Kevin's Review - 85 NCLEX Practice Questions

1. A client with schizophrenia has been started on medication therapy with clozapine (Clozaril). A nurse assesses the results of which laboratory study to monitor for adverse effects related to this medication?

A. White blood cell

B. Platelet count

C. Liver function studies

D. Random blood sugar

Correct Answer: A. White blood cell

Agranulocytosis my experience by the client taking clozapine which can be monitored by evaluating the white blood cell count.

- **Options B, C, and D:** Platelet count, liver function test, and RBS are not related specifically to the use of the medication.

2. All of these nursing activities are included in the care plan for a 78-year-old man with Parkinson's disease who has been referred to your home health agency. Which ones will you delegate to a nursing assistant (NA)? Select all that apply.

A. Check for orthostatic changes in pulse and blood pressure.

B. Monitor for improvement in tremor after levodopa (L-dopa) is given.

C. Remind the patient to allow adequate time for meals.

D. Monitor for abnormal involuntary jerky movements of extremities.

E. Assist the patient with prescribed strengthening exercises.

F. Adapt the patient's preferred activities to his level of function.

Correct Answer: A, C, & E

NA education and scope of practice includes taking pulse and blood pressure measurements. In addition, NAs can reinforce previous teaching or skills taught by the RN or other disciplines, such as speech or physical therapists.

- **Option B:** Evaluation of patient response to medication requires the knowledge of an experienced RN.
- **Option D:** Development and individualizing the plan of care require RN-level education and scope of practice.

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

A. Septic arthritis

B. Traumatic arthritis

C. Intermittent arthritis

D. Gouty arthritis

Correct Answer: D. Gouty arthritis

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

- **Option A:** Septic arthritis results from bacterial invasion of a joint and leads to inflammation of the synovial lining.
- **Option B:** Traumatic arthritis results from blunt trauma to a joint or ligament.
- **Option C:** Intermittent arthritis is a rare, benign condition marked by regular, recurrent joint effusions, especially in the knees.

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

A. Is the strategy used for analysis compatible with the purpose of the study?

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

C. Are the informants who were chosen appropriate to inform the research?

D. What are the philosophical underpinnings of the research method?

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

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

- **Option A:** A research critique is an analysis of a research undertaking that focuses on its strengths and limitations. Critiquing is a systematic process for evaluating research studies and the results reported.
- **Option C:** This question will critique the sampling of a research project. Read the article or report again, paying attention to the questions appropriate to each stage of the critiquing process.
- **Option D:** This question will critique the philosophy of a research project. "The necessary elements in a research critique can be compiled in a series of questions for the process of critiquing research" (Boswell & Cannon, 2009, p. 308).

5. The nurse is assessing a client who states her last menstrual period was March 17, and she has missed one period. She reports episodes of nausea and vomiting. Pregnancy is confirmed by a urine test. What will the nurse calculate as the estimated date of delivery (EDD)?

A. November 8

B. May 15

C. February 21

D. December 24

Correct Answer: D. December 24

Naegele's rule: add 7 days and subtract 3 months from the first day of the last regular menstrual period to calculate the estimated date of delivery. Naegele's rule, derived from a German obstetrician, subtracts 3 months and adds 7 days to calculate the estimated due date (EDD). It is prudent for the obstetrician to get a detailed menstrual history, including duration, flow, previous menstrual periods, and hormonal contraceptives.

- **Option A:** Determining gestational age is one of the most critical aspects of providing quality prenatal care. Knowing the gestational age allows the obstetrician to provide care to the mother without compromising maternal or fetal status. It allows for the correct timing of management, such as administering steroids for fetal lung maturity, starting ASA therapy with a history of pre-eclampsia in previous pregnancies, starting hydroxyprogesterone caproate (Makena) for previous preterm deliveries.
- **Option B:** An average pregnancy lasts 280 days from the first day of the last menstrual period (LMP) or 266 days after conception. Historically, an accurate LMP is the best estimator to determine the due date.
- **Option C:** An official EDD is established after calculating the first-trimester sonogram EDD date and then using the LMP. If the LMP and first trimester EDD are within 7 days of each other, the LMP estimates the due date. The margin of error is reduced depending on when (i.e., how early) the sonogram occurred.

6. A 52-year-old man was referred to the clinic due to increased abdominal girth. He is diagnosed with ascites by the presence of a fluid thrill and shifting dullness on percussion. After administering diuretic therapy, which nursing action would be most effective in ensuring safe care?

A. Measuring serum potassium for hyperkalemia

B. Assessing the client for hypervolemia

C. Measuring the client's weight weekly

D. Documenting precise intake and output

Correct Answer: D. Documenting precise intake and output.

For the client with ascites receiving diuretic therapy, careful intake and output measurement are essential for safe diuretic therapy. Diuretics lead to fluid losses, which if not monitored closely and documented, could place the client at risk for serious fluid and electrolyte imbalances. The most common adverse effect for any diuretic is mild hypovolemia, which can lead to transient dehydration and increased thirst. When there is an over-treatment with a diuretic, this could lead to severe hypovolemia, causing hypotension, dizziness, and syncope.

- **Option A:** Hypokalemia, not hyperkalemia, commonly occurs with diuretic therapy. Hypokalemia and metabolic alkalosis can occur with both loop and thiazide diuretics but are more common with loop diuretics. Loop agents increase distal Na+ delivery at macula densa and cause volume depletion, both of which indirectly activate the RAAS pathway.
- **Option B:** Because urine output increases, a client should be assessed for hypovolemia, not hypervolemia. Acid-base disorders usually accompany the electrolyte derangement due to their close association with their reabsorption in the renal tubules. Metabolic disturbances can lead to derangement of glucose, uric acid, or lipid levels with certain diuretics and are individually discussed.

- **Option C:** Weights are also an accurate indicator of fluid balance. However, for this client, weights should be obtained daily, not weekly. Diuretic treatment calls for careful assessment of extracellular fluid volume, urine output, electrolyte levels in plasma and urine, body weight, acid-base status, serum glucose, and BP regularly with particular emphasis on patients with cardiovascular, hepatic, renal, or metabolic disorders and in the elderly individuals.

7. A client arrives in the emergency department with an ischemic stroke and receives tissue plasminogen activator (t-PA) administration. Which is the priority nursing assessment?

A. Time of onset of current stroke

B. Complete physical and history

C. Current medications

D. Upcoming surgical procedures

Correct Answer: A. Time of onset of current stroke

The time of onset of a stroke to t-PA administration is critical. Administration within 3 hours has better outcomes. Tissue plasminogen activator (tPA) is classified as a serine protease (enzymes that cleave peptide bonds in proteins). It is thus one of the essential components of the dissolution of blood clots. Its primary function includes catalyzing the conversion of plasminogen to plasmin, the primary enzyme involved in dissolving blood clots.

- **Option B:** A complete history is not possible in emergency care. For the management of acute myocardial infarction in adults, administer alteplase as soon as possible after the onset of symptoms. The patient's weight determines the dose to be administered, which is not to exceed 100 mg irrespective of the selected administration method (accelerated infusion preferred by the AHA/ACCA or slower, 3-hour infusion as per manufacturer's labeling).
- **Option C:** Current medications are relevant, but the onset of current stroke takes priority. Monitor closely with any drug that causes anticoagulation as there is an increased risk of bleeding. Through pharmacodynamic synergism, defibrotide increases the effects of tPA drugs and is thus contraindicated. Prothrombin complex concentrate, human can cause pharmacodynamic antagonism of the tPA drugs. Nitroglycerin could decrease the serum concentration of tPA drugs. Salicylates could enhance the toxic effects of thrombolytic drugs. Monitor therapy, as there is an increased risk of bleeding.
- **Option D:** Upcoming surgical procedures will need to be delayed if t-PA is administered. tPA is a thrombolytic (i.e., it breaks up blood clots) formed by aggregation of activated platelets into fibrin meshes by activating plasminogen. More specifically, it cleaves the zymogen plasminogen at its Arg561-Val562 peptide bond to form the serine protease, plasmin. Plasmin, an endogenous fibrinolytic enzyme, breaks the cross-links between fibrin molecules, which are the structural support of the blood clot, and its activity is extremely short-lived.

8. A significant cause of venous thrombosis is:

A. Altered blood coagulation

B. Stasis of blood

C. Vessel wall injury

D. All of the above

Correct Answer: D. All of the above

A deep-vein thrombosis (DVT) is a blood clot that forms within the deep veins, usually of the leg, but can occur in the veins of the arms and the mesenteric and cerebral veins. Deep-vein thrombosis is a common and important disease. It is part of the venous thromboembolism disorders which represent the third most common cause of death from cardiovascular disease after heart attacks and stroke.

- **Option A:** Thrombosis is a protective mechanism that prevents the loss of blood and seals off damaged blood vessels. Fibrinolysis counteracts or stabilizes the thrombosis. The triggers of venous thrombosis are frequently multifactorial, with the different parts of the triad of Virchow contributing in varying degrees in each patient, but all result in early thrombus interaction with the endothelium.
- **Option B:** This then stimulates local cytokine production and causes leukocyte adhesion to the endothelium, both of which promote venous thrombosis. Depending on the relative balance between the coagulation and thrombolytic pathways, thrombus propagation occurs.
- **Option C:** DVT is commonest in the lower limb below the knee and starts at low-flow sites, such as the soleal sinuses, behind venous valve pockets. Mechanical compression or functional impairment leads to reduced flow in the veins (neoplasm, pregnancy, stenosis, or congenital anomaly which increases outflow resistance).

9. A child with fever has been admitted to the ED for several hours. Cooling measures are ordered by the physician in order for the client's temperature to come down. Which task would be appropriate to delegate to the nursing assistant?

A. Prepare and administer a tepid bath

B. Assist the child in removing outer garments

C. Educate the need for giving cool fluids

D. Tell the parent to use acetaminophen (Tylenol) instead of aspirin

Correct Answer: B. Assist the child in removing outer garments

The nursing assistant can assist with the elimination of outer garments, which enables the heat to dissipate from the child's skin. The nurse who delegates aspects of care to other members of the nursing team must balance the needs of the client with the abilities of those to which the nurse is delegating tasks and aspects of care, among other things such as the scopes of practice and the policies and procedures within the particular healthcare facility.

- **Option A:** Tepid baths are not usually given because of the potential for rebound and shivering. Registered nurses who assign, delegate and/or provide nursing care to clients and groups of clients must report all significant changes that occur in terms of the client and their condition. For example, a significant change in a client's laboratory values requires that the registered nurse report this to the nurse's supervisor and doctor.
- **Option C:** Explaining is a teaching function only appropriate for a registered nurse. The staff members' levels of education, knowledge, past experiences, skills, abilities, and competencies are also evaluated and matched with the needs of all of the patients in the group of patients that will be cared for.

- **Option D:** Advising is a teaching function that is the responsibility of the registered nurse. Delegation should be done according to the differentiated practice for each of the staff members.

10. When creating a teaching program for the parents of Jessica who is diagnosed with pulmonic stenosis (PS), Nurse Alex would keep in mind that this disorder involves which of the following?

A. A single vessel arising from both ventricles

B. Obstruction of blood flow from the left ventricle

C. Obstruction of blood flow from the right ventricle

D. Return of blood to the heart without entry to the left atrium

Correct Answer: C. Obstruction of blood flow from the right ventricle.

PS refers to an obstruction of blood flow from the right ventricle. Pulmonic stenosis is a defect of the pulmonic valve in which the valve is stiffened, causing an obstruction to flow. This disease is typically congenital, benign, and diagnosed in pediatric patients with potentially curative treatments.

- **Option A:** Truncus arteriosus involves a single vessel arising from both ventricles. Persistent truncus arteriosus (TA) is a rare, congenital, cyanotic heart defect characterized by a ventricular septal defect (VSD), a single truncal valve, and a common ventricular outflow tract (OT).
- **Option B:** A physical exam may reveal multiple signs of pulmonic stenosis, depending on severity and practitioner skill. Cardiac examination may reveal a left parasternal heave, secondary to right ventricular hypertrophy. Auscultation at the left upper sternal border may reveal a systolic ejection murmur radiating to the back.
- **Option D:** Total anomalous pulmonary venous communications involve the return of blood to the heart without entry into the left atrium and obstruction of blood flow from the left ventricle.

11. A pulsating abdominal mass usually indicates which of the following conditions?

A. Abdominal aortic aneurysm

B. Enlarged spleen

C. Gastric distention

D. Gastritis

Correct Answer: A. Abdominal aortic aneurysm

The presence of a pulsating mass in the abdomen is an abnormal finding, usually indicating an outpouching in a weakened vessel, as in an abdominal aortic aneurysm. The finding, however, can be normal for a thin person.

- **Option B:** An enlarged spleen does not cause a pulsation. It is usually palpable upon physical examination. Most clinically significant AAAs are palpable upon routine physical examination; however, the sensitivity of palpation depends on the experience of the examiner, the size of the aneurysm, and the size of the patient. In one study, 38% of AAA cases were detected on the basis of physical examination findings, whereas 62% were detected incidentally on radiologic studies obtained for other reasons.

- **Option C:** Gastric distention does not cause pulsation. Gastric distension causes progressive shortening of the abdominal length of the LES and a reduction in its pressure. The process exposes the effaced mucosa and sphincter to acid gastric juice.
- **Option D:** Gastritis does not indicate pulsation. The physical examination findings are often normal, with occasional mild epigastric tenderness. The examination tends to exhibit more abnormalities as the patient develops complications in relation to gastritis.

12. Toxicity from which of the following medications may cause a client to see a green halo around lights?

A. Digoxin

B. Furosemide

C. Metoprolol

D. Enalapril

Correct Answer: A. Digoxin

One of the most common signs of digoxin toxicity is the visual disturbance known as the green halo sign.

- **Option B:** Furosemide does not cause this kind of toxicity. The principal signs and symptoms of overdose with furosemide are dehydration, blood volume reduction, hypotension, electrolyte imbalance, hypokalemia, and hypochloremic alkalosis, and are extensions of its diuretic action.
- **Option C:** Metoprolol is not associated with this effect. Poisoning due to an overdose of metoprolol may lead to severe hypotension, sinus bradycardia, atrioventricular block, heart failure, cardiogenic shock, cardiac arrest, bronchospasm, impairment of consciousness, coma, nausea, vomiting, cyanosis, hypoglycemia, and, occasionally, hyperkalemia.
- **Option D:** This medication isn't associated with such an effect. While there is limited data about enalapril overdose in humans, overdosage may result in marked hypotension and stupor based on the pharmacological properties of the drug. The most common adverse effects of enalapril include cough, hypotension, stupor, headache, dizziness, and fatigue.

13. A client states that the physician said the tidal volume is slightly diminished and asks the nurse what this means. The nurse explains that the tidal volume is the amount of air:

A. Exhaled forcibly after a normal expiration.

B. Exhaled after there is a normal inspiration.

C. Trapped in the alveoli that cannot be exhaled.

D. Forcibly inspired over and above a normal respiration.

Correct Answer: B. Exhaled after there is a normal inspiration.

Tidal volume (TV) is defined as the amount of air exhaled after a normal inspiration. Tidal volume is the amount of air that moves in or out of the lungs with each respiratory cycle. It measures around 500 mL in an average healthy adult male and approximately 400 mL in a healthy female. It is a vital clinical parameter that allows for proper ventilation to take place.

- **Option A:** The expiratory reserve volume (ERV), about 1,200 mL, is the additional air that can be forcibly exhaled after the expiration of a normal tidal volume. When a person breathes in, oxygen from the surrounding atmosphere enters the lungs. It then diffuses across the alveolar-capillary interface to reach arterial blood. At the same time, carbon dioxide continuously forms as long as metabolism takes place. Expiration occurs to expel carbon dioxide and prevent it from accumulating in the body.
- **Option C:** Residual volume (RV), about 1,200 mL, is the volume of air still remaining in the lungs after the expiratory reserve volume is exhaled. When emphysema develops, the alveoli and lung tissue are destroyed. With this damage, the alveoli cannot support the bronchial tubes. The tubes collapse and cause an “obstruction” (a blockage), which traps air inside the lungs.
- **Option D:** The inspiratory reserve volume (IRV), about 3,100 mL, is the additional air that can be forcibly inhaled after the inspiration of a normal tidal volume. The volume of air occupying the lungs at different phases of the respiratory cycle subdivides into four volumes and four capacities. The four lung volumes are inspiratory reserve volume (IRV), expiratory reserve volume (ERV), tidal volume (V), and residual volume (RV), while the four lung capacities include total lung capacity (TLC), vital capacity (VC), inspiratory capacity (IC), and functional residual capacity (FRC).

14. After suffering an acute MI, a client with a history of type 1 diabetes is prescribed metoprolol (Lopressor) I.V. Which nursing interventions are associated with I.V. administration of metoprolol? Select all that apply.

A. Monitor glucose levels closely.

B. Monitor for heart block and bradycardia.

C. Monitor blood pressure closely.

D. Mix the drug in 50 ml of dextrose 5% in water and infuse over 30 minutes.

E. Be aware that the drug is not compatible with morphine.

Correct Answer: A, B, & C.

Metoprolol is a cardioselective beta-1-adrenergic receptor inhibitor that competitively blocks beta1-receptors with minimal or no effects on beta-2 receptors at oral doses of less than 100 mg in adults. It decreases cardiac output by negative inotropic and chronotropic effects.

- **Option A:** Metoprolol masks the common signs of hypoglycemia; therefore, glucose levels should be monitored closely in diabetic clients. The mechanism responsible for ?-blocker–induced hypoglycemia involves inhibition of hepatic glucose production, which is promoted by sympathetic nervous stimulation. In addition, adrenergic counter-regulation is diminished, resulting in a reduction in glycogenolysis.
- **Option B:** When used to treat an MI, metoprolol is contraindicated in clients with heart rates less than 45 beats/minute and any degree of heart block, so the nurse should monitor the client for bradycardia and heart block.
- **Option C:** Metoprolol masks common signs and symptoms of shock, such as decreased blood pressure, so blood pressure should also be monitored closely. Beta-blockers, including atenolol and metoprolol, may mask the signs of tachycardia and diaphoretic skin seen in patients in shock.
- **Option D:** The nurse should give the drug undiluted by direct injection. Lopressor, metoprolol tartrate USP, is a selective betai-adrenoreceptor blocking agent, available in 5-mL ampoule for intravenous administration. Each ampul contains a sterile solution of metoprolol tartrate USP, 5 mg, and sodium chloride USP, 45 mg, and water for injection USP.

- **Option E:** Although metoprolol should not be mixed with other drugs, studies have shown that it is compatible when mixed with morphine sulfate or when administered with alteplase infusion at a Y-site connection.

15. Which of the following would be inappropriate when administering chemotherapy to a child?

A. Monitoring the child for both general and specific adverse effects

B. Observing the child for 10 minutes to note for signs of anaphylaxis

C. Administering medication through a free-flowing intravenous line

D. Assessing for signs of infusion infiltration and irritation

Correct Answer: B. Observing the child for 10 minutes to note for signs of anaphylaxis.

When administering chemotherapy, the nurse should observe for an anaphylactic reaction for 20 minutes and stop the medication if one is suspected. Anaphylaxis is a severe allergic reaction, which can cause shock, low blood pressure, and occasionally death. Food allergies, including allergy to peanuts and tree nuts, are said to account for the majority of fatal or near-fatal anaphylactic reactions in the U.S.A. Care is taken especially when chemotherapy medications are known to be common allergic reaction producers, to premedicate to prevent or lessen the reaction.

- **Option A:** Chemotherapy is associated with both general and specific adverse effects, therefore close monitoring for them is important. A major challenge for the nurse caring for a child with fever and neutropenia is monitoring for signs of sepsis (e.g., peripheral perfusion, temperature of extremities, level of consciousness, vital signs, and pulse oximetry).
- **Option C:** Education of the family and child regarding the treatment plan or protocol (e.g., chemotherapy, radiotherapy, and/or surgery) is crucial to relieving parents' fears and anxieties. Even though the explanation of the diagnosis and treatment plan supports the hope that their child may survive cancer, the word cancer still conveys a life-threatening illness.
- **Option D:** Because most infectious origins develop from the child's own endogenous flora, the nurse should encourage the parents/child to adhere to strict handwashing practices, perform frequent mouth care, perineal hygiene, and avoid the use of rectal thermometers owing to the chance of introducing pathogens through the rectal mucosa. Protective isolation and food sterilization have little impact on decreasing infectious rates in neutropenic children.

16. A nurse is caring for a patient with a platelet count of 20,000/microliter. Which of the following is an important intervention?

A. Observe for evidence of spontaneous bleeding.

B. Limit visitors to family only.

C. Give aspirin in case of headaches.

D. Impose immune precautions.

Correct Answer: A. Observe for evidence of spontaneous bleeding.

Platelet counts under 30,000/microliter may cause spontaneous petechiae and bruising, particularly in the extremities. When the count falls below 15,000, spontaneous bleeding into the brain and internal organs may occur. The blood clotting cascade is an integral system requiring intrinsic and extrinsic

factors. Derangements in any factors can affect clotting ability. These laboratory tests provide important information about the patient's coagulation status and bleeding potential. The specific laboratory values to be monitored will depend on the patient's specific clinical condition.

- **Option B:** There is no reason to limit visitors as long as any physical trauma is prevented. Educate the patient and family members about signs of bleeding that need to be reported to a health care provider. Early evaluation and treatment of bleeding by a health care provider reduce the risk for complications from blood loss.
- **Option C:** Headaches may be a sign and should be watched for. Aspirin disables platelets and should never be used in the presence of thrombocytopenia. Educate the patient about over-the-counter drugs and avoid products that contain aspirin or NSAIDs such as ibuprofen and naproxen. These drugs not only decrease normal platelet aggregation but also decrease the integrity of gastric mucosa through inhibition of cyclooxygenase (COX)-1 inhibitor and therefore increase the risk for gastrointestinal bleeding.
- **Option D:** Thrombocytopenia does not compromise immunity. Educate the at-risk patient about precautionary measures to prevent tissue trauma or disruption of the normal clotting mechanisms. Information about precautionary measures lessens the risk for bleeding. Use a soft-bristled toothbrush and nonabrasive toothpaste. Avoid the use of toothpicks and dental floss.

17. Which of the following groups of symptoms indicates a ruptured abdominal aortic aneurysm?

A. Lower back pain, increased blood pressure, decreased red blood cell (RBC) count, increased white blood (WBC) count.

B. Severe lower back pain, decreased blood pressure, decreased RBC count, increased WBC count.

C. Severe lower back pain, decreased blood pressure, decreased RBC count, decreased RBC count, decreased WBC count.

D. Intermittent lower back pain, decreased blood pressure, decreased RBC count, increased WBC count.

Correct Answer: B. Severe lower back pain, decreased blood pressure, decreased RBC count, increased WBC count.

Severe lower back pain indicates an aneurysm rupture, secondary to pressure being applied within the abdominal cavity. When rupture occurs, the pain is constant because it can't be alleviated until the aneurysm is repaired. Blood pressure decreases due to the loss of blood. After the aneurysm ruptures, the vasculature is interrupted and blood volume is lost, so blood pressure wouldn't increase. For the same reason, the RBC count has decreased – not increased. The WBC count increases as cells migrate to the site of injury.

- **Option A:** The pain is severe due to the ruptured aneurysm; the blood pressure is decreased due to blood loss.
- **Option C:** The increase in WBC count is due to the cells migrating to the site of the injury.
- **Option D:** The pain in a ruptured aneurysm is constant and can only be alleviated if the aneurysm is repaired.

18. Nurse Benjamin, who works at Little Stars Pediatric Hospital, has been assigned to care for 4-year-old Mia. Mia has been admitted for a corrective

surgery related to her cleft palate. While reviewing Mia's medical history, Nurse Benjamin observes that Mia has had multiple instances of otitis media in the past year. Remembering his pediatric nursing training and understanding the interrelation between cleft palate and otitis media, Nurse Benjamin anticipates the potential reasons behind Mia's recurrent ear infections. He is preparing to discuss these with Mia's parents, to help them understand the risks and possible preventative measures. When assessing a child like Mia with a cleft palate, the nurse understands that the child is at risk for more frequent episodes of otitis media due to which of the following reasons?

A. Lowered resistance from malnutrition.

B. Ineffective functioning of the Eustachian tubes.

C. Plugging of the Eustachian tubes with food particles.

D. Associated congenital defects of the middle ear.

E. Nasal congestion leading to impaired drainage.

F. Chronic exposure to upper respiratory tract infections.

Correct Answer: B. Ineffective functioning of the Eustachian tubes.
Children with cleft palate often have altered muscle function which affects the Eustachian tube function. This can result in poor drainage of fluid from the middle ear, increasing the risk of otitis media. Understanding the link between cleft palate and ineffective functioning of the Eustachian tubes will help Nurse Benjamin educate Mia's parents about her increased risk and discuss preventative measures to reduce future occurrences.

- **Option A:** While children with cleft palate can face feeding difficulties which may lead to malnutrition, it isn't the direct cause of increased otitis media in these children.
- **Option C:** Food particles don't typically enter the Eustachian tubes. However, children with cleft palate are at risk of aspirating food into the airways, not the ears.
- **Option D:** Some children with cleft palate may have associated middle ear defects, but this isn't the primary reason for the increased risk of otitis media in most children with cleft palate.
- **Option E:** While nasal congestion can contribute to otitis media, it's not directly related to the presence of a cleft palate.
- **Option F:** Children with frequent respiratory infections can have an increased risk of otitis media, but this is not a direct correlation with having a cleft palate.

19. A client with type 1 diabetes mellitus has a fingerstick glucose level of 258mg/dl at bedtime. An order for sliding scale insulin exists. The nurse should:

A. Call the physician

B. Encourage the intake of fluids

C. Administer the insulin as ordered

D. Give the client 1/2 c. of orange juice

Correct Answer: C. Administer the insulin as ordered

A value of 258 mg/dl is above the expected range of 70-105 mg/dl; the nurse should administer the insulin as ordered. Sliding scale regimens may include a bedtime high blood sugar correction. As the nighttime scale only considers the amount of insulin required to drop the blood sugar level back into the target range, it should not be used to cover a bedtime snack.

- **Option A:** It is unnecessary to call the physician. The term “sliding scale” refers to the progressive increase in the pre-meal or nighttime insulin dose, based on predefined blood glucose ranges. Sliding scale insulin regimens approximate daily insulin requirements.
- **Option B:** When using a sliding scale, eat the same amount of carbohydrates at each meal. In other words, while the foods may change, the time and the carbohydrate content of the meal should not vary. Eat the pre-assigned amount of carbohydrate for each meal, and at a similar time of the day.
- **Option D:** The sliding scale method does not accommodate changes in insulin needs related to snacks or to stress and activity. The sliding scale method may seem easier because there are fewer calculations. However, to be successful, it requires strict adherence to a consistent schedule of meals and activity and following the prescribed diet.

20. The nurse prepares to care for a male client with acute cellulitis of the lower leg. The nurse anticipates which of the following will be prescribed for the client?

A. Cold compress to the affected area.

B. Warm compress to the affected area.

C. Intermittent heat lamp treatments four times daily.

D. Alternating hot and cold compresses continuously.

Correct Answer: B. Warm compress to the affected area.

Cellulitis is a skin infection into deeper dermal and subcutaneous tissues that results in a deep red erythema without sharp borders and spreads widely throughout tissue spaces. Warm compresses may be used to decrease the discomfort, erythema, and edema. After tissue and blood cultures are obtained, antibiotics will be initiated. The nurse should provide supportive care as prescribed to manage symptoms such as fatigue, fever, chills, headache, and myalgia.

- **Option A:** Cold compresses and alternating cold and hot compresses are not the best measures. Identify aggravating factors. Inquire about recent changes in use of products such as soaps, laundry products, cosmetics, wool or synthetic fibers, cleaning solvents, and so forth.
- **Option C:** Heat lamps can cause more disruption to already inflamed tissue. Patients may develop cellulitis in response to changes in their environment. Extremes of temperature, emotional stress, and fatigue may contribute to cellulitis.
- **Option D:** Bathe or shower using lukewarm water and mild soap or nonsoap cleansers. Long bathing or showering in hot water causes drying of the skin and can aggravate itching through vasodilation.

21. A nurse is giving discharge instructions to a client who will be taking phenobarbital (Luminal). The nurse would educate the client in which of the following directly correlates with the safety of the client?

A. Take the medication at the same time each day.

B. Take the medication with meals only.

C. Avoid using sleep aids while taking the medication.

D. Decrease the dosage once with symptoms of dizziness and lightheadedness.

Correct Answer: C. Avoid using sleep aids while taking the medication.

Phenobarbital (Luminal) is an anticonvulsant and hypnotic drug. The client should avoid drinking alcohol or use medicines that may cause drowsiness (eg, sleep aids, muscle relaxers).

- **Option A:** Taking the medication at the same time daily improves compliance and maintains more stable blood levels of the medication.
- **Option B:** The medication is taken without regard to meals.
- **Option D:** Decreasing the dosage is not done without the approval of the physician.

22. Important teaching for a client receiving risperidone (Risperdal) would include advising the client to:

A. Double the dose if missed to maintain a therapeutic level.

B. Be sure to take the drug with a meal because it's very irritating to the stomach.

C. Discontinue the drug if the client reports weight gain.

D. Notify the physician if the client notices an increase in bruising.

Correct Answer: D. Notify the physician if the client notices an increase in bruising.

Bruising may indicate blood dyscrasias, so notifying the physician about increased bruising is very important. Although there are no mandatory requirements for therapeutic drug monitoring (TDM) with risperidone, monitoring plasma concentrations for this medication is strongly recommended by European guidelines because of data that shows interdependent variability. Therapeutic monitoring can be of benefit to assess compliance and in identifying low drug concentrations that may be low resulting in therapeutic failure. Also, monitoring the drug level can aid in evaluating for potential drug interactions and side effects.

- **Option A:** Don't double the dose. Certain parameters should be monitored while the patient is on antipsychotics, especially in children who are more sensitive to adverse effects. In the case of risperidone, it may be of benefit to monitoring serum prolactin level, hepatic functioning, metabolic functioning, thyroid functioning, weight/BMI, height, waist circumference, blood pressure, fasting plasma glucose and insulin, fasting lipid profile, and QTc.
- **Option B:** This drug doesn't irritate the stomach. This medication may be administered in oral form (tablets, solution, or dissolvable M-TABs) or as a long-acting injection. The use of risperidone has also been linked to a higher probability of cerebrovascular events in elderly patients with dementia, leading to an FDA warning about the use of this medication in the context of dementia-related psychosis. Studies have even shown an increase in all-cause mortality among the elderly with dementia who are on this medication.
- **Option C:** Weight gain isn't a problem. Unlike the older antipsychotics, tardive dyskinesia is less frequently seen with the newer atypical antipsychotics like risperidone. Nevertheless, the onus is on the healthcare provider to detect any movement disorder and manage it. Countless litigations have occurred chiefly due to the lack of proper management of the adverse effects of risperidone. Serious side effects of antipsychotic medications (like risperidone) can include neuroleptic

malignant syndrome (NMS). Although the pathogenesis of NMS is not clear, it is a life-threatening condition that can manifest with altered mental status, fever, “lead pipe” rigidity, and autonomic instability including hypertension, tachypnea, and tachycardia.

23. Which of the following drugs might be given to relieve pain from corneal abrasions?

A. Proparacaine hydrochloride (Alcaine)

B. Timolol maleate (Timoptic)

C. Betaxolol hydrochloride (Betoptic)

D. Levobunolol hydrochloride (Betagan)

Correct Answer: A. Proparacaine hydrochloride (Alcaine)

This is the only drug listed that is an anesthetic eye preparation. ALCAINE (proparacaine hydrochloride ophthalmic solution) (Proparacaine Hydrochloride) Ophthalmic Solution is indicated for topical anesthesia in ophthalmic practice. Representative ophthalmic procedures in which the preparation provides good local anesthesia include measurement of intraocular pressure (tonometry), removal of foreign bodies and sutures from the cornea, conjunctival scraping in diagnosis and gonioscopic examination; it is also indicated for use as a topical anesthetic prior to surgical operations such as cataract extraction.

- **Option B**: Ophthalmic timolol is used to treat glaucoma, a condition in which increased pressure in the eye can lead to the gradual loss of vision. Timolol is in a class of medications called beta-blockers. It works by decreasing the pressure in the eye. Timolol eye drops and gel-forming solution control glaucoma but do not cure it. Continue to use timolol even if you feel well. Do not stop using the medication without talking to a doctor.
- **Option C:** Ophthalmic betaxolol is used to treat glaucoma, a condition in which increased pressure in the eye can lead to the gradual loss of vision. Betaxolol is in a class of medications called beta-blockers. It works by decreasing the pressure in the eye.
- **Option D:** Ophthalmic levobunolol is used to treat glaucoma, a condition in which increased pressure in the eye can lead to a gradual loss of vision. Levobunolol is in a class of medications called beta-blockers. It works by decreasing the pressure in the eye.

24. A patient is admitted to the hospital with a diagnosis of primary hyperparathyroidism. A nurse checking the patient’s lab results would expect which of the following changes in laboratory findings?

A. Elevated serum calcium

B. Low serum parathyroid hormone (PTH)

C. Elevated serum vitamin D

D. Low urine calcium

Correct Answer: A. Elevated serum calcium

The parathyroid glands regulate the calcium level in the blood. In hyperparathyroidism, the serum calcium level will be elevated. The chronic excessive resorption of calcium from bone caused by excessive parathyroid hormone can result in osteopenia.

- **Option B:** Parathyroid hormone levels may be high or normal but not low. The main effects of parathyroid hormone are to increase the concentration of plasma calcium by increasing the release of calcium and phosphate from bone matrix, increasing calcium reabsorption by the kidney, and increasing renal production of 1,25-dihydroxyvitamin D-3 (calcitriol), which increases intestinal absorption of calcium.
- **Option C:** The body will lower the level of vitamin D in an attempt to lower calcium. Vitamin D levels should be measured in the evaluation of primary hyperparathyroidism. Vitamin D deficiency (a 25-hydroxyvitamin D level of less than 20 ng per milliliter) can cause secondary hyperparathyroidism, and repletion of vitamin D deficiency can help to reduce parathyroid hormone levels.
- **Option D:** Urine calcium may be elevated, with calcium spilling over from elevated serum levels. This may cause renal stones. In addition, the chronically increased excretion of calcium in the urine can predispose to the formation of renal stones.

25. A nurse is caring for a client who is disoriented to time, place, and person and is attempting to get out of bed and pull out an intravenous (I.V.) line that is supplying hydration and antibiotics. The client has a vest restraint and bilateral soft wrist restraints. Which nursing actions would be appropriate? Select all that apply.

A. Perform a face-to-face behavior evaluation every hour.

B. Tie the restraints in quick-release knots.

C. Tie the restraints to the side rails of the bed.

D. Document the client's condition.

E. Document alternative methods used before the restraints were applied.

F. Document the client's response to the intervention.

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

Preventing a client from falling or harming him- or herself is of utmost importance. Applying restraints should be a last resort when all other alternative interventions have been attempted.

- **Option A:** A face-to-face evaluation must be performed every hour. After restraint placement, patients should be reevaluated every hour and moved at regular intervals to prevent sequelae such as pressure ulcers, rhabdomyolysis, and paresthesias.
- **Option B:** Restraints should be tied in knots that can be released quickly and easily. Physical restraints encompass hand mitts, soft cloth limb restraints, leather limb restraints, enclosed beds, belts, and vests.
- **Option C:** Restraints should never be secured to side rails because doing so can cause injury if the side rail is lowered without untying the restraint. Ideally, a restraint team should include at least five people, including the team leader.
- **Options D, E, and F:** The nurse should document the client's condition, any alternative methods used before the restraints were applied, and the client's response to the interventions. Document appropriate clinical indication and have a standardized checklist prepared for staff to monitor and supply patient needs effectively.

26. The nurse is admitting a male client with laryngeal cancer to the nursing unit. The nurse assesses for which most common risk factor for this type of cancer?

A. Alcohol abuse

B. Cigarette smoking

C. Use of chewing tobacco

D. Exposure to air pollutants

Correct Answer: B. Cigarette smoking

- **Option B:** Cigarette use is the most common risk factor for head and neck cancers such as laryngeal cancer. The smoke that comes from a cigarette contains harmful chemicals such as nicotine, carbon monoxide, ammonia, and hydrogen cyanide that passes through the larynx on its way to the lungs.
- **Options A and C:** Combined use of alcohol and tobacco enhances the risk.
- **Option D:** Another risk factor is exposure to environmental pollutants (e.g., paint fumes, wood dust, coal dust) but cigarette smoking remains the most common.

27. What are the three most important prognostic factors in determining long-term survival for children with acute leukemia?

A. Histologic type of disease, initial WBC count, and client's age at diagnosis

B. Progression of illness, WBC at the time of diagnosis, and client's age at the time of diagnosis

C. Histologic type of disease, initial platelet count, and type of treatment

D. Type of treatment and client's sex

Correct Answer: A. Histologic type of disease, initial WBC count, and client's age at diagnosis

- **Option A:** The factor whose prognostic value is considered to be of greatest significance in determining the long-range outcome is the histologic type of leukemia. Children with a normal or low WBC count appear to have a much better prognosis than those with a high WBC count. Children diagnosed between ages 2 and 10 have consistently demonstrated a better prognosis because of age 2 or after 10.

28. In the midst of a bustling endocrinology unit, you come across the case of Ruby, a 46-year-old female, entrenched in a long-term management plan for hypothyroidism entailing thyroid hormone replacement therapy. Recently, Ruby encountered the onslaught of a virulent flu, confining her to bed and muddling her usually meticulous medication regimen, leading to inadvertent skipping of her thyroid replacement doses for several days. Upon being admitted, her husband revealed Ruby's cognitive fog and lethargy, which he initially attributed to her viral ailment, but with growing concern, he sought medical evaluation. As the attending nurse, you meticulously chart Ruby's vital signs which reveal bradycardia and hypothermia. Your clinical acumen alerts you to the potential escalation of hypothyroidism into a life-threatening juncture due to

her lapse in medication adherence amidst an acute illness. Given this narrative, your clinical understanding guides you to associate the omission of thyroid replacement medication, especially amidst an external stressor like the flu, with a risk of which of the following severe complications?

A. Thyroid storm

B. Exophthalmos

C. Tibial myxedema

D. Myxedema coma

E. Hashimoto's encephalopathy

F. Rhabdomyolysis

Correct Answer: D. Myxedema coma.
Myxedema coma is a life-threatening but rare complication of hypothyroidism that can be precipitated by acute illness, such as the flu, especially if thyroid replacement therapy is interrupted. The severe hypothyroid state can cause a metabolic and physiological standstill characterized by profound bradycardia, hypothermia, hypoventilation, and altered mental status, as seen in Ruby's presentation, making this a viable answer.

- **Option A:** Thyroid storm is a life-threatening condition typically occurring due to hyperthyroidism, not hypothyroidism. Ruby's omission of her thyroid replacement medication would likely not instigate a thyroid storm, making this choice implausible.
- **Option B:** Exophthalmos is associated with hyperthyroidism, specifically Graves' disease, and not typically a consequence of missed thyroid replacement medication in a hypothyroid individual like Ruby.
- **Option C:** While tibial myxedema is associated with severe hypothyroidism, it is not a life-threatening condition. It's a localized myxedema that occurs in the pretibial area, not typically a direct result of a few missed doses of thyroid replacement medication.
- **Option E:** Although associated with autoimmune thyroiditis, Hashimoto's encephalopathy is a rare condition and not a direct result of missing thyroid replacement doses.
- **Option F:** Rhabdomyolysis isn't a typical complication of missed thyroid replacement medication and is not directly associated with hypothyroidism.

29. A client with paranoid-type schizophrenia becomes angry and tells the nurse to leave him alone. The nurse should

A. Tell him that she'll leave for now but will return soon.

B. Ask him if it's okay if she sits quietly with him.

C. Ask him why he wants to be left alone.

D. Tell him that she won't let anything happen to him.

Correct Answer: A. Tell him that she'll leave for now but will return soon.

If the client tells the nurse to leave, the nurse should leave but let the client know that she'll return so that he doesn't feel abandoned. If a client is found to be very paranoid, solitary or one-on-one activities that require concentration are appropriate. Client is free to choose his level of interaction; however, the

concentration can help minimize distressing paranoid thoughts or voices.

- **Option B:** Not heeding the client's request can agitate him further. Teach the client to remove himself briefly when feeling agitated and work on some anxiety relief exercises (e.g., meditations, rhythmic exercise, deep breathing exercise). Teach client skills in dealing with anxiety and increasing a sense of control.
- **Option C:** Also, challenging the client isn't therapeutic and may increase his anger. If the client is very withdrawn, one-on-one activities with a "safe" person initially should be planned. They learn to feel safe with one person, then gradually might participate in a structured group activity. Useful coping skills that the client will need include conversational and assertiveness skills. These are fundamental skills for dealing with the world, which everyone uses daily with more or less skill.
- **Option D:** False reassurance isn't warranted in this situation. Ensure that the goals set are realistic; whether in the hospital or community. Avoids pressure on the client and sense of failure on part of the nurse/family. This sense of failure can lead to mutual withdrawal. If the client is delusional/hallucinating or is having trouble concentrating at this time, provide very simple concrete activities with the client (e.g., looking at a picture or doing a painting). Even simple activities help draw the client away from delusional thinking into reality in the environment.

30. What is the most important postoperative instruction that nurse Kate must give a client who has just returned from the operating room after receiving a subarachnoid block?

A. "Avoid drinking liquids until the gag reflex returns."

B. "Avoid eating milk products for 24 hours."

C. "Notify a nurse if you experience blood in your urine."

D. "Remain supine for the time specified by the physician."

Correct Answer: D. "Remain supine for the time specified by the physician."

The nurse should instruct the client to remain supine for the time specified by the physician.

- **Option A:** Local anesthetics used in a subarachnoid block don't alter the gag reflex.
- **Option B:** No interactions between local anesthetics and food occur.
- **Option C:** Local anesthetics don't cause hematuria.

31. During the admission assessment of a 35 year old client with advanced ovarian cancer, the nurse recognizes which symptom as typical of the disease?

A. Abdominal distention

B. Abdominal bleeding

C. Diarrhea

D. Hypermenorrhea

Correct Answer: A. Abdominal distention

- **Option A:** Clinical manifestations of ovarian cancer include abdominal distention, urinary frequency and urgency, pleural effusion, malnutrition, pain from pressure caused by the growing tumor and

the effects of urinary or bowel obstruction, constipation, ascites with dyspnea, and ultimately general severe pain.

- **Options B and D:** Abnormal bleeding, often resulting in hypermenorrhea, is associated with uterine and endometrial cancer.
- **Option C:** Diarrhea is often related to colon cancer, lymphoma, carcinoid syndrome, and pancreatic cancer.

32. What supplemental medication is most frequently ordered in conjunction with furosemide (Lasix)?

A. Chloride

B. Digoxin

C. Potassium

D. Sodium

Correct Answer: C. Potassium

Supplemental potassium is given with furosemide because of the potassium loss that occurs as a result of this diuretic. Loop diuretics act at the ascending loop of Henle in the kidney and help the body push out extra fluid that could accumulate in the lungs or legs and ankles when the heart is unable to completely pump blood throughout the body. But they may also cause the body to eliminate excessive amounts of potassium, which might be expected to increase mortality from heart arrhythmias. As a precaution, therefore, many doctors prescribe potassium supplements to their patients receiving loop diuretics.

- **Option A**: Chloride isn't lost during diuresis. Continued use of diuretics, will cause some overall sodium and chloride loss. The body, however, has a natural way of compensating for these losses by reducing the excretion of sodium and chloride and stabilizing the amount of sodium, chloride, and water in the body. In this manner, fluid depletion usually is prevented.
- **Option B:** Digoxin acts to increase contractility but isn't given routinely with furosemide. People with heart failure who take digoxin are commonly given medicines called diuretics. These drugs remove excess fluid from the body. Many diuretics can cause potassium loss. A low level of potassium in the body can increase the risk of digitalis toxicity.
- **Option D:** Sodium is not lost during diuresis. Diuretic drugs increase urine output by the kidney (i.e., promote diuresis). This is accomplished by altering how the kidney handles sodium. If the kidney excretes more sodium, then water excretion will also increase.

33. A young, handsome man with a diagnosis of antisocial personality disorder is being discharged from the hospital next week. He asks the nurse for her phone number so that he can call her for a date. The nurse's best response would be:

A. "We are not permitted to date clients."

B. "No, you are a client and I am a nurse."

C. "I like you, but our relationship is professional."

D. "It's against my professional ethics to date clients."

Correct Answer: C. “I like you, but our relationship is professional.”

This accepts the client as a person of worth rather than being cold or implying rejection. However, the nurse maintains a professional rather than a social role. Maintain a neutral, calm, and respectful manner, although with some clients this is easier said than done. Helps a client see himself or herself as respected as a person even when behavior might not be appropriate.

- **Option A:** Keep in mind clients with personality disorders might defend against feelings of low-self-esteem through blaming, projection, anger, passivity, and demanding behaviors. Many behaviors seen in PD clients cover a fragile sense of self. Often these behaviors are the crux of clients’ interpersonal difficulties in all their relationships.
- **Option B:** Focus questions in a positive and active light; helps client refocus on the present and look to the future. For example, “What can you do differently now?” or “What have you learned from that experience?”. Allows the client to look at past behaviors differently, and gives the client a sense that he or she has choices in the future.
- **Option D:** Give the client honest and genuine feedback regarding your observations as to his or her strengths, and areas that could use additional skills. Feedback helps give clients a more accurate view of self, strengths, areas to work on, as well as a sense that someone is trying to understand them.

34. The client with a dressing covering the neck is experiencing some respiratory difficulty. What is the nurse’s initial action?

A. Administer oxygen.

B. Loosen the dressing.

C. Notify the emergency team.

D. Document the observation as the only action.

Correct Answer: B. Loosen the dressing

Respiratory difficulty can arise from external pressure. The first action in this situation would be to loosen the dressing and then reassess the client’s respiratory status. Generally, it is recommended that pressure should be maintained between 20 and 30 mm Hg, which is above capillary pressure but less than what would diminish peripheral blood circulation.

- **Option A:** It is unnecessary to administer oxygen. Wearing pressure garments is uncomfortable and challenging; problems with movement, appearance, fit, comfort, swelling of extremities, rashes, and blistering are common; consequently, low compliance with PGT is to be expected.
- **Option C:** The nurse may intervene first. However, monitoring of pressure exerted by pressure garments is currently difficult and time-consuming, and not routinely done and currently, the optimal pressure magnitude for PGT remains unsolved.
- **Option D:** The nurse may loosen the dressing to help the client breathe. Recent evidence suggests that pressure garment therapy is effective for the prevention and/or treatment of abnormal scarring after burn injury but that the clinical benefit is restricted to those patients with moderate or severe scarring.

35. A 24-year old female client has just been diagnosed with condylomata acuminata (genital warts). What information is appropriate to tell this client?

A. This condition puts her at a higher risk for cervical cancer; therefore, she should have a Papanicolaou (Pap) smear annually.

B. The most common treatment is metronidazole (Flagyl), which should eradicate the problem within 7 to 10 days.

C. The potential for transmission to her sexual partner will be eliminated if condoms are used every time they have sexual intercourse.

D. The human papillomavirus (HPV), which causes condylomata acuminata, can't be transmitted during oral sex.

Correct Answer: A. This condition puts her at a higher risk for cervical cancer; therefore, she should have a Papanicolaou (Pap) smear annually.

Women with condylomata acuminata are at risk for cancer of the cervix and vulva. Yearly Pap smears are very important for early detection. Cervical cancer screening guidance comes from the American Cancer Society guidelines and does not require modification with the presence or absence of genital warts. There are no indications for females younger than 21 to be screened for cervical cancer.

- **Option B:** Because condylomata acuminata is a virus, there is no permanent cure. Topical therapies, cryotherapy, and surgical excision are available treatment options for patients. A formal treatment algorithm does not exist, and treatment depends on lesion location, morphology, and patient preference.
- **Option C:** Because condylomata acuminata can occur on the vulva, a condom won't protect sexual partners. The patient should receive education on safe sex practice; this means using barrier protection, avoiding anal sex, and multiple partners. The patient should be encouraged to be tested for other sexually transmitted infections and maintain long-term follow-up.
- **Option D:** HPV can be transmitted to other parts of the body, such as the mouth, oropharynx, and larynx. While condyloma acuminata generally occur in the anogenital region, lesions may also be present in the oral cavity. Simultaneous lesions in the anogenital region suggest sexual transmission, but fomites may also be the source of condyloma acuminata present in the oral cavity.

36. A woman is considered to be menopause if she has experienced cessation of her menses for a period of

A. 6 months

B. 12 months

C. 18 months

D. 24 months

Correct Answer: B. 12 months

If a woman has not had her menstrual period for 12 consecutive months, she is considered to be in her menopausal stage. Menopause is the time in a woman's life when her period stops. It usually occurs naturally, most often after age 45. Menopause happens because the woman's ovaries stop producing the hormones estrogen and progesterone.

- **Option A:** A woman has reached menopause when she has not had a period for one year. Changes and symptoms can start several years earlier. They include changes in periods; hot flashes and/or night sweats; trouble sleeping; vaginal dryness; mood swings; trouble focusing; and less hair on the head, more on the face.

- **Option C:** Skipping periods during perimenopause is common and expected. Often, menstrual periods will skip a month and return, or skip several months and then start monthly cycles again for a few months. Periods also tend to happen on shorter cycles, so they are closer together. Despite irregular periods, pregnancy is possible.
- **Option D:** Menopause is a natural biological process. But the physical symptoms, such as hot flashes, and emotional symptoms of menopause may disrupt sleep, lower energy or affect emotional health. There are many effective treatments available, from lifestyle adjustments to hormone therapy.

37. Which clinical manifestation indicates that the burned client is moving into the fluid remobilization phase of recovery?

A. Increased urine output, decreased urine specific gravity

B. Increased peripheral edema, decreased blood pressure

C. Decreased peripheral pulses, slow capillary refill

D. Decreased serum sodium level, increased hematocrit

Correct Answer: A. Increased urine output, decreased urine specific gravity

The “fluid remobilization” phase improves renal blood flow, increasing diuresis and restoring fluid and electrolyte levels. The increased water content of the urine reduces its specific gravity. Injured capillaries heal approximately 24 to 36 hours after a burn, so intravascular fluid loss typically ceases at this time, and fluid begins to shift back into the intravascular compartment. This stage is called the fluid remobilization period.

- **Option B:** Edema develops when the rate at which fluid is filtered out of the capillaries exceeds the flow in the lymph vessels. Edema formation often follows a biphasic pattern. An immediate and rapid increase in the water content of burned tissue is seen in the first hour after burn injury.
- **Option C:** Inadequate fluid resuscitation is the most common cause of diminished distal pulses in the newly burned patient. Another potential cause of diminished pulses is peripheral edema, which develops in many severe burn patients due to the large fluid volumes needed for resuscitation.
- **Option D:** Hyponatraemia is frequent, and the restoration of sodium losses in the burn tissue is, therefore, essential hyperkalemia is also characteristic of this period because of the massive tissue necrosis. Following a severe burn injury, significant hematologic changes occur that are reflected in complete blood count (CBC) measurements. Over the first week after injury, HGB and HCT decreased. This decrease was due to loss of red blood cells. WBC counts were initially elevated but decreased over the first 4 days. PLT also decreased over the first 4 days.

38. A client with catatonic schizophrenia is mute, can’t perform activities of daily living, and stares out the window for hours. What is the nurse’s first priority?

A. Assist the client with feeding

B. Assist the client with showering

C. Reassure the client about safety

D. Encourage socialization with peers

Correct Answer: A. Assist the client with feeding

According to Maslow's hierarchy of needs, the need for food is among the most important. The initial management includes supportive measures such as IV fluids and even nasogastric tubes given that patients with catatonia are susceptible to malnutrition, dehydration, pneumonia, etc. The key is early identification of catatonia in a patient with schizophrenia and initiation of treatment.

- **Option B:** Catatonia again is a complex combination of psychomotor abnormalities and mood and thought processes. There are at least forty different signs and symptoms that have been associated with catatonia. The Diagnostic and Statistical Manual V has criteria for catatonia with specifiers, including that for schizophrenia.
- **Option C:** Features of catatonia had been described since the 1800s with prominent physicians such as Kahlbaum and even Kraepelin, who defined catatonia within the larger definition of dementia praecox.[2] There are several theories behind the same as catatonia can be part of a larger psychiatric or neurological illness. Kahlbaum has ultimately been credited with the understanding that symptoms such as stupor and catalepsy were part of a larger syndrome of psychomotor abnormalities, which he termed as "catatonia." This can be a part of a larger schizophrenic illness or even a bipolar affective illness or medical illness.
- **Option D:** Other needs, in order of decreasing importance, include hygiene, safety, and a sense of belonging. The epidemiology of catatonic schizophrenia can be multivariate. It is said that about 10% of patients in psychiatric inpatient services have catatonic features.[7] On the one hand, the older school of psychiatry associated schizophrenia with catatonia, while newer epidemiological studies show that 20% of patients with catatonia have schizophrenia, and about 45% have symptoms of mood disorders and medical illness.

39. You are initiating a nursing care plan for a patient with pneumonia. Which intervention for cough enhancement should you delegate to a nursing assistant?

A. Teaching the patient about the importance of adequate fluid intake and hydration.

B. Assisting the patient to a sitting position with neck flexed, shoulders relaxed, and knees flexed.

C. Reminding the patient to use an incentive spirometer every 1 to 2 hours while awake.

D. Encouraging the patient to take a deep breath, hold it for 2 seconds, then cough two or three times in succession.

Correct Answer: C. Reminding the patient to use an incentive spirometer every 1 to 2 hours while awake

A nursing assistant can remind the patient to perform actions that are already part of the plan of care. The right person must be assigned to the right tasks and jobs under the right circumstances. The nurse who assigns the tasks and jobs must then communicate with and direct the person doing the task or job. The nurse supervises the person and determines whether or not the job was done in the correct, appropriate, safe and competent manner.

- **Option A:** Teaching patients about adequate fluid intake requires additional education and skill and is within the scope of practice of the RN. Among the tasks that cannot be legally and appropriately delegated to nonprofessional, unlicensed assistive nursing personnel, such as nursing assistants, patient care technicians, and personal care aides, include assessments, nursing diagnosis, establishing expected outcomes, evaluating care and any and all other tasks and aspects of care including but not limited to those that entail sterile technique, critical thinking, professional judgment and professional knowledge.

- **Option B:** Assisting the patient in the best position to facilitate coughing requires specialized knowledge and understanding that is beyond the scope of practice of the basic nursing assistant. However, an experienced nursing assistant could assist the patient with positioning after the nursing assistant and the patient had been taught the proper technique. The nursing assistant would still be under the supervision of the RN.
- **Option D:** Discussing and teaching require additional education and training. These actions are within the scope of practice of the RN. The client is the center of care. The needs of the client must be competently met with the knowledge, skills and abilities of the staff to meet these needs.

40. A 3-year-old is immobilized in a hip spica cast. Which discharge instruction should be given to the parents?

A. Keep the bed flat, with a small pillow beneath the cast

B. Provide crayons and a coloring book for play activity

C. Increase her intake of high-calorie foods for healing

D. Tuck a disposable diaper beneath the cast at the perineal opening

Correct Answer: D. Tuck a disposable diaper beneath the cast at the perineal opening

- Option D: Tucking a disposable diaper at the perineal opening will help prevent the soiling of the cast by urine and stool.
- Option A: The head of the bed should be elevated.
- Option B: The child can place the crayons beneath the cast, causing pressure areas to develop.
- Option C: The child does not need high-calorie foods that would cause weight gain while she is immobilized by the cast.

41. A 40-year-old construction worker presents to the emergency department after falling from a height. Radiographic imaging is ordered to assess potential fractures. The radiologist pays special attention to the areas where two or more bones come together, as these are common sites of injury. Which term best describes these areas?

A. Cartilage

B. Tendon

C. Ligament

D. Joint

- **Option A:** Cartilage is a connective tissue that provides cushioning between bones in a joint.
- **Option B:** Tendons connect muscles to bones.
- **Option C:** Ligaments connect bones to bones.

42. Mary Jean, a first year nursing student, was rushed to the clinic department due to hyperventilation. Which nursing intervention is the most appropriate for

the client who is subsequently developing respiratory alkalosis?

A. Administering sodium chloride I.V.

B. Encouraging slow, deep breaths.

C. Preparing to administer sodium bicarbonate.

D. Administer low-flow oxygen therapy.

Correct Answer: B. Encouraging slow, deep breaths.

The client who is hyperventilating and subsequently develops respiratory alkalosis is losing too much carbon dioxide. Measures that result in the retention of carbon dioxide are needed. Encourage slow, deep breathing to retain carbon dioxide and reverse respiratory alkalosis. Encourage the patient to breathe slowly and deeply. Speak in a low, calm tone of voice. Provide a safe environment. May help reassure and calm the agitated patient, thereby aiding the reduction of respiratory rate. Assists the patient to regain control.

- **Option A:** Administering sodium chloride is appropriate for metabolic alkalosis. Demonstrate appropriate breathing patterns, if appropriate, and assist with respiratory aids or a rebreathing mask/bag. Decreasing the rate of respiration can halt the “blowing off” of CO2, elevating Pco2 level and normalizing pH.
- **Option C:** Administering sodium bicarbonate is appropriate for treating metabolic acidosis. Provide comfort measures; encourage the use of meditation and visualization. Use a tepid sponge bath/cool cloths. Promotes relaxation and reduces stress. Control and reduction of fever reduce the potential for seizures and helps reduce respiration rate.
- **Option D:** Administering low-flow oxygen therapy is appropriate for chronic respiratory acidosis. Administer CO2, or use a rebreathing mask as indicated. Reduce respiratory rate and tidal volume, or add additional dead space (tubing) to a mechanical ventilator.

43. At Hope Pediatric Center, Nurse Jordan is reviewing the case of 8-year-old Lily, who is currently being treated for leukemia. Lily’s medical journey has been filled with frequent hospital visits, intensive chemotherapy sessions, and consistent monitoring. Lily’s mother, Mrs. Williams, rushes into the clinic looking panicked and informs Nurse Jordan that Lily’s cousin, who visited their home two days ago, has just been diagnosed with chickenpox. Given Lily’s compromised immunity due to leukemia and chemotherapy, Mrs. Williams is gravely concerned about the potential repercussions of this exposure. Nurse Jordan recalls the center’s protocol for such situations and assesses the appropriate treatment measures for Lily. Given the circumstances, which treatment measure is most appropriate for Lily, who has leukemia and has been exposed to chickenpox?

A. No treatment is indicated.

B. Acyclovir (Zovirax) should be started on exposure.

C. Varicella-zoster immunoglobulin (VZIG) should be given with the evidence of disease.

D. VZIG should be given within 72 hours of exposure.

E. Administer a booster dose of the varicella vaccine.

F. Start prophylactic antibiotics to prevent secondary infections.

Correct Answer: D. VZIG should be given within 72 hours of exposure.
VZIG provides passive immunity to chickenpox and is recommended for high-risk individuals like Lily, who are immunocompromised. It should be given as soon as possible after exposure to be effective.

- **Option A:** Given Lily's compromised immune system, doing nothing could lead to severe complications if she contracts the disease.
- **Option B:** While antiviral medications such as acyclovir can be useful in treating chickenpox, the priority for someone with leukemia and without prior immunity to chickenpox would be passive immunization through VZIG.
- **Option C:** Waiting for evidence of disease is risky, especially in an immunocompromised child. It's better to administer VZIG soon after exposure.
- **Option E:** The vaccine is live-attenuated and isn't typically given to severely immunocompromised patients due to the potential risk.
- **Option F:** Chickenpox is a viral infection, and antibiotics won't prevent its onset. They might be considered if there's a concern for secondary bacterial infections, but it's not the primary measure following exposure.

44. Using the principles of standard precautions, the nurse would wear gloves in what nursing interventions?

A. Providing a back massage.

B. Feeding a client.

C. Providing hair care.

D. Providing oral hygiene.

Correct Answer: D. Providing oral hygiene

Doing oral care requires the nurse to wear gloves. Standard precautions apply to the care of all patients, irrespective of their disease state. These precautions apply when there is a risk of potential exposure to (1) blood; (2) all body fluids, secretions, and excretions, except sweat, regardless of whether or not they contain visible blood; (3) non-intact skin, and (4) mucous membranes. This includes the use of hand hygiene and personal protective equipment (PPE), with hand hygiene being the single most important means to prevent transmission of disease.

- **Option A:** Must be worn when touching blood, body fluids, secretions, excretions, mucous membranes, or non-intact skin. Change when there is contact with potentially infected material in the same patient to avoid cross-contamination. Remove before touching surfaces and clean items. Wearing gloves does not mitigate the need for proper hand hygiene.
- **Option B:** Hand washing after feeding the client is sufficient. Handwashing with soap and water for at least 40 to 60 seconds, making sure not to use clean hands to turn off the faucet, must be performed if hands are visibly soiled, after using the restroom, or if potential exposure to spore-forming organisms.
- **Option C:** Gloves are not needed in providing hair care. Hand rubbing with alcohol applied generously to cover hands completely should be performed and hands rubbed until dry.

45. A chemotherapeutic agent known to cause alopecia is prescribed for a patient. To maintain the patient's self-esteem, the nurse plans to

A. Suggest that the patient limit social contacts until regrowth of the hair occurs

B. Encourage the patient to purchase a wig or hat and wear it once hair loss begins

C. Have the patient wash the hair gently with a mild shampoo to minimize hair loss

D. Inform the patient that hair loss will not be permanent and that the hair will grow back

Correct Answer: B. Encourage the patient to purchase a wig or hat and wear it once hair loss begins

- **Option B:** The patient is taught to anticipate hair loss and to be prepared with wigs, scarves, or hats.
- **Option A:** Limiting social contacts is not appropriate at a time when the patient is likely to need a good social support system.
- **Option C:** The damage occurs at the hair follicle and will occur regardless of gentle washing or use of a mild shampoo.
- **Option D:** The information that the hair will grow back is not immediately helpful in maintaining the patient's self-esteem.

46. When discharging a client from the ER after An interval when the client's speech is garbled. head trauma, the nurse teaches the guardian to observe for a lucid interval. Which of the following statements best describes a lucid interval?

A. An interval when the client's speech is garbled.

B. An interval when the client is alert but can't recall recent events.

C. An interval when the client is oriented but then becomes somnolent.

D. An interval when the client has a "warning" symptom, such as an odor or visual disturbance.

Correct Answer: C. An interval when the client is oriented but then becomes somnolent.

A lucid interval is described as a brief period of unconsciousness followed by alertness; after several hours, the client again loses consciousness. The lucid interval following head trauma and unconsciousness is described classically in epidural hematomas. The historic emphasis placed on the lucid interval in cases of extradural hematoma has made this one of the best-remembered signs of the syndrome. Initial unconsciousness is thought to be due to the concussive effect of the blow to the head. The lucid period is the time required for the clot to grow to proportions great enough to produce compression of the brain.

- **Option A:** Garbled speech is known as dysarthria. Dysarthria is a motor speech disorder in which the muscles that are used to produce speech are damaged, paralyzed, or weakened. The person with dysarthria cannot control their tongue or voice box and may slur words.
- **Option B:** An interval in which the client is alert but can't recall recent events is known as amnesia. Amnesia is a dramatic form of memory loss. If you have amnesia you may be unable to recall past information (retrograde amnesia) and/or hold onto new information (anterograde amnesia).
- **Option D:** Warning symptoms or auras typically occur before seizures. Focal aware seizures (FAS) are sometimes called 'warnings' or 'auras' because, for some people, a FAS develops into another

type of seizure. The FAS is therefore sometimes a warning that another seizure will happen (see focal to bilateral tonic-clonic seizures).

47. Nurse Jenny of Nurseslabs Medical Center is planning care for a client who had undergone colposcopy. Which of the following actions should the RN take first?

A. Discuss the client's fear regarding potential cervical cancer.

B. Assist with silver nitrate application to the cervix to control bleeding.

C. Give instructions regarding douching and sexual relations.

D. Administer pain medications.

Correct Answer: B. Assist with silver nitrate application to the cervix to control bleeding.

Colposcopy is a procedure to examine the cervix, vagina, and vulva for signs of disease. The priority nursing action when caring for a client who underwent colposcopy is to assist in controlling potential bleeding by applying silver nitrate to the cervix.

- **Option A:** Colposcopy is a procedure in which a lighted, magnifying instrument called a colposcope is used to examine the cervix, vagina, and vulva. The indications for a colposcopy to be performed are risk-based. Women referred for colposcopy have a variety of underlying risks for cervical pre-cancer based on their cytological results, the HPV testing if it was performed, and personal history of cervical dysplasia.
- **Option C:** There is no required preparation for the patient having the colposcopy; however, it can be difficult to perform if she is on her menstrual cycle due to obscuring blood. Having the room with the proper equipment readily available will expedite the patient’s visit.
- **Option D:** The procedure is typically not painful. It does not require local or regional anesthesia. Slight discomfort may be felt when a speculum is inserted into the vagina, which can be minimized by deep breathing during the procedure.

48. Because of difficulties with hemodialysis, peritoneal dialysis is initiated to treat a female client’s uremia. Which finding signals a significant problem during this procedure?

A. Potassium level of 3.5 mEq/L

B. Hematocrit (HCT) of 35%

C. Blood glucose level of 200 mg/dl

D. White blood cell (WBC) count of 20,000/mm3

Correct Answer: D. White blood cell (WBC) count of 20,000/mm3

An increased WBC count indicates infection, probably resulting from peritonitis, which may have been caused by insertion of the peritoneal catheter into the peritoneal cavity. Peritonitis can cause the peritoneal membrane to lose its ability to filter solutes; therefore, peritoneal dialysis would no longer be a treatment option for this client.

- **Option A:** A potassium level of 3.5 mEq/L can be treated by adding potassium to the dialysate solution. People on peritoneal dialysis (PD) are usually encouraged to eat more potassium-rich

foods than people dialyzing with traditional in-center hemodialysis. PD is performed daily and as a result, the body does not have as much potassium buildup.

- **Option B:** An HCT of 35% is lower than normal. However, in this client, the value isn't abnormally low because of the daily blood samplings. A lower HCT is common in clients with chronic renal failure because of the lack of erythropoietin.
- **Option D:** Hyperglycemia occurs during peritoneal dialysis because of the high glucose content of the dialysate; it's readily treatable with sliding-scale insulin. Since PD uses sugar-based solutions (glucose) to perform dialysis, people with diabetes starting PD often see a rise in their blood sugar levels. Very high sugar levels (greater than 300 mg/dl) can occur in PD patients, but it is uncommon for this to cause symptoms.

49. Which of the following family members exposed to TB would be at highest risk for contracting the disease?

A. 45-year-old mother

B. 17-year-old daughter

C. 8-year-old son

D. 76-year-old grandmother

Correct Answer: D. 76-year-old grandmother

Elderly persons are believed to be at higher risk for contracting TB because of decreased immunocompetence. Other high-risk populations in the US include the urban poor, AIDS, and minority groups. Tuberculosis is present globally. However, developing countries account for a disproportionate share of tuberculosis disease burden. In addition to the six countries listed above, several countries in Asia, Africa, Eastern Europe, and Latin and Central America continue to have an unacceptably high burden of tuberculosis.

- **Option A:** In more advanced countries, high burden tuberculosis is seen among recent arrivals from tuberculosis-endemic zones, health care workers, and HIV-positive individuals. Use of immunosuppressive agents such as long-term corticosteroid therapy has also been associated with an increased risk.
- **Option B:** More recently, the use of a monoclonal antibody targeting the inflammatory cytokine, tumor necrotic factor-alpha (TNF-alpha) has been associated with an increased risk. Antagonists of this cytokine include several monoclonal antibodies (biologics) used for the treatment of inflammatory disorders.
- **Option C:** TB is especially a problem among patients with HIV/AIDS. Resistance to multiple anti-tuberculosis medications including at least the two standard anti-tuberculous medications, Rifampicin or Isoniazid, is required to make a diagnosis of MDR-TB.

50. Corticosteroids are potent suppressors of the body's inflammatory response. Which of the following conditions or actions do they suppress?

A. Cushing syndrome

B. Pain receptors

C. Immune response

D. Neural transmission

Correct Answer: C. Immune response

Corticosteroids suppress eosinophils, lymphocytes, and natural killer cells, inhibiting the natural inflammatory process in an infected or injured part of the body. This helps resolve inflammation, stabilizes lysosomal membranes, decreases capillary permeability, and depresses phagocytosis of tissues by white blood cells, thus blocking the release of more inflammatory materials.

- **Option A:** Excessive corticosteroid therapy can lead to Cushing's syndrome.
- **Option B:** Analgesics suppress pain receptors.
- **Option D:** Opioids and heroin may suppress neural transmission if taken in unregulated amounts.

51. The nurse is teaching the female client with myasthenia gravis about the prevention of myasthenic and cholinergic crisis. The nurse tells the client that this is most effectively done by:

A. Eating large, well-balanced meals.

B. Doing muscle-strengthening exercises.

C. Doing all chores early in the day while less fatigued.

D. Taking medications on time to maintain therapeutic blood levels.

Correct Answer: D. Taking medications on time to maintain therapeutic blood levels

Taking medications correctly to maintain blood levels that are not too low or too high is important. The complication of myasthenia gravis includes myasthenic crisis, usually secondary to infections, stress, or acute illnesses. Patients are advised to take their medications as directed and to avoid taking new medicines without checking with the medical provider.

- **Option A:** Overeating is a cause of exacerbation of symptoms, as is exposure to heat, crowds, erratic sleep habits, and emotional stress. It is important to stress the value of avoiding precipitants like infections, excessive exertion, emotional stress, worsening of chronic medical illnesses, and drugs (aminoglycosides, fluoroquinolones, beta-blockers).
- **Option B:** Muscle-strengthening exercises are not helpful and can fatigue the client. Patients should also be educated about various complications and advised to seek medical care as early as possible. Wearing a medical identification bracelet that shows they have myasthenia gravis is also recommended. Health promotive measures to prevent infections like handwashing and yearly flu vaccine should be emphasized.
- **Option C:** Clients with myasthenia gravis are taught to space out activities over the day to conserve energy and restore muscle strength. The nurses encourage the patients to follow preventive measures like handwashing, smoking cessation, and age-appropriate vaccinations. These can prevent infections that could trigger a myasthenic attack.

52. During the assessment of the client with urinary incontinence, the nurse is most likely to assess for which of the following? Select all that apply.

A. Perineal skin irritation

B. Fluid intake of less than 1,500 mL/d

C. History of antihistamine intake

D. Hx of UTI

E. A fecal impaction

Correct Answer: A, B, D, and E

Urinary incontinence is the involuntary leakage of urine. This medical condition is common in the elderly, especially in nursing homes, but it can affect younger adult males and females as well. Urinary incontinence can impact both patient health and quality of life. The prevalence may be underestimated as some patients do not inform health care providers of having issues with urinary incontinence for various reasons.

- **Option A:** The perineum may become irritated by the frequent contact with urine. Approximately 13 million Americans experience urinary incontinence. The prevalence is 50% or greater among residents of nursing facilities. Caregivers report that 53% of the homebound elderly are incontinent. A random sampling of hospitalized elderly patients reports that 11% of patients have persistent urinary incontinence at admission, and 23% at discharge.
- **Option B:** Normal fluid intake is at least 1,500 mL/d and clients often decrease their intake to try to minimize urine leakage. Functional urinary incontinence is the involuntary leakage of urine due to environmental or physical barriers to toileting. This type of incontinence is sometimes referred to as toileting difficulty.
- **Option C:** Antihistamines can cause urinary retention rather than urinary incontinence. The urethra is the tube that takes urine from the bladder out of the body. The problem can also be caused by using drugs such as antihistamines (like Benadryl®), antispasmodics (like Detrol®), and tricyclic antidepressants (like Elavil®) that can change the way the bladder muscle works.
- **Option D:** UTIs can contribute to incontinence. Patients should be asked about medical conditions such as chronic obstructive pulmonary disease and asthma (which can cause cough), heart failure (with related fluid overload and diuresis), neurologic conditions (which may suggest dysregulated bladder innervation), musculoskeletal conditions (which may contribute to toileting barriers), etc.
- **Option E:** A fecal impaction can compress the urethra, which results in sm. amts of urine leakage. Overflow urinary incontinence is the involuntary leakage of urine from an overdistended bladder due to impaired detrusor contractility and/or bladder outlet obstruction. Neurologic diseases such as spinal cord injuries, multiple sclerosis, and diabetes can impair detrusor function. Bladder outlet obstruction can be caused by external compression by abdominal or pelvic masses and pelvic organ prolapse, among other causes. A common cause in men is benign prostatic hyperplasia.

53. You're preparing a patient with a malignant tumor for colorectal surgery and subsequent colostomy. The patient tells you he's anxious. What should your initial step be in working with this patient?

A. Determine what the patient already knows about colostomies.

B. Show the patient some pictures of colostomies.

C. Arrange for someone who has a colostomy to visit the patient.

D. Provide the patient with written material about colostomy care.

Correct Answer: A. Determine what the patient already knows about colostomies.

Initially, you should assess the patient's knowledge about colostomies and how it will affect his lifestyle. Review anatomy, physiology, and implications of surgical intervention. Discuss future expectations,

including anticipated changes in the character of effluent. Provides knowledge base from which the patient can make informed choices, and offers an opportunity to clarify misconceptions regarding an individual situation.

- **Option B:** Include written, picture (photo, video, Internet) learning resources. This provides references for obtaining support, equipment, and additional information after discharge to support patient efforts for independence in self-care.
- **Option C:** Ascertain whether support and counseling were initiated when the possibility and/or necessity of ostomy was first discussed. This provides information about the patient's/SO's level of knowledge and anxiety about an individual situation.
- **Option D:** The patient may find it easier to accept or deal with an ostomy done to correct chronic or long-term disease than for traumatic injury, even if ostomy is only temporary. Also, patient who will be undergoing a second procedure (to convert ostomy to a continent or anal reservoir) may possibly encounter less severe self-image problems because body function eventually will be "more normal."

54. In the United States, the first programs for training nurses were affiliated with:

A. The military

B. General hospitals

C. Civil service

D. Religious orders

Correct Answer: D. Religious orders

When the Civil War broke out, the Army used nurses who had already been trained in religious orders. Nursing started with religious orders. The Hindu faith was the first to write about nursing. In the United States, all training for nurses was affiliated with religious orders until after the Civil War.

- **Option A:** Although the Army did provide some training, it occurred later than in the religious orders. Most people think of the nursing profession as beginning with the work of Florence Nightingale, an upper class British woman who captured the public imagination when she led a group of female nurses to the Crimea in October of 1854 to deliver nursing service to British soldiers.
- **Option B:** Although nurses were trained in hospitals, the training and the hospitals were affiliated with religious orders. Upon her return to England, Nightingale successfully established nurse education programs in a number of British hospitals. These schools were organized around a specific set of ideas about how nurses should be educated, developed by Nightingale often referred to as the "Nightingale Principles."
- **Option C:** Civil service was not mentioned in Chapter 1 and was not a factor in the early 1800s. While Nightingale's work was groundbreaking in that she confirmed that a corps of educated women, informed about health and the ways to promote it, could improve the care of patients based on a set of particular principles, she was not the first to put these principles into action.

55. As a well-rounded health care provider, you know that corticosteroid therapy is indicated in all of the following conditions except:

A. Osteoarthritis

B. Rheumatoid arthritis

C. Systemic lupus erythematosus

D. Acute spinal cord injury

Correct Answer: A. Osteoarthritis

Osteoarthritis is not an indication for corticosteroid therapy. It has an inflammatory component, but the disease is not severe enough to suppress the immune system. Lupus, spinal injury, and rheumatoid arthritis are conditions that require suppression of the immune system in order for the client to survive.

- **Option B:** The desired immune-suppressing and anti-inflammatory effects of corticosteroids can also predispose patients to infection. A meta-analysis of 2000 patients found that the infection rate is significantly higher in patients using systemic corticosteroids when the daily dose was 10 mg/day. The immunosuppressive effect is impacted not just by the dosage but also by the patient's age, underlying disorders, and any concomitant use of biologic or non-biologic disease-modifying anti-rheumatic drugs. In particular, patients on corticosteroids are susceptible to invasive fungal and viral infections.
- **Option C:** The genomic mechanism of action is the classically understood mechanism mediated through the glucocorticoid receptor, which leads to most of the anti-inflammatory and immunosuppressive effects. The glucocorticoid receptor is located intracellularly within the cytoplasm and upon binding trans-locates rapidly into the nucleus where it affects gene transcription and causes inhibition of gene expression and translation for inflammatory leukocytes and structural cells such as epithelium. This action leads to a reduction in proinflammatory cytokines, chemokines, and cell adhesion molecules, as well as other enzymes involved in the inflammatory response.
- **Option D:** The non-genomic mechanism occurs more rapidly and is mediated through interactions between the intracellular glucocorticoid receptor or a membrane-bound glucocorticoid receptor. Within seconds to minutes of receptor activation, a cascade of effects is set off, including inhibition of phospholipase A2, which is critical for the production of inflammatory cytokines, impaired release of arachidonic acid, and regulation of apoptosis in thymocytes. Corticosteroids at high concentrations will also inhibit the production of B cells and T cells.

56. Dervid, an adolescent boy, was admitted for substance abuse and hallucinations. The client's mother asks Nurse Armando to talk with his husband when he arrives at the hospital. The mother says that she is afraid of what the father might say to the boy. The most appropriate nursing intervention would be to:

A. Inform the mother that she and the father can work through this problem themselves.

B. Refer the mother to the hospital social worker.

C. Agree to talk with the mother and the father together.

D. Suggest that the father and son work things out.

Correct Answer: C. Agree to talk with the mother and the father together.

By agreeing to talk with both parents, the nurse can provide emotional support and further assess and validate the family's needs. Observe family interactions and SO dynamics and level of support. Substance abuse is a family disease, and how the members act and react to the patient's behavior

affects the course of the disease and how the patient sees himself. Many unconsciously become “enablers,” helping the individual to cover up the consequences of the abuse.

- **Option A:** Review family history; explore roles of family members, circumstances involving drug use, strengths, areas for growth. Determines areas for focus, potential for change. Explore how the SO has coped with the patient’s habit, (denial, repression, rationalization, hurt, loneliness, projection). The person who enables also suffers from the same feelings as the patient and uses ineffective methods for dealing with the situation, necessitating help in learning new and effective coping skills.
- **Option B:** Assess the current level of functioning of family members. Affects an individual’s ability to cope with a situation. Determine the extent of enabling behaviors being evidenced by family members; explore with each individual and patient. Enabling is doing for the patient what he or she needs to do for self (rescuing). People want to be helpful and do not want to feel powerless to help their loved one stop substance use and change the behavior that is so destructive. However, the substance abuser often relies on others to cover up their own inability to cope with daily responsibilities.
- **Option D:** Identify and discuss sabotage behaviors of family members. Even though family member(s) may verbalize a desire for the individual to become substance-free, the reality of interactive dynamics is that they may unconsciously not want the individual to recover because this would affect the family member(s)’ own role in the relationship. Additionally, they may receive sympathy and attention from others (secondary gain).

57. A mother is inquiring about her child’s ability to potty train. Which of the following factors is the most important aspect of toilet training?

A. The age of the child

B. The child's ability to understand instruction

C. The overall mental and physical abilities of the child

D. Frequent attempts with positive reinforcement

Correct Answer: C. The overall mental and physical abilities of the child.

Age is not the greatest factor in potty training. The overall mental and physical abilities of the child are the most important factor.

- **Option A:** Readiness for toilet training varies with every age of the child.
- **Option B:** A child who can follow simple instructions may start toilet training. However, it is not considered the most important factor.
- **Option D:** Positive reinforcement is a great tool for toilet training, yet, it may not be the most important one.

58. When caring for a client with a central venous line, which of the following nursing actions should be implemented in the plan of care for chemotherapy administration? Select all that apply.

A. Verify patency of the line by the presence of a blood return at regular intervals.

B. Inspect the insertion site for swelling, erythema, or drainage.

C. Administer a cytotoxic agent to keep the regimen on schedule even if blood return is not present.

D. If unable to aspirate blood, reposition the client, and encourage the client to cough.

E. Contact the health care provider about verifying placement if the status is questionable.

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

A major concern with the intravenous administration of cytotoxic agents is vessel irritation or extravasation. In order to avoid additional chemotherapy adverse effects, every effort should be made to minimize the complications of chemotherapy administration. All the oncology team members share the responsibility to ensure the safe administration of chemotherapy.

- **Option A:** The Oncology Nursing Society and hospital guidelines require frequent evaluation of blood return when administering vesicant or non-vesicant chemotherapy due to the risk of extravasation. These guidelines apply to peripheral and central venous lines.
- **Option B:** Chemotherapy extravasation is manifested by a wide range of symptoms that can be mild and can present as acute burning pain, swelling, at the infusion site. Symptoms vary according to the amount and concentration of extravasated drugs. Pain and erythema, induration, and skin discoloration progresses over a few days and weeks and may progress to blister formation. Unlike flare reaction and vessel irritation, extravasation is usually manifested with no or minimal blood return at the infusion site.
- **Option C:** In case of chemotherapy extravasation and as soon as the patient complains of pain or swelling, the first step should be an immediate cessation of the infusion while keeping the cannula or port needle in place. This is followed by attempts at the aspiration of the chemotherapeutic agent and removing the cannula or port needle.
- **Option D:** In addition, central venous lines may be long-term venous access devices. Thus, difficulty drawing or aspirating blood may indicate the line is against the vessel wall or may indicate the line has occlusion. Having the client cough or move position may change the status of the line if it is temporarily against a vessel wall.
- **Option E:** Occlusion warrants a more thorough evaluation via x-ray study to verify placement if the status is questionable and may require a declotting regimen. Any local incidence of extravasation should be reported. While documentation may differ among institutions, certain items remain essential and should be documented for every incident.

59. The clinic nurse is assisting to perform a focused data collection process on a client who is complaining of symptoms of a cold, a cough, and lung congestion. Which of the following would the nurse include for this type of data collection? Select all that apply.

A. Auscultating lung sounds

B. Obtaining the client's temperature

C. Checking the strength of peripheral pulses

D. Obtaining information about the client's respirations

E. Performing a musculoskeletal and neurological examination

F. Asking the client about a family history of any illness or disease

Correct Answer: A, B, & D.

A focused data collection process focuses on a limited or short-term problem, such as the client's complaint. Because the client is complaining of symptoms of a cold, a cough, and lung congestion the nurse would focus on the respiratory system and the presence of an infection.

- **Option A:** Auscultation of the lungs should be systematic and follow a stepwise approach in which the examiner surveys all the lung zones. For practical purposes, the lung can be divided into apical, middle, and basilar regions during auscultation.
- **Option B:** An increase in temperature may be a sign of underlying infection. The diagnosis of a cough is an obvious clinical observation. A cough is a symptom rather than a diagnosis of disease. As such, many patients present for evaluation of the secondary or underlying effects of cough rather than a cough itself.
- **Option C:** Checking the strength of peripheral pulses relates to a vascular assessment, which is not related to this client's complaints. Otherwise, a systemic approach should be used to identify any coexisting illness, which may be the origin or compounding factor of a cough.
- **Option D:** During the inspection, the examiner should pay attention to the pattern of breathing: thoracic breathing, thoracoabdominal breathing, costal markings, and use of accessory breathing muscles. The use of accessory breathing muscles (i.e., scalenes, sternocleidomastoid muscle, intercostal muscles) could point to excessive breathing effort caused by pathologies.
- **Option E:** A musculoskeletal and neurological examination also is not related to this client's complaints. However, the strength of peripheral pulses and a musculoskeletal and neurological examination would be included in a complete data collection.
- **Option F:** A complete data collection includes a complete health history and physical examination and forms a baseline database. Likewise, asking the client about a family history of any illness or disease would be included in a complete assessment.

60. Anxiety is caused by:

A. An objective threat.

B. A subjectively perceived threat.

C. Hostility turned to the self.

D. Masked depression.

Correct Answer: B. A subjectively perceived threat.

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

- **Option A:** Fear is caused by an objective threat. Sometimes fear stems from real threats, but it can also originate from imagined dangers. Fear can also be a symptom of some mental health conditions including panic disorder, social anxiety disorder, phobias, and post-traumatic stress disorder (PTSD).
- **Option C:** A depressed client internalizes hostility. The common features of all the depressive disorders are sadness, emptiness, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function.
- **Option D:** Mania is due to masked depression. Some other hallmarks of mania are an elevated or expansive mood, mood lability, impulsivity, irritability, and grandiosity. If the individual experiencing

these symptoms requires hospitalization, then this period automatically qualifies as true mania and not hypomania, even if the symptoms are present for less than one week.

61. A mother of a term neonate asks what the thick, white, cheesy coating is on his skin. Which correctly describes this finding?

A. Lanugo

B. Milia

C. Nevus flammeus

D. Vernix

Correct Answer: D. Vernix.

- **Option D:** Vernix caseosa or vernix is the waxy or cheese-like white substance found coating the skin of newborn human babies. It is produced by dedicated cells and is thought to have some protective roles during fetal development and for a few hours after birth.

62. The LPN/LVN, under your supervision, is providing nursing care for a patient with GBS. What observation would you instruct the LPN/LVN to report immediately?

A. Complaints of numbness and tingling.

B. Facial weakness and difficulty speaking.

C. Rapid heart rate of 102 beats per minute.

D. Shallow respirations and decreased breath sounds.

Correct Answer: D. Shallow respirations and decreased breath sounds

The priority interventions for the patient with GBS are aimed at maintaining adequate respiratory function. These patients are at risk for respiratory failure, which is urgent. Upon presentation, 40% of patients have a respiratory or oropharyngeal weakness. Ventilatory failure with required respiratory support occurs in up to one-third of patients at some time during the course of their disease.

- **Option A:** These findings should be reported to the nurse but it is not an urgent matter. The typical patient with Guillain-Barré syndrome (GBS), which in most cases will manifest as acute inflammatory demyelinating polyradiculoneuropathy (AIDP), presents 2-4 weeks following a relatively benign respiratory or gastrointestinal illness with complaints of finger dysesthesias and proximal muscle weakness of the lower extremities.
- **Option B:** Facial weakness and difficulty of speaking are common signs of GBS and must be reported, but it is not a priority. The classic clinical picture of weakness is ascending and symmetrical in nature. The lower limbs are usually involved before the upper limbs. Proximal muscles may be involved earlier than the more distal ones. Trunk, bulbar, and respiratory muscles can be affected as well.
- **Option C:** A rapid heart rate is important and should be reported to the nurse, but it is not life-threatening. Autonomic nervous system involvement with dysfunction in the sympathetic and parasympathetic systems can be observed in patients with GBS.

63. A client is receiving methotrexate (Rheumatrex) for a series of chemotherapy. Which of the following medication should be readily available to avoid toxicity?

A. mesna (Mesnex)

B. vigabatrin (Sabril)

C. leucovorin (Folinic acid)

D. oseltamivir (Tamiflu)

Correct Answer: C. leucovorin (Folinic acid)

Large doses of Methotrexate (Rheumatrex) may lead to harmful effects in the body. Leucovorin is administered to prevent its toxicity.

- **Option A:** Mesna is given with ifosfamide to decrease the potential of ifosfamide induced cystitis.
- **Option B:** Vigabatrin is an anticonvulsant.
- **Option D:** Oseltamivir is an influenza antiviral medication.

64. Alfred was newly diagnosed with anxiety disorder. The physician prescribed buspirone (BuSpar). The nurse is aware that the teaching instructions for newly prescribed buspirone should include which of the following?

A. A warning about the drug's delayed therapeutic effect, which is from 14 to 30 days.

B. A warning about the incidence of neuroleptic malignant syndrome (NMS).

C. A reminder of the need to schedule blood work in 1 week to check blood levels of the drug.

D. A warning that immediate sedation can occur with a resultant drop in pulse.

Correct Answer: A. A warning about the drug's delayed therapeutic effect, which is from 14 to 30 days.

The client should be informed that the drug's therapeutic effect might not be reached for 14 to 30 days. The client must be instructed to continue taking the drug as directed. Unlike benzodiazepines and barbiturates, there is no associated risk of physical dependence or withdrawal with buspirone use due to the lack of effects on GABA receptors. However, buspirone has little efficacy as an acute anxiolytic as clinical effect typically takes 2 to 4 weeks to achieve.[1] Buspirone is FDA approved for the short and long-term treatment of GAD, as well as short-term symptomatic relief of anxiety. It is as effective as benzodiazepine treatment for GAD.

- **Option B:** NMS hasn't been reported with this drug, but tachycardia is frequently reported. Patients should receive a warning about the possibility of CNS depression. While rarer, patients should also be informed of the potential for akathisia (likely due to central dopamine antagonism) and serotonin syndrome.
- **Option C:** Blood level checks aren't necessary. Offer frequent follow-up after initiating treatment to assess for therapeutic and adverse effects. Encourage patients to stay consistent with their medication schedule and whether they take it with food. As mentioned before, a therapeutic effect typically takes 2 to 4 weeks to take effect. Often, many of the adverse effects will lessen over time, as well. However, the patient should have close monitoring for signs and symptoms of anaphylaxis, akathisia, and serotonin syndrome.

- **Option D:** Relative to other anxiolytics, buspirone has low toxicity and potential for abuse. There have been no deaths reported from a buspirone overdose alone. In pharmacological trials, healthy male patients were given up to 375 mg per day and developed nausea, vomiting, dizziness, drowsiness, miosis, and gastric distress. While buspirone overdose typically resolves with complete recovery, high suspicion of additional medication overdose should be maintained and investigated.

65. The client asks whether her diet would change on CAPD. Which of the following would be the nurse's best response?

A. "Diet restrictions are more rigid with CAPD because standard peritoneal dialysis is a more effective technique."

B. "Diet restrictions are the same for both CAPD and standard peritoneal dialysis."

C. "Diet restrictions with CAPD are fewer than with standard peritoneal dialysis because dialysis is constant."

D. "Diet restrictions with CAPD are fewer than with standard peritoneal dialysis because CAPD works more quickly."

Correct Answer: C. "Diet restrictions with CAPD are fewer than with standard peritoneal dialysis because dialysis is constant."

Dietary restrictions with CAPD are fewer than those with standard peritoneal dialysis because dialysis is constant, not intermittent. The constant slow diffusion of CAPD helps prevent accumulation of toxins and allows for a more liberal diet.

- **Option A:** Both types of peritoneal dialysis are effective. CAPD is peritoneal dialysis that can be done manually, without a machine, throughout the day. The patient fills his or her abdomen with dialysis solution and later drains the fluid. Gravity moves the fluid through the tube and into and out of the belly.
- **Option B:** Exchanges can be done at home, work or any clean place. During CAPD, patients are free to go about their normal activities while the dialysis solution dwells in their abdomen between exchanges.
- **Option D:** CAPD does not work more quickly, but more consistently. Each exchange includes filling the abdomen with dialysate fluid, letting the fluid dwell in the abdomen, and then draining the fluid. Patients may need three to four exchanges during the day and one with a longer dwell time while sleeping.

66. If a client requires a pneumonectomy, what fills the area of the thoracic cavity?

A. The space remains filled with air only.

B. The surgeon fills the space with a gel.

C. Serous fluids fill the space and consolidate the region.

D. The tissue from the other lung grows over to the other side.

Correct Answer: C. Serous fluids fill the space and consolidate the region

Serous fluid fills the space and eventually consolidates, preventing extensive mediastinal shift of the heart and remaining lung.

- **Option A:** Air can't be left in space. Air in the chest cavity is called a pneumothorax, and it may cause the lungs to collapse.
- **Option B:** There's no gel that can be placed in the pleural space. The pleural cavity is the space that lies between the pleura, the two thin membranes that line and surround the lungs. It contains a small amount of liquid known as pleural fluid.
- **Option D:** The tissue from the other lung can't cross the mediastinum, although a temporary mediastinal shift exists until space is filled.

67. You are pulled from the ED to the neurologic floor. Which action should you delegate to the nursing assistant when providing nursing care for a patient with SCI?

A. Assess the patient's respiratory status every 4 hours.

B. Take the patient's vital signs and record them every 4 hours.

C. Monitor nutritional status including calorie counts.

D. Have the patient turn, cough, and deep breathe every 3 hours.

Correct Answer: B. Take the patient's vital signs and record them every 4 hours.

The nursing assistant's training and education include taking and recording the patient's vital signs.

- **Option A:** Assessing the patient's respiratory status would require the knowledge of a registered nurse.
- **Option C:** Monitoring patients requires additional education and is appropriate for the scope of practice for professional nurses.
- **Option D:** The nursing assistant may assist with turning and repositioning the patient and may remind the patient to cough and deep breathe but does not teach the patient how to perform these actions.

68. Damage to the VII cranial nerve results in:

A. Facial pain

B. Absence of ability to smell

C. Absence of eye movement

D. Tinnitus

Correct Answer: A. Facial pain

The facial nerve is cranial nerve VII. If damage occurs, the client will experience facial pain. The sensory portion, or intermediate nerve, has the following components: (1) taste to the anterior two-thirds of the tongue; (2) secretory and vasomotor fibers to the lacrimal gland, the mucous membranes of the nose and mouth, and the submandibular and sublingual salivary glands; (3) cutaneous sensory impulses from the external auditory meatus and region back of the ear.

- **Option B:** Olfactory nerve controls smell, and it is cranial nerve I. The olfactory nerve is the first cranial nerve and is instrumental in our sense of smell. The olfactory nerve contains only afferent sensory nerve fibers and, like all cranial nerves, is paired. The olfactory nerve is the shortest cranial nerve, and along with the optic nerve is one of the only two cranial nerves that do not converge with

the brainstem.

- **Option C:** Eye movement is controlled by the Trochlear or C IV. The trochlear nerve is the fourth cranial nerve (CN IV) and one of the ocular motor nerves that controls eye movement. The trochlear nerve, while the smallest of the cranial nerves, has the longest intracranial course as it is the only nerve to have a dorsal exit from the brainstem. It originates in the midbrain and extends laterally and anteriorly to the superior oblique muscle.
- **Option D:** The vestibulocochlear nerve or CN VIII is responsible for hearing loss and tinnitus. The vestibulocochlear nerve, also known as cranial nerve eight (CN VIII), consists of the vestibular and cochlear nerves. Each nerve has distinct nuclei within the brainstem. The vestibular nerve is primarily responsible for maintaining body balance and eye movements, while the cochlear nerve is responsible for hearing.

69. Freud explains anxiety as:

A. Strives to gratify the needs for satisfaction and security.

B. Conflict between id and superego.

C. A hypothalamic-pituitary-adrenal reaction to stress.

D. A conditioned response to stressors.

Correct Answer: B. Conflict between id and superego

Freud explains anxiety as due to opposing action drives between the id and the superego. Moral anxiety is a function of the development of the superego. Whatever the anxiety, the ego seeks to reduce it. Operating at the unconscious level, it employs defense mechanisms to distort or deny reality.

- **Option A:** Sullivan identified 2 types of needs, satisfaction and security. Failure to gratify these needs may result in anxiety. Sullivan (1953b) postulated that it is transferred from the parent to the infant through the process of empathy. Anxiety in the mothering one inevitably induces anxiety in the infant. Because all mothers have some amount of anxiety while caring for their babies, all infants will become anxious to some degree.
- **Option C:** Biomedical perspective of anxiety. Serotonin and dopamine are two important neurotransmitters that, when disrupted, can cause feelings of anxiety and depression. Researchers have also found that several parts of the brain are involved in fear and anxiety.
- **Option D:** Explanation of anxiety using the behavioral model. Anxiety is a psychological, physiological, and behavioral state induced in animals and humans by a threat to well-being or survival, either actual or potential. It is characterized by increased arousal, expectancy, autonomic and neuroendocrine activation, and specific behavior patterns. The function of these changes is to facilitate coping with an adverse or unexpected situation.

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

A. Beta-adrenergic blockers

B. Bronchodilators

C. Inhaled steroids

D. Oral steroids

Correct Answer: B. Bronchodilators

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

- **Option A:** Beta-adrenergic blockers aren't used to treat asthma and can cause bronchoconstriction. The catecholamines, epinephrine, and norepinephrine bind to B1 receptors and increase cardiac automaticity as well as conduction velocity. B1 receptors also induce renin release, and this leads to an increase in blood pressure. In contrast, binding to B2 receptors causes relaxation of the smooth muscles along with increased metabolic effects such as glycogenolysis.
- **Option C:** Inhaled steroids may be given to reduce the inflammation but aren't used for emergency relief. Inhaled corticosteroids have potent glucocorticoid activity and work directly at the cellular level by reversing capillary permeability and lysosomal stabilization to reduce inflammation. The onset of action is gradual and may take anywhere from several days to several weeks for maximal benefit with consistent use.
- **Option D:** Corticosteroids produce their effect through multiple pathways. In general, they produce anti-inflammatory and immunosuppressive effects, protein and carbohydrate metabolic effects, water and electrolyte effects, central nervous system effects, and blood cell effects. Oral administration is more common for chronic treatment. Patients should receive non-systemic therapy whenever possible, to minimize systemic exposure.

71. A nurse is giving discharge instructions to the parents of a healthy newborn. Which of the following instructions should the nurse provide regarding car safety and the trip home from the hospital?

A. The infant should be restrained in an infant car seat, properly secured in the back seat in a rear-facing position.

B. The infant should be restrained in an infant car seat, properly secured in the front passenger seat.

C. The infant should be restrained in an infant car seat facing forward or rearward in the back seat.

D. For the trip home from the hospital, the parent may sit in the back seat and hold the newborn.

Correct Answer: A. The infant should be restrained in an infant car seat, properly secured in the back seat in a rear-facing position.

All infants under 1 year of age weighing less than 20 lbs. should be placed in a rear-facing infant car seat secured properly in the back seat. Rear-facing car safety seats for infants are perhaps the least controversial; rear-facing car seats have superior effectiveness in preventing serious injury in infants from car crashes. Children < 24 months riding in rear-facing car seats were 1.76 times less likely be seriously injured from all types of car crashes relative to children riding in forward-facing safety seats

- **Option B:** Infant car seats should never be placed in the front passenger seat. States have implemented their own individual mandates for car safety seats, with stringent recommendations from the AAP incorporated into law in New Jersey and Oklahoma and with states including West Virginia (WV) and North Carolina having the most lenient requirements (Bae, Anderson, Silver, & Macinko, 2014; NCPSC, 2013). WV requires that children under 7 years be restrained in a car safety or booster seat, without specifying the timing of the transition.

- Option C: The infant should always face rearward in the back seat while on a car seat. For side crashes, children < 24 months riding in forward-facing car seats were 5.5 times more likely to get injured as compared to those riding in rear-facing car seats. Accident data (such as from Sweden) indicate that increased duration of rear-facing car safety seat usage can decrease injuries and deaths relating to automobile accidents (SafetyBeltSafe USA, 2013).
- **Option D:** Infants should always be placed in an approved car seat during travel, even on that first ride home from the hospital. Consistent with research, the American Academy of Pediatrics (AAP) and National Highway Traffic Safety Administration (NHTSA) have developed evidence-based practice guidelines for car safety seat use, which vary by the size and weight of the child, emphasizing the use of rear seats among infants less than 2 years of age (AAP, 2013; NHTSA, 2014).

72. Diazepam (Valium) is prescribed to a client with alcohol withdrawal. Which of the following statements made by the client indicates an understanding of the treatment regimen?

A. "This medication causes a blurring of vision".

B. "This medication will cause a decreased platelet and white blood cell count in my blood".

C. "I'll have my physician lower my dosage once I start to feel okay".

D. "Drinking grapefruit can decrease the side effects with this medication".

Correct Answer: D. “Drinking grapefruit can decrease the side effects with this medication”.

Diazepam (Valium) can cause side effects such as sleepiness and drowsiness. Meanwhile, grapefruit can reduce the metabolism of this drug. This can result in the increased pharmacologic effects of Valium as well as its side effects.

- **Option A:** Blurred vision is a recognized adverse effect of valium.
- **Option B:** Long-term use of valium causes thrombocytopenia and neutropenia.
- **Option C:** Usually, a client who is prescribed with valium begins to take a low dosage and it will be adjusted over time to reach the right dosage. Once the patient feels okay, the physician will give the smallest dosage that provides the desired effect of the medication.

73. The parents express apprehensions on their ability to care for their maladaptive child. The nurse identifies what nursing diagnosis:

A. Hopelessness

B. Altered parenting role

C. Altered family process

D. Ineffective coping

Correct Answer: B. Altered parenting role

Altered parenting role refers to the inability to create an environment that promotes optimum growth and development of the child. This is reflected in the parent’s inability to care for the child. Provide an opportunity for parents to express their feelings, personal needs, and goals; avoid making judgmental remarks or comparing them to other parents. Supports parents in meeting their own needs.

- **Option A:** This refers to the lack of choices or inability to mobilize one's resources. Hopelessness can result when someone is going through difficult times or unpleasant experiences. A person may feel overwhelmed, trapped, or insecure, or may have a lot of self-doubts due to multiple stresses and losses. He or she might think that challenges are unconquerable or that there are no solutions to the problems and may not be able to mobilize the energy needed to act on his or her own behalf.
- **Option C:** Refers to change in family relationship and function. Altered family processes can be related to the impact that an ill family member can have on the family system. An illness, hospitalization, surgery, previous diagnoses, coping styles, culture can all place tremendous stress on a family and greatly interfere with keeping a family strong and united.
- **Option D:** Ineffective coping is the inability to form a valid appraisal of the stressor or inability to use available resources. Considering healthy ways to cope and getting the appropriate care and support can put problems in perspective and help stressful feelings and symptoms subside. Nurses, together with the patients, need to recognize stress accordingly to come up with the most effective yet proper strategies that work best for every patient.

74. A male client has an abnormal result on a Papanicolaou test. After admitting, he read his chart while the nurse was out of the room, the client asked what dysplasia means. Which definition should the nurse provide?

A. Alteration in the size, shape, and organization of differentiated cells

B. Increase in the number of normal cells in a normal arrangement in a tissue or an organ

C. Presence of completely undifferentiated tumor cells that don't resemble cells of the tissues of their origin

D. Replacement of one type of fully differentiated cell by another in tissues where the second type normally isn't found

Correct Answer: A. Alteration in the size, shape, and organization of differentiated cells

- **Option A:** Dysplasia refers to an alteration in the size, shape, and organization of differentiated cells.
- **Option B:** An increase in the number of normal cells in a normal arrangement in a tissue or an organ is called hyperplasia.
- **Option C:** The presence of completely undifferentiated tumor cells that don't resemble cells of the tissues of their origin is called anaplasia.
- **Option D:** Replacement of one type of fully differentiated cell by another in tissues where the second type normally isn't found is called metaplasia.

75. A client tells the nurse that psychotropic medicines are dangerous and refuses to take them. Which intervention should the nurse use first?

A. Ask the client about any previous problems with psychotropic medications.

B. Ask the client if an injection is preferable.

C. Insist that the client takes medication as prescribed.

D. Withhold the medication until the client is less suspicious.

Correct Answer: A. Ask the client about any previous problems with psychotropic medications.

The nurse needs to clarify the client's previous experience with psychotropic medication in order to understand the meaning of the client's statement. Attempt to understand the significance of these beliefs to the client at the time of their presentation. Important clues to underlying fears and issues can be found in the client's seemingly illogical fantasies. Explain the procedures and try to be sure the client understands the procedures before carrying them out. When the client has full knowledge of procedures, he or she is less likely to feel tricked by the staff.

- **Option B:** Asking the client if an injection is preferable may add to the client's suspicion and feeling threatened. Show empathy regarding the client's feelings; reassure the client of your presence and acceptance. The client's delusion can be distressing. Empathy conveys your caring, interest and acceptance of the client.
- **Option C:** Insisting that the client take medication can be a violation of his right to refuse treatment. Initially do not argue with the client's beliefs or try to convince the client that the delusions are false and unreal. Arguing will only increase a client's defensive position, thereby reinforcing false beliefs. This will result in the client feeling even more isolated and misunderstood.
- **Option D:** Withholding medication prescribed to relieve delusional beliefs will likely intensify paranoid thinking. Encourage healthy habits to optimize functioning: Maintain medication regimen; maintain regular sleep pattern; maintain self-care; and reduce alcohol and drug intake. All are vital to help keep the client in remission.

76. After an Rh(-) mother has delivered her Rh (+) baby, the mother is given RhoGam. This is done in order to:

A. Prevent the recurrence of Rh(+) babies in future pregnancies.

B. Prevent the mother from producing antibodies against the Rh(+) antigen that she may have gotten when she delivered to her Rh(+) baby.

C. Ensure those future pregnancies will not lead to maternal illness.

D. To prevent the newborn from having problems of incompatibility when it breastfeeds.

Correct Answer: B. Prevent the mother from producing antibodies against the Rh(+) antigen that she may have gotten when she delivered to her Rh(+) baby

In Rh incompatibility, a Rh(-) mother will produce antibodies against the fetal Rh (+) antigen which she may have gotten because of the mixing of maternal and fetal blood during labor and delivery. Giving her RhoGam right after birth will prevent her immune system from being permanently sensitized to Rh antigen.

- **Option A:** RhoGAM is a prescription medicine that is used to prevent Rh immunization, a condition in which an individual with Rh-negative blood develops antibodies after exposure to Rh-positive blood.
- **Option C:** RhoGAM prevents the Rh-negative mother from making antibodies directed against her baby's Rh-positive red blood cells during her pregnancy.
- **Option D:** Rho(D) immune globulin is immune globulin (IgG) rich in IgG antibodies against erythrocyte antigen Rho(D). IgG is a normal component of breastmilk. Rho(D) immune globulin is frequently used in nursing mothers and no adverse effects have been reported in breastfed infants. No special precautions are required.

77. In the past, factors to determine whether a woman was likely to have a high-risk pregnancy were evaluated primarily from a medical point of view. A broader, more comprehensive approach to high-risk pregnancy has been adopted. There are now four categories based on threats to the health of the woman and the outcome of pregnancy. Which of the options listed here is not included as a category?

A. Biophysical

B. Psychosocial

C. Geographic

D. Environmental

Correct Answer: C. Geographic

The fourth category is correctly referred to as the sociodemographic risk category. Several risk factors for high-risk pregnancy were present before pregnancy, including multiple pregnancies, maternal age under 16 or over 35 years, and interval between pregnancies less than one year.

- **Option A:** A fetal biophysical profile is a prenatal test used to check on a baby's well-being. The test combines fetal heart rate monitoring (nonstress test) and fetal ultrasound to evaluate a baby's heart rate, breathing, movements, muscle tone and amniotic fluid level.
- **Option B:** A pregnancy may be determined to be at high risk because of obstetric factors in previous pregnancies or the present one; conditions that are, themselves, psychosocial: anxiety disorders (GAD, OCD, panic disorder, PTSD), mood disorders, and schizophrenia, all of which are a background for a disturbed pregnancy and might complicate a pregnancy denominated high risk for some other reason.
- **Option D:** Environmental factors that have been implicated in adverse pregnancy outcomes include smoking, video display terminals, anesthetic gases, antineoplastic drugs and exposure to lead, selenium and inorganic mercury.

78. A nurse instructor is preparing to conduct a seminar about Piaget's Theory of Cognitive Development. The current topic is the concrete operational stage. Which of the following milestones during this stage should be included in the discussion, except?

A. Ability to think logic about objects and events

B. Ability to understand that an object does not affect its number, length, volume, or mass when it changes appearance or shape

C. Increased classification skills

D. Ability to exhibit propositional thought

E. Ability to perform mathematical problems in both addition and subtraction

Correct Answer: D. Ability to exhibit propositional thought.

This is achieved during the formal operational stage. Propositional thought is the ability of an individual to evaluate the logic of prepositions without referring to real-world circumstances.

- **Option A:** Piaget determined that children in the concrete operational stage were fairly good at the use of inductive logic (inductive reasoning). During this stage, children begin to think logically about concrete events. Their thinking becomes more logical and organized, but still very concrete.
- **Option B:** Another key development at this stage is the understanding that when something changes in shape or appearance it is still the same, a concept known as conservation. They begin to understand the concept of conservation; that the amount of liquid in a short, wide cup is equal to that in a tall, skinny glass, for example.
- **Option C:** Children begin using inductive logic, or reasoning from specific information to a general principle. This growing ability to mentally manipulate information and think about the thoughts of others will play a critical role in the formal operational stage of development when logic and abstract thought become critical.
- **Option E:** All these things are evident during the concrete operational stage. While children are still very concrete and literal in their thinking at this point in development, they become much more adept at using logic.

79. Dr. Hugo has prescribed sulfonylureas for Rebecca in the management of diabetes mellitus type 2. As a nurse, you know that the primary purpose of sulfonylureas, such as long-acting glyburide (Micronase), is to:

A. Induce hypoglycemia by decreasing insulin sensitivity.

B. Improve insulin sensitivity and decrease hyperglycemia.

C. Stimulate the beta cells of the pancreas to secrete insulin.

D. Decrease insulin sensitivity by enhancing glucose uptake.

Correct Answer: C. Stimulate the beta cells of the pancreas to secrete insulin.

Sulfonylureas such as glyburide are used only with patients who have some remaining pancreatic-beta cell function. These drugs stimulate insulin secretion, which reduces liver glucose output and increases cell uptake of glucose, enhancing the number of and sensitivity of cell receptor sites for interaction with insulin.

- **Option A:** Medications that reduce insulin resistance (insulin-sensitizing and antihyperglycemic effects) include metformin and thiazolidinediones. Metformin is a biguanide; it reduces hepatic glucose output and increases the uptake in the peripheral tissues (muscle and adipocytes).
- **Option B:** Thiazolidinediones (TZDs) are insulin sensitizers that act on intracellular metabolic pathways to enhance insulin action and increase insulin sensitivity in critical tissues. TZDs also increases adiponectin levels, decrease hepatic gluconeogenesis, and increase insulin-dependent glucose uptake in muscle and fat. Adiponectin, a cytokine secreted by fat tissue, increases insulin sensitivity, and fatty acid oxidation increases with TZD therapy.
- **Option D:** Metformin exerts its glucose-lowering effect by suppressing gluconeogenesis in the liver and facilitating glucose uptake and use by peripheral tissues. Decreased glucose uptake may result from suppressed insulin signaling or impaired glucose transporter (GLUT) 4 trafficking.

80. After the first four months of pregnancy, the chief source of estrogen and progesterone is the:

A. Placenta

B. Adrenal cortex

C. Corpus luteum

D. Anterior hypophysis

Correct Answer: A. Placenta.

When the placental formation is complete, around the 16th week of pregnancy; it produces estrogen and progesterone.

- **Option B:** The adrenal cortex—the outer part of the gland—produces hormones that are vital to life, such as cortisol (which helps regulate metabolism and helps the body respond to stress) and aldosterone (which helps control blood pressure).
- **Option C:** The primary purpose of the corpus luteum is to pulse out hormones, including progesterone. Progesterone is required for a viable pregnancy to occur and to continue. Progesterone helps the uterine lining, known as the endometrium, to thicken and become spongy.
- **Option D:** Anterior pituitary undergoes two- to three-fold enlargement during pregnancy, because of hyperplasia and hypertrophy of lactotroph cells. In contrast to lactotrophs, the size of other anterior pituitary cells remains unchanged or decreases.

81. Flumazenil (Romazicon) has been ordered for a male client who has overdosed on oxazepam (Serax). Before administering the medication, nurse Gina should be prepared for which common adverse effect?

A. Seizures

B. Shivering

C. Anxiety

D. Chest pain

Correct Answer: A. Seizures

Seizures are the most common serious adverse effect of using flumazenil to reverse benzodiazepine overdose. The effect is magnified if the client has a combined tricyclic antidepressant and benzodiazepine overdose. Benzodiazepine reversal has correlations with seizures. Seizures may happen more frequently in patients who have been on benzodiazepines for long-term sedation or in patients who are showing signs of severe tricyclic antidepressant overdose. The required dosage of Flumazenil should be measured and prepared by the practitioners to manage seizures. Flumazenil use requires caution in patients relying on a benzodiazepine for seizure control.

- **Option B:** Shivering is not an adverse effect of flumazenil. Monitor the patient for the possible return of sedation, mostly in those who are tolerant of benzodiazepines. Patients should have monitoring for respiratory depression, benzodiazepine withdrawal, and other residual effects of benzodiazepines for at least 2 hours.
- **Option C:** Anxiety is a rare adverse effect for people using flumazenil. Flumazenil has some associations with precipitation of seizures in patients with benzodiazepine dependence with a history of seizures. Flumazenil overdose is extremely rare. There is no precise antidote for flumazenil toxicity. In mild to severe toxicity, symptomatic and supportive treatment should be a consideration.
- **Option D:** An overdose of flumazenil in a patient who is not a chronic benzodiazepine user would not be expected. Chronic benzodiazepines users may experience withdrawal with abrupt

discontinuation of the drug. Administration of benzodiazepines or barbiturates may be necessary for seizure control.

82. A client with liver cirrhosis has been advised to follow a high-protein diet. The nurse evaluates the effectiveness of the diet if the total protein level is which of the following values?

A. 6.9 g/dL.

B. 4.9 g/dL.

C. 2.9 g/dL.

D. 0.9 g/dL.

Correct Answer: A. 6.9 g/dL.

The normal value for total serum protein is 6 to 8 g/dL. The client with liver cirrhosis has low total protein levels secondary to inadequate nutrition. Protein deficiency is often associated with liver disease. The principal cause of protein deficiency is decreased dietary intake. Deficiencies in digestion and absorption that are common in alcoholics contribute to protein deficiency in alcoholic liver disease.

- **Option B:** 4.9 mg/dl is a low value for total serum protein. The protein requirements in most patients with compensated chronic liver disease are not different from normal but increase during episodes of hepatocellular deterioration. Increased demand for protein after liver injury drains nitrogen from other organs such as muscle.
- **Option C:** 2.9 mg/dl is a very low total serum protein level. Circulating proteins synthesized by the liver, such as albumin and clotting factors, are frequently decreased in chronic liver disease. Vitamin deficiencies that are common in liver disease contribute to abnormalities of protein metabolism. Hepatic regeneration following hepatic resection or injury is adversely affected by protein and vitamin deficiencies and by alcohol ingestion.
- **Option D:** 0.9 mg/dl is an abnormally low total serum protein value. This is because some conditions affect the amounts of albumin or globulin in the blood. A low A/G ratio may be due to an overproduction of globulin, underproduction of albumin, or loss of albumin, which may indicate the following: an autoimmune disease. cirrhosis, involving inflammation and scarring of the liver.

83. Gold salt toxicity can be reversed using which medication?

A. Acetaminophen

B. Dimercaprol

C. Calcium salts

D. Hydroxocobalamin

Correct Answer: B. Dimercaprol

Dimercaprol, a chelator, is used to treat arsenic, gold, or mercury poisoning.

- **Option A:** Acetaminophen is an analgesic/antipyretic.
- **Option C:** Calcium salt is the antidote for fluoride ingestion.
- **Option D:** Hydroxocobalamin is the antidote for cyanide poisoning.

84. What's the first intervention for a patient experiencing chest pain and a p02 of 89%?

A. Administer morphine

B. Administer oxygen

C. Administer sublingual nitroglycerin

D. Obtain an electrocardiogram (ECC)

Correct Answer: B. Administer oxygen

Administering supplemental oxygen to the patient is the first priority. Administer oxygen to increase SpO2 to greater than 90% to help prevent further cardiac damage.

- **Options A and C:** Sublingual nitroglycerin and morphine are commonly administered after oxygen.
- **Option D:** Obtaining an ECG may occur after administering the oxygen to provide baseline data.

85. A client with paranoid schizophrenia has been experiencing auditory hallucinations for many years. One approach that has proven to be effective for hallucinating clients is to:

A. Take an as-needed dose of psychotropic medication whenever they hear voices.

B. Practice saying "Go away" or "Stop" when they hear voices.

C. Sing loudly to drown out the voices and provide a distraction.

D. Go to their room until the voices go away.

Correct Answer: B. Practice saying "Go away" or "Stop" when they hear voices.

Researchers have found that some clients can learn to control bothersome hallucinations by telling the voices to go away or stop. The estimated prevalence of auditory hallucinations in the general population ranges from 5 to 28%. Auditory hallucinations are the most commonly reported in psychotic patients. They are prevalent in 75% of individuals suffering from schizophrenia, 20-50% of individuals with bipolar disorder, 10% of individuals with major psychotic depression, and 40% of individuals with PTSD.

- **Option A:** Taking an as-needed dose of psychotropic medication whenever the voices arise may lead to overmedication and put the client at risk for adverse effects. Because the voices aren't likely to go away permanently, the client must learn to deal with the hallucinations without relying on drugs.
- **Option C:** Although distraction is helpful, singing loudly may upset other clients and would be socially unacceptable after the client is discharged. In children and adolescents, the prevalence has been noted to be 9% and ranging between 5 to 16%, respectively. In children, it is mostly seen in conjunction with conduct disorder, migraine, and anxiety. The discontinuation rate of auditory hallucinations in adolescence ranges from 3 to 40% each year.
- **Option D:** Hallucinations are most bothersome in a quiet environment when the client is alone, so sending the client to his room would increase, rather than decrease, the hallucinations. Auditory hallucinatory experiences are psychopathological end-points. Disturbances in consciousness may occur earlier in the course that includes thought blocking, thought pressure, obsessive perseveration, and failure to discriminate between thought and perception.