit.

After a laminectomy, it is essential to avoid twisting the spine to prevent damage to the surgical site. Logrolling is a technique used to turn the client while keeping the spine neutral. The additional choices, while they may be appropriate for other postoperative scenarios, do not specifically address the needs of a client who has had a laminectomy.

20. The client with an ileal conduit will be using a reusable appliance at home. The nurse should teach the client to clean the appliance routinely with what product?

- A. Baking soda
- B. Soap
- C. Hydrogen peroxide
- D. Alcohol

Correct Answer: B. Soap

A reusable appliance should be routinely cleaned with soap and water. Clean with warm water and pat dry. Use soap only if the area is covered with sticky stool. If the paste has collected on the skin, let it dry, then peel it off. Maintaining a clean and dry area helps prevent skin breakdown.

- **Option A:** Baking soda may irritate the skin. Clean stoma gently by wiping it with warm water. Do not use soap. Aggressive cleaning can cause bleeding. If removing stoma adhesive paste from the skin, use a dry cloth first.
- **Option C:** Wash the skin and pat dry. Do not use alcohol or hydrogen peroxide to clean around the stoma because this can damage the tissue. Consider more frequent pouch changes if the skin is red and irritated.
- **Option D:** Do not use Benzoin on the skin around the stoma. Skin preparations should not be used under wafer-type barriers because this can result in redness and itching and can actually interfere with the integrity of the barrier.

21. A fragile 87-year-old female has recently been admitted to the hospital with increased confusion and falls over the last two (2) weeks. She is also noted to have a mild left hemiparesis. Which of the following tests is most likely to be performed?

- A. CBC (Complete blood count)
- B. ECG (electrocardiogram)
- C. Thyroid function tests
- D. CT scan

Correct Answer: D. CT scan

A CT scan would be performed for further investigation of the hemiparesis. Noncontrast CT scanning is the most commonly used form of neuroimaging in the acute evaluation of patients with apparent acute stroke.

- **Option A:** A complete blood count (CBC) and a basic chemistry panel can be useful baseline studies. A CBC serves as a baseline study and may reveal a cause for the stroke (eg, polycythemia, thrombocytosis, thrombocytopenia, leukemia), identify evidence of concurrent illness (eg, anemia), or issues that may affect reperfusion strategies (thrombocytopenia).
- **Option B:** Electrocardiogram may serve as baseline data upon entry into the ED. An electrocardiogram (ECG or EKG) records the electrical signal from the heart to check for different heart conditions. Electrodes are placed on the chest to record the heart's electrical signals, which cause the heart to beat. The signals are shown as waves on an attached computer monitor or printer.
- **Option C:** Testing can often be limited to blood glucose, plus coagulation studies if the patient is on warfarin, heparin, or one of the newer antithrombotic agents (eg, dabigatran, rivaroxaban), not including thyroid studies.

22. The physician refers the client with unstable angina for a cardiac catheterization. The nurse explains to the client that this procedure is being used in this specific case to:

- A. Open and dilate the blocked coronary arteries.
- B. Assess the extent of arterial blockage.
- C. Bypass obstructed vessels.
- D. Assess the functional adequacy of the valves and heart muscle.

Correct Answer: B. Assess the extent of arterial blockage

Cardiac catheterization is done in clients with angina primarily to assess the extent and severity of the coronary artery blockage. A decision about medical management, angioplasty, or coronary artery bypass surgery will be based on the catheterization results. Cardiac catheterization is performed for both diagnostic and therapeutic purposes. Despite significant advancement in non-invasive cardiac imaging, it remains the standard for the measurement of cardiac hemodynamics.

- **Option A:** Angioplasty with or without stenting is a nonsurgical procedure used to open clogged or narrow coronary arteries due to underlying atherosclerosis. The procedure involves introducing an inflatable balloon-tipped catheter through the skin in extremities and inflating the balloon once it

traverses the stenosed arterial site. It pushes the atherosclerotic intraluminal plaque against the arterial wall and restores the luminal diameter.

- **Option C:** Coronary artery bypass grafting (CABG) is a major surgical operation where atheromatous blockages in a patient's coronary arteries are bypassed with harvested venous or arterial conduits. The bypass restores blood flow to the ischemic myocardium which, in turn, restores function, viability, and relieves anginal symptoms.
- **Option D:** An echocardiogram (echo) is a test that uses high-frequency sound waves (ultrasound) to make pictures of the heart. The test is also called echocardiography. An echocardiogram looks at the heart's structure and checks how well the heart functions.

23. A 72-year old male client is brought to the emergency room by his son. The client is extremely uncomfortable and has been unable to void for the past 12 hours. He has known for some time that he has an enlarged prostate but has wanted to avoid surgery. The best method for the nurse to use when assessing for bladder distention in a male client is to check for:

- A. A rounded swelling above the pubis.
- B. Dullness in the lower left quadrant.
- C. Rebound tenderness below the symphysis.
- D. Urine discharge from the urethral meatus.

Correct Answer: A. A rounded swelling above the pubis.

The best way to assess for a distended bladder in either a male or female client is to check for a rounded swelling above the pubis. The swelling represents the distended bladder rising above the pubis into the abdominal cavity. Determine the condition of the skin in the perianal area. In patients with chronic neurogenic bladder, the skin typically shows areas of chronic irritation manifested by areas of excoriation and redness, usually superseded by fungal infection.

- **Option B:** Dullness does not indicate a distended bladder. Physical examination of a patient for incontinence includes cognitive, neural, musculoskeletal, and pelvic assessment. This is because both voluntary and involuntary control of voiding involve the central and peripheral nervous systems as well as the renal and genitourinary systems.
- **Option C:** The client might experience tenderness or pressure above the symphysis. Determine the motor level of the lesion, including the completeness of the lesion in SCI patients. Ascertain the extent of the patient's hand function and ability to perform transfers and activities of daily living. Hand function is especially important in SCI patients who are to perform self-catheterization.
- **Option D:** No urine discharge is expected; the urine flow is blocked by the enlarged prostate. Perform pelvic, genitourinary examinations on both male and female patients. For male patients, evaluate the status of the prostate, especially in men aged 60 years or older, as this can cause secondary urologic symptoms such as urinary retention. Perform pelvic, genitourinary examinations on both male and female patients. For male patients, evaluate the status of the prostate, especially in men aged 60 years or older, as this can cause secondary urologic symptoms such as urinary retention.

24. The nurse should include which of the following instructions when developing a teaching plan for clients receiving INH and rifampin for treatment

for TB?

- A. Take the medication with antacids.
- B. Double the dosage if a drug dose is forgotten.
- C. Increase intake of dairy products.
- D. Limit alcohol intake.

Correct Answer: D. Limit alcohol intake

INH and rifampin are hepatotoxic drugs. Clients should be warned to limit intake of alcohol during drug therapy. Liver function tests should be monitored routinely as rifampin, isoniazid, pyrazinamide, and ethambutol all may exert hepatotoxic effects. CBC also requires regular monitoring for patients taking rifampin, as it can cause thrombocytopenia and neutropenia.

- **Option A:** Both drugs should be taken on an empty stomach. If antacids are needed for GI distress, they should be taken 1 hour before or 2 hours after these drugs are administered. Rifampin also exerts its effects by inducing cytochrome P450(CYP450), which may cause unwanted drug interactions of medications that are metabolized by the CYP450 system and decrease their clinical efficacy.
- **Option B:** Clients should not double the dosage of these drugs because of their potential toxicity. Isoniazid can cause pyridoxine deficiency that may lead to peripheral neuropathy in patients. All first-line antitubercular medications, rifampin, isoniazid, pyrazinamide, and ethambutol can exert hepatotoxic effects. A continual rise in liver functions test should prompt discontinuation of treatment.
- **Option C:** Clients taking INH should avoid foods that are rich in tyramine, such as cheese and dairy products, or they may develop hypertension. All first-line antitubercular medications, rifampin, isoniazid, pyrazinamide, and ethambutol can exert hepatotoxic effects. A continual rise in liver functions test should prompt discontinuation of treatment.

25. A client with nontropical sprue has an exacerbation of symptoms. Which meal selection is responsible for the recurrence of the client's symptoms?

- A. Mixed fruit and yogurt
- B. Cream of tomato soup and crackers
- C. Baked potato with sour cream and chives
- D. Tossed salad with oil and vinegar dressing

Correct Answer: B. Cream of tomato soup and crackers

- Option B: The symptoms of nontropical sprue and celiac are caused by the ingestion of gluten, which is found in wheat, oats, barley, and rye. Creamed soup and crackers contain gluten.
- Options A, C, and D: These food items do not contain gluten and can be eaten by the client.

26. A client with diabetes visits the prenatal clinic at 28 weeks gestation. Which statement is true regarding insulin needs during pregnancy?

- A. Insulin requirements moderate as the pregnancy progresses.

- B. A decreased need for insulin occurs during the second trimester.
- C. Elevations in human chorionic gonadotropin decrease the need for insulin.
- D. Fetal development depends on adequate insulin regulation.

Correct Answer: D. Fetal development depends on adequate insulin regulation.

Fetal development depends on adequate nutrition and insulin regulation. Significant alterations in maternal metabolism during pregnancy ensure a continuous supply of nutrients to the fetus. Glucose is the primary energy source for the fetus. In early pregnancy, increases in maternal insulin sensitivity enable the storage of energy and nutrients.

- **Option A:** Insulin requirements do not moderate as the pregnancy progresses. To counteract insulin resistance and achieve adequate metabolic control in late pregnancy, the dose of insulin may need to be increased. Understanding insulin requirements in pregnant women with type 1 diabetes would help them to maintain tight glycemic control.
- **Option B:** Insulin needs to increase during the second and third trimesters. In late pregnancy, maternal insulin resistance develops due to increases in pregnancy-related hormones, such as progesterone, human placental lactogen and prolactin, as well as inflammatory cytokines, such as tumor necrosis factor- α . These changes facilitate the supply of glucose toward the fetus.
- **Option C:** Elevated human chorionic gonadotropin elevates insulin needs, not decreases them. Insulin dose prior to pregnancy was associated with pre-pregnancy body weight, BMI, and HbA1c levels before pregnancy and in the first trimester. Insulin dose prior to pregnancy was higher in patients with male infants than patients with female infants.

27. The nurse is assessing a client's activity intolerance by having the client walk on a treadmill for 5 minutes. Which of the following indicates an abnormal response?

- A. Pulse rate increased by 20 bpm immediately after the activity.
- B. Respiratory rate decreased by 5 breaths/minute.
- C. Diastolic blood pressure increased by 7 mm Hg.
- D. Pulse rate within 6 bpm of resting phase after 3 minutes of rest.

Correct Answer: B. Respiratory rate decreased by 5 breaths/minute.

The normal physiologic response to activity is an increased metabolic rate over the resting basal rate. The decrease in respiratory rate indicates that the client is not strong enough to complete the mechanical cycle of respiration needed for gas exchange. The respiratory system works in conjunction with the cardiovascular system. The pulmonary circuit receives almost all of the cardiac output. In response to the increased cardiac output, perfusion increases in the apex of each lung, increasing the available surface area for gas exchange (decreased alveolar dead space).

- **Option A:** The post-activity pulse is expected to increase immediately after activity but by no more than 50 bpm if it is a strenuous activity. To accommodate the increased metabolic activity in skeletal muscle, the circulatory system must properly control the transport of oxygen and carbon dioxide, as well as help to buffer the pH level of active tissues. This action is accomplished by increasing cardiac output (increased heart rate and stroke volume) and modulating microvascular circulation.
- **Option C:** The diastolic blood pressure is expected to rise but by no more than 15 mm Hg. There is a linear increase in systolic blood pressure to peak values of 200 to 249 mmHg in normotensive

individuals, and the diastolic pressure value remains near rest level. Hypertensive individuals reach higher systolic blood pressures at a given rate of work, and they can also reach higher diastolic values.

- **Option D:** The pulse returns to within 6 bpm of the resting pulse after 3 minutes of rest. To accommodate the increased metabolic activity in skeletal muscle, the circulatory system must properly control the transport of oxygen and carbon dioxide, as well as help to buffer the pH level of active tissues. To accommodate the increased metabolic activity in skeletal muscle, the circulatory system must properly control the transport of oxygen and carbon dioxide, as well as help to buffer the pH level of active tissues.

28. The nurse is admitting a client with hypoglycemia. Identify the signs and symptoms the nurse should expect. Select all that apply.

- A. Thirst
- B. Palpitations
- C. Diaphoresis
- D. Slurred speech
- E. Hyperventilation

Correct Answers: B, C, & D.

Hypoglycemia is often defined by a plasma glucose concentration below 70 mg/dL; however, signs and symptoms may not occur until plasma glucose concentrations drop below 55 mg/dL. The clinical manifestations of hypoglycemia can be classified as either neuroglycopenic or neurogenic.

- **Option A:** Excessive thirst may be a symptom of high blood sugar (hyperglycemia). It's important to be able to recognize any imbalance in thirst or urine production. It's the function of the kidneys and other organs to help filter out impurities.
- **Option B:** Palpitations, an adrenergic symptom, occur as the glucose levels fall; the sympathetic nervous system is activated and epinephrine and norepinephrine are secreted causing this response.
- **Option C:** Neurogenic signs and symptoms can either be adrenergic (tremor, palpitations, anxiety) or cholinergic (hunger, diaphoresis, paresthesias). Diaphoresis is a sympathetic nervous system response that occurs as epinephrine and norepinephrine are released.
- **Option D:** Neuroglycopenic signs and symptoms are signs and symptoms that result from direct central nervous system (CNS) deprivation of glucose. Slurred speech is a neuroglycopenic symptom; as the brain receives insufficient glucose, the activity of the CNS becomes depressed.
- **Option E:** Rapid or labored breathing, known as Kussmaul breathing, can be a symptom of diabetic ketoacidosis (DKA). Ketoacidosis is a short-term complication of diabetes caused by very high blood glucose levels accompanied by a high level of ketones in the blood.

29. The nurse is teaching a client with a history of obesity and hypertension regarding dietary requirements during pregnancy. Which statement indicates that the client needs further teaching?

- A. "I need to drink at least a quart of milk a day."

- B. "I need to reduce my daily intake to 1,200 calories a day."
- C. "I shouldn't add salt when I am cooking."
- D. "I need to eat more protein and fiber each day."

Correct Answer: B. "I need to reduce my daily intake to 1,200 calories a day."

- Option B: The client does not need to drastically reduce her caloric intake during pregnancy. Doing so would not provide adequate nourishment for the proper development of the fetus.
- Options A, C, and D: These statements indicate that the client understands the nurse's dietary teaching regarding obesity and hypertension; therefore, they are incorrect.

30. The nurse is developing a plan of care for the client scheduled for cataract surgery. The nurse documents which more appropriate nursing diagnosis in the plan of care?

- A. Self-care deficit
- B. Imbalanced nutrition
- C. Disturbed sensory perception
- D. Anxiety

Correct Answer: C. Disturbed sensory perception

The most appropriate nursing diagnosis for the client scheduled for cataract surgery is Disturbed sensory perception (visual) related to lens extraction and replacement. Although the other options identify nursing diagnoses that may be appropriate, they are not related specifically to cataract surgery. If surgery is planned, instruct the patient and/or family regarding the procedure, post-procedure care, and the need for follow-up with the physician.

- **Option A:** Instruct about complications and emergency signs and symptoms (flashing lights with loss of vision, seeing a "veil" falling over visual field, loss of vision in a specific portion of the visual field, etc.) of which to notify the physician.
- **Option B:** Ensure the room environment is safe with adequate lighting and furniture moved toward the walls. Remove all rugs, and objects that could be potentially hazardous. Provides a safe environment to reduce the potential for injury.
- **Option D:** Instruct patient and/or family regarding safe lighting. The patient should wear sunglasses to reduce glare. Advise the family to use contrasting bright colors in household furnishings. These techniques help enhance visual discrimination and reduce the potential for injury.

31. 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.

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

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

Correct Answer: A. Diabetes mellitus

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

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

33. The client with GERD complains of a chronic cough. The nurse understands that in a client with GERD this symptom may be indicative of which of the following conditions?

- A. Development of laryngeal cancer.
- B. Irritation of the esophagus.
- C. Esophageal scar tissue formation.

D. Aspiration of gastric contents.

Correct Answer: D. Aspiration of gastric contents

Clients with GERD can develop pulmonary symptoms such as coughing, wheezing, and dyspnea that are caused by the aspiration of gastric contents. It is frequently thought that GERD plays a big role in chronic cough; there are reports that 25% or more of chronic cough cases are associated with GERD.

- **Option A:** GERD does not predispose the client to the development of laryngeal cancer. The most intuitive theory is called the reflux theory, whereby reflux rises above the esophagus and upper esophageal sphincter, resulting in microaspiration as microdroplets land in the larynx or occasionally enter the bronchial tree, directly causing cough as a protective mechanism against reflux.
- **Option B:** Irritation of the esophagus can develop as a result of GERD. However, GERD is more likely to cause painful and difficult swallowing. In the reflux theory, because of the common embryologic origin of the respiratory tract and the digestive tract, a little bit of reflux in the esophagus can lead to an esophagobronchial reflex that causes cough.
- **Option C:** Esophageal scar tissue formation can develop as a result of GERD. GERD occurs in approximately 20% of Americans, and chronic cough is a very common problem, which patients with GERD are not immune to developing. Due to the baseline GERD rate of 20%, it is difficult to separate the presence of the disorder from the causative effect of the disorder.

34. Which statement regarding heart sounds is correct?

- A. S1 and S2 sound equally loud over the entire cardiac area.
- B. S1 and S2 sound fainter at the apex.
- C. S1 and S2 sound fainter at the base.
- D. S1 is loudest at the apex, and S2 is loudest at the base.

Correct Answer: D. S1 is loudest at the apex, and S2 is loudest at the base.

The S1 sound—the “lub” sound—is loudest at the apex of the heart. It sounds longer, lower, and louder there than the S2 sounds. The S2—the “dub” sound—is loudest at the base. It sounds shorter, sharper, higher, and louder there than S1. Heart sounds are created from blood flowing through the heart chambers as the cardiac valves open and close during the cardiac cycle. Vibrations of these structures from the blood flow create audible sounds — the more turbulent the blood flow, the more vibrations that get created.

- **Option A:** The S1 heart sound is produced as the mitral and tricuspid valves close in systole. This structural and hemodynamic change creates vibrations that are audible at the chest wall. The mitral valve closing is the louder component of S1. It also occurs sooner because of the left ventricle contracts earlier in systole.
- **Option B:** Changes in the intensity of S1 are more attributable to forces acting on the mitral valve. Such causes include a change in left ventricular contractility, mitral structure, or the PR interval. However, under normal resting conditions, the mitral and tricuspid sounds occur close enough together not to be discernible. The most common reasons for a split S1 are things that delay right ventricular contraction, like a right bundle branch block.
- **Option C:** The S2 heart sound is produced with the closing of the aortic and pulmonic valves in diastole. The aortic valve closes sooner than the pulmonic valve, and it is the louder component of S2; this occurs because the pressures in the aorta are higher than the pulmonary artery.

35. Mariefer is studying about abuse for the upcoming exam. For her to fully instill the topic, she should know that the priority nursing intervention for a child or elder victim of abuse is:

- A. Assess the scope of the abuse problem.
- B. Analyze family dynamics.
- C. Implement measures to ensure the victim's safety.
- D. Teach appropriate coping skills.

Correct Answer: C. Implement measures to ensure the victim's safety.

The priority intervention when a child or elderly person is involved in a situation of abuse is establishing the safety of the victim. Legislation in most states mandates the reporting of such abuse to ensure prompt intervention and safety. One of the first nursing intervention priorities for action after someone has been found to be a victim of abuse is to provide a safe environment. When a report of abuse is made by the nurse to CPS, a caseworker will decide whether or not the report warrants an investigation. If a child is in immediate danger, he/she will be removed from the home and placed in either the home of a relative or in the foster care system. There are also organizations like Stop Abuse of Elders, or SAFE, which is based in Maryland, that can be used for crisis intervention when an elderly person is in danger. They can refer the victim to a shelter or safe house until more long-term measures can be taken.

- **Option A:** The signs of abuse that can show up in a vulnerable child or elderly person are almost endless. Besides the obvious physical signs like a black eye, bruising, or frequent fractures, there can be depression and lack of motivation, a sudden drop in grades or change in personality or behavior, insomnia, and social isolation. Nurses must be aware of all the possible signs and also of the appropriate interventions to be made.
- **Option B:** The question is asking about implementing a specific nursing action, not assessing the problem or analyzing the family dynamics. It is mandated by the Child Abuse Prevention and Treatment Act, or CAPTA, for healthcare professionals to report any suspected incidents of child or elder abuse to a state agency, like Child Protective Services (CPS) or a similar local agency. Many states have hotlines that can be used to report an issue anonymously and confidentially. Abuse or neglect can also be reported to members of law enforcement.
- **Option D:** Teaching coping skills are important; however, the priority action involves ensuring safety. Provide a play program with other children; set aside time to be alone with the child or quiet time for the child as well; praise the child or reward with a special treat when appropriate. Modifies negative behavior by promoting interactions with others and rewarding desired behaviors; promotes self-esteem.