

Kevin's Review - 85 NCLEX Practice Questions

1. The nurse is instructing a woman on a low-fat, high-fiber diet. Which of the following food choices, if selected by the client, indicate an understanding of a low-fat, high-fiber diet?

- A. Tuna salad sandwich on whole-wheat bread.
- B. Vegetable soup made with vegetable stock, carrots, celery, and legumes served with toasted oat bread.
- C. Chef's salad with hard-boiled eggs and fat-free dressing.
- D. Broiled chicken stuffed with chopped apples and walnuts.

Correct Answer: B. Vegetable soup made with vegetable stock, carrots, celery, and legumes served with toasted oat bread.

This choice shows a low-fat soup (which would have been higher in fat if made with chicken or beef stock) and high-fiber bread and soup contents (both the vegetables and the legumes). Eating a high-fiber diet that is low in fat can help maintain overall health. Fiber-rich foods are naturally low in fat and contain cancer-fighting and heart-healthy properties. While a low-fat diet is good, it is important that the client does not dismiss all fats, however. Eat some foods containing unsaturated fats because they are necessary for an overall healthy diet.

- **Option A:** Mayonnaise in tuna salad is high in fat. The whole-wheat bread has some fiber. Fiber's presence in the digestive tract can help reduce the body's cholesterol absorption. This is especially true if you take statins, which are medications to lower cholesterol, and use fiber supplements like psyllium fiber
- **Option C:** Salad is high in fiber, but hard-boiled eggs are high in fat. In fact, a single egg contains 212 mg of cholesterol, which is 71% of the recommended daily intake. Plus, 62% of the calories in whole eggs are from fat.
- **Option D:** There is some fiber in the apples and walnuts. The walnuts are high in fat, as is the chicken. Nuts have a high-fat content, so are high in energy. In most nuts, this is mainly unsaturated fat: either polyunsaturated fats in walnuts and pine nuts or monounsaturated fats in almonds, pistachios, pecans, and hazelnuts, for example. Brazil nuts, cashews, and macadamia nuts are higher in saturated fat.

2. Methylergonovine (Methergine) is prescribed to a patient who is having postpartum bleeding. Prior to giving the medication, the nurse contacts the physician who prescribed the medication if which of the following condition is documented in the patient's chart?

- A. Hypotension
- B. Uterine atony
- C. Ischemic heart disease
- D. Acute Gastroenteritis

Correct Answer: C. Ischemic heart disease.

Methergine (methylergonovine maleate) is a semi-synthetic ergot alkaloid used for the prevention and control of postpartum hemorrhage. Ergot alkaloids are contraindicated in patients with cardiovascular diseases such as ischemic heart disease, stroke, peripheral vascular disease, rheumatic heart disease.

- **Options A, B, & D:** These are not contraindicated with the use of methergine.

3. Which of the following is the meaning of PRN?

- A. When advice
- B. Immediately
- C. When necessary
- D. Now.

Correct Answer: C. When necessary

PRN comes from the Latin “pro re nata” meaning, “for an occasion that has arisen or as circumstances require”. When an abbreviation is less known outside of the organization or clinical specialty, it is necessary to spell out the abbreviation throughout the discharge summary to prevent misunderstanding and confusion by the physician or health care organization that receives the summary.

- **Option A:** The practice of spelling out an abbreviation when first mentioned, then using the abbreviation thereafter in the document is acceptable only in discharge summaries. Abbreviations are not to be used in the other types of documents listed in the measurable element.
- **Option B:** Laboratory test results sometimes go to patients, but it is not the intent of the standard for the abbreviations of the laboratory tests to be spelled out. When test results are given to patients, they are shared with their physician who can help explain the results.
- **Option D:** Hospitals may want to consider providing a separate form or resource to patients for information about the tests — such as a handout or website that has the names of common laboratory tests along with their definitions or descriptions. Results of diagnostic imaging studies also go to a patient’s physician, after interpretation by a radiologist.

4. A female client with Cushing’s syndrome is admitted to the medical-surgical unit. During the admission assessment, nurse Tyzz notes that the client is agitated and irritable, has poor memory, reports loss of appetite, and appears disheveled. These findings are consistent with which problem?

- A. Depression
- B. Neuropathy
- C. Hypoglycemia
- D. Hyperthyroidism

Correct Answer: A. Depression

Agitation, irritability, poor memory, loss of appetite, and neglect of one’s appearance may signal depression, which is common in clients with Cushing’s syndrome. In some studies, as many as 90% of Cushing’s patients suffer from depression. In part, this is due to actual chemical changes in the brain from high cortisol. The depressing effect of having a serious and impairing illness may also contribute to depression.

- **Option B:** Neuropathy affects clients with diabetes mellitus — not Cushing’s syndrome. Diabetic neuropathy is a type of nerve damage that can occur if the client has diabetes. High blood sugar (glucose) can injure nerves throughout the body. Diabetic neuropathy most often damages nerves

in the legs and feet.

- **Option C:** Although hypoglycemia can cause irritability, it also produces increased appetite, rather than loss of appetite. Neurogenic signs and symptoms can either be adrenergic (tremor, palpitations, anxiety) or cholinergic (hunger, diaphoresis, paresthesias). Neurogenic symptoms and signs arise from sympathoadrenal involvement (either norepinephrine or acetylcholine release) in response to perceived hypoglycemia.
- **Option D:** Hyperthyroidism typically causes such signs as goiter, nervousness, heat intolerance, and weight loss despite increased appetite. Common symptoms that a patient may report include unintentional weight loss despite unchanged oral intake, palpitations, diarrhea or increased frequency of bowel movements, heat intolerance, diaphoresis, and/or menstrual irregularities.

5. Which of the following is least likely to influence the potential for a client to comply with lithium therapy after discharge?

- A. The impact of lithium on the client's energy level and lifestyle.
- B. The need for consistent blood level monitoring.
- C. The potential side effects of lithium.
- D. What do the client's friends think of his need to take medication.

Correct Answer: D. What do the client's friends think of his need to take medication.

While the client's social network can influence the client in terms of compliance, the influence is typically secondary to that of the other factors listed. Lithium acts on a person's central nervous system (brain and spinal cord). Doctors don't know exactly how lithium works to stabilize a person's mood, but it is thought to help strengthen nerve cell connections in brain regions that are involved in regulating mood, thinking, and behavior.

- **Option A:** The impact of lithium on the client's energy level and lifestyle are great determinants to compliance. as your body gets used to lithium, these side effects should wear off. If these symptoms do not get better within a week or two, your doctor may either reduce your dose or increase it more slowly. If that does not work you may need to switch to a different medicine.
- **Option B:** The frequent blood level monitoring required is difficult for clients to follow for a long period of time. Check with the doctor right away if there is anxiety, restlessness, a fast heartbeat, fever, sweating, muscle spasms, twitching, nausea, vomiting, diarrhea, or see or hear things that are not there. These may be symptoms of a serious condition called serotonin syndrome. The risk may be higher if one also takes certain other medicines that affect serotonin levels in the body.
- **Option C:** Potential side effects such as fine tremor, drowsiness, diarrhea, polyuria, thirst, weight gain, and fatigue can be disturbing to the client. Some side effects may occur that usually do not need medical attention. These side effects may go away during treatment as the body adjusts to the medicine. Also, the health care professional may be able to tell about ways to prevent or reduce some of these side effects.

6. A nurse is orienting a new client to the unit when another client rushes down the hallway and asks the nurse to sit down and talk. The client requesting the nurse's attention is extremely manipulative and uses socially acting-out behaviors when demands are unmet. The nurse should:

- A. Suggest that the client requesting attention speak with another staff member.
- B. Leave the new client and talk with the other client to avoid precipitating acting out behavior.
- C. Tell the interrupting client to sit down and be patient, stating, "I'll be back as soon as possible."
- D. Introduce the two clients and suggest that the client join the new client and the nurse on the tour.

Correct Answer: C. Tell the interrupting client to sit down and be patient, stating, "I'll be back as soon as possible."

This sets realistic limits on behavior without rejecting the client. Identify behavioral limits and behaviors that are expected. Client needs a clear structure. Expect frequent testing of limits initially. Maintaining limits can enhance feelings of safety in the client.

- **Option A:** Be clear with the client as to the unit/hospital/clinic policies. Give brief concrete reasons for the rules, if asked, and then move on. Institutional policies provide structure and safety. Be very clear about the consequences if policies/limits are not adhered to. Client needs to understand the consequences of breaking the rules.
- **Option B:** When limits or policies are not followed, enforce the consequences in a matter-of-fact, nonjudgmental manner. Enforces that the client is responsible for his or her own actions. Make a clear and concrete written plan of care so other staff can follow. Helps minimize manipulations and might help encourage cooperation.
- **Option D:** Some clients might attempt to instill guilt when they do not get what they want. Remain neutral but firm. Nurses often want to be seen as "nice" However, being professional and maintaining limits is the better therapeutic approach.

7. Which of the following conditions can you safely administer metoclopramide (Reglan)?

- A. Patient with bowel obstruction
- B. Patient with gastrointestinal hemorrhage
- C. Patient undergoing radiation
- D. Patients with pheochromocytoma

Correct Answer: C. Patient undergoing radiotherapy

Metoclopramide can be safely administered to patients having vomiting episodes following radiation, chemotherapy, and surgery.

- **Options A & B:** It is contraindicated in patients with conditions where stimulation of gastrointestinal motility might be harmful, such as mechanical bowel obstruction, bowel perforation, or gastrointestinal hemorrhage.
- **Option D:** Hypertensive crises may occur in patients with pheochromocytoma due to induction of catecholamine release from the tumor.

8. A 42-year-old female patient with a known history of type 1 diabetes presents to the emergency department with complaints of fatigue, increased urination, and difficulty breathing. The nurse suspects an acute episode of ketoacidosis based on her medical history and current symptoms. As the nurse continues the assessment, the patient describes various symptoms she has been

experiencing over the past few days. Based on her potential acute ketoacidosis, which of the following symptoms reported by the patient would the nurse consider atypical for this condition?

- A. Persistent nausea leading to episodes of vomiting
- B. An insatiable feeling of thirst despite drinking large amounts of water
- C. A noticeable increase in weight over a short period
- D. A distinct fruity odor on her breath

Correct Answer: C. Weight gain

Diabetic ketoacidosis (DKA) is a serious complication of diabetes that occurs when the body produces high levels of blood acids called ketones. Common symptoms of DKA include nausea and vomiting, extreme thirst, frequent urination, and a fruity-scented breath. Weight gain is not typically associated with acute DKA; in fact, weight loss might be more common due to the body's inability to use glucose for energy and the subsequent breakdown of fat stores.

9. What is the most appropriate nursing response to a myocardial infarction client who is fearful of dying?

- A. "Tell me about your feelings right now."
- B. "When the doctor arrives, everything will be fine."
- C. "This is a bad situation, but you'll feel better soon."
- D. "Please be assured we're doing everything we can to make you feel better."

Correct Answer: A. "Tell me about your feelings right now."

Validation of the client's feelings is the most appropriate response. It gives the client a feeling of comfort and safety.

- **Option B:** Option B may give the client false hope.
- **Option C:** Telling the client that he will feel better soon would give him false hope.
- **Option D:** No one can determine if a client experiencing MI will feel or get better and therefore, these responses are inappropriate.

10. Nurse Jamie is administering the initial total parenteral nutrition solution to a client. Which of the following assessments requires the nurse's immediate attention?

- A. Temperature of 37.5 degrees Celsius.
- B. Urine output of 300 cc in 4 hours.
- C. Poor skin turgor.
- D. Blood glucose of 350 mg/dl.

Correct Answer: D. Blood glucose of 350 mg/dl.

Total parenteral nutrition formulas contain dextrose in concentrations of 10% or greater to supply 20% to 50% of the total calories. Blood glucose levels should be checked every 4 to 6 hours. A sliding scale dose of insulin may be ordered to maintain the blood glucose level below 200mg/dl.

- **Option A:** Catheter-related bloodstream infection or CR-BSI, which starts at the hub connection, is the spread of bacteria through the bloodstream. There's an increased risk of CR-BSI with TPN, due to the high dextrose concentration of TPN. Symptoms include tachycardia, hypotension, elevated or decreased temperature, increased breathing, decreased urine output, and disorientation. Strict adherence to aseptic technique with insertion, care, and maintenance; avoid hyperglycemia to prevent infection complications; closely monitor vital signs and temperature. IV antibiotic therapy is required. Monitor white blood cell count and patient for the malaise. Replace IV tubing frequently as per agency policy (usually every 24 hours).
- **Option B:** Monitor and record every eight hours or as per agency policy. Monitor for signs and symptoms of fluid overload (excessive weight gain) by completing a cardiovascular and respiratory assessment. Assess intakes such as IV (intravenous fluids), PO (oral intake), NG (nasogastric tube feeds). Assess outputs: NG (removed gastric content through the nasogastric tube), fistula drainage, BM (liquid bowel movements), colostomy/ileostomy drainage, closed suction drainage devices (Penrose or Jackson-Pratt drainage), and chest tube drainage.
- **Option C:** Related to a sudden increase in glucose after a recent malnourished state. After starvation, glucose intake suppresses gluconeogenesis by leading to the release of insulin and the suppression of glycogen. Excessive glucose may lead to hyperglycemia, with osmotic diuresis, dehydration, metabolic acidosis, and ketoacidosis. Excess glucose also leads to lipogenesis (again caused by insulin stimulation). This may cause fatty liver, increased CO₂ production, hypercapnia, and respiratory failure.

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

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

Correct Answer: C. Muscle weakness

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

- **Option A:** For those taking the oral capsule for muscle spasticity, liver function tests require monitoring, and dantrolene discontinued if signs and symptoms of liver injury appear. These include elevated LFTs, jaundice, right upper quadrant pain, etc. These symptoms typically resolve upon the discontinuation of dantrolene. If dantrolene is to be reinstated, per recommendations, the patient should be inpatient, and the drug initiated in very small doses with gradual increases.
- **Option B:** Although urine retention is an adverse reaction associated with dantrolene use; they aren't as common as muscle weakness. When using the lyophilized form of dantrolene, large volumes of sterile water are administered with the medication. Although mannitol is included with the dantrolene, monitoring fluid status and output is paramount to the ongoing care of resuscitation

of these patients.

- **Option D:** Muscle weakness is rarely severe enough to cause slurring of speech, drooling, and enuresis. Oral dantrolene carries a black box warning for the potential for hepatotoxicity, including overt hepatitis. Hepatic function should be evaluated before the administration of the oral capsule form and require monitoring throughout the course of treatment. The medication should stop immediately if liver function becomes impaired.

12. Which of the following groups of clients are most at risk for GI bleeding from the use of NSAIDs?

- A. Clients with dysmenorrhea.
- B. Clients with headaches.
- C. Clients with arthritis.
- D. Clients with renal failure.

Correct Answer: C. Clients with arthritis.

Clients with arthritis are taking the drugs for prolonged periods of time and may take higher doses. Nonsteroidal anti-inflammatory drugs (NSAIDs) are a drug class FDA-approved for use as antipyretic, anti-inflammatory, and analgesic agents. These effects make NSAIDs useful for the treatment of muscle pain, dysmenorrhea, arthritic conditions, pyrexia, gout, migraines, and used as opioid-sparing agents in certain acute trauma cases. Choices A and B are incorrect because the use of NSAIDs with these clients is intermittent.

- **Option A:** Gastric adverse effects are likely due to the inhibition of COX-1, preventing the creation of prostaglandins that protect the gastric mucosa. The damage is more likely in a patient that has a prior history of peptic ulcers. Since it is COX-1 specific, the use of COX-2 selective NSAIDs is a lower risk alternative.
- **Option B:** The main mechanism of action of NSAIDs is the inhibition of the enzyme cyclooxygenase (COX). Cyclooxygenase is required to convert arachidonic acid into thromboxanes, prostaglandins, and prostacyclins. The therapeutic effects of NSAIDs are attributed to the lack of these eicosanoids. Specifically, thromboxanes play a role in platelet adhesion, prostaglandins cause vasodilation, increase the temperature set-point in the hypothalamus, and play a role in anti-nociception.
- **Option D:** Renal failure is a contraindication for NSAIDs because most of the drug is excreted through the kidneys. Renal adverse effects are because COX-1 and COX-2 facilitate the production of prostaglandins that play a role in renal hemodynamics. In a patient with normal renal function, inhibition of prostaglandin synthesis does not pose a large problem; however, in a patient with renal dysfunction, these prostaglandins play a greater role and can be the source of problems when reduced via NSAIDs. Complications that can occur due to this are acute renal dysfunction, fluid and electrolyte disorders, renal papillary necrosis, and nephrotic syndrome/ interstitial nephritis.

13. When developing a teaching plan for a group of high school students about teenage pregnancy, the nurse would keep in mind which of the following?

- A. The incidence of teenage pregnancies is increasing.
- B. Most teenage pregnancies are planned.

- C. Denial of the pregnancy is common early on.
- D. The risk for complications during pregnancy is rare.

Correct Answer: C. Denial of the pregnancy is common early on.

The adolescent who becomes pregnant typically denies the pregnancy early on. Early recognition by a parent or health care provider may be crucial to timely initiation of prenatal care.

- **Option A:** The incidence of adolescent pregnancy has declined since 1991, yet morbidity remains high.
- **Option B:** Most teenage pregnancies are unplanned and occur out of wedlock.
- **Option D:** The pregnant adolescent is at high risk for physical complications including premature labor and low-birth-weight infants, high neonatal mortality, iron deficiency anemia, prolonged labor, and fetopelvic disproportion as well as numerous psychological crises.

14. Which of the following nursing interventions is appropriate for a client with an ICP of 20 mm Hg?

- A. Give the client a warming blanket.
- B. Administer low-dose barbiturate.
- C. Encourage the client to hyperventilate.
- D. Restrict fluids.

Correct Answer: C. Encourage the client to hyperventilate.

Normal ICP is 15 mm Hg or less. Hyperventilation causes vasoconstriction, which reduces CSF and blood volume, two important factors for reducing a sustained ICP of 20 mm Hg. Hyperventilation causes hypocapnia, which causes vasoconstriction, thus decreasing cerebral blood flow. Hyperventilation to moderate levels ($\text{PaCO}_2 = 25\text{-}35$) is generally considered a short-term temporizing measure to decrease ICP. Extreme hyperventilation ($\text{PaCO}_2 < 25\text{mmHg}$) should be avoided (Levin et al., 2010).

- **Option A:** A cooling blanket is used to control the elevation of temperature because a fever increases the metabolic rate, which in turn increases ICP. Interventions to lower or stabilize ICP include elevating the head of the bed to thirty degrees, keeping the neck in a neutral position, maintaining a normal body temperature, and preventing volume overload.
- **Option B:** High doses of barbiturates may be used to reduce the increased cellular metabolic demands. Blood pressure (BP) control when hypertension is severe ($> 180/95$ mm Hg). Mean arterial pressure needs to be high enough to maintain CPP even when ICP increases (Maiese, 2019). Hypotension should be promptly treated to avoid cerebral hypoperfusion.
- **Option D:** Fluid volume and inotropic drugs are used to maintain cerebral perfusion by supporting the cardiac output and keeping the cerebral perfusion pressure greater than 80 mm Hg. Hydration with isotonic fluids. If there are no signs of dehydration or fluid overload, IV fluids with normal saline can be started at 50 to 75 mL/h. The rate can be adjusted based on serum sodium, osmolality, urine output, and physical assessment (Maiese, 2019).

15. A client who has been diagnosed with calculi reports that the pain is intermittent and less colicky. Which of the following nursing actions is most important at this time?

- A. Report hematuria to the physician.
- B. Strain the urine carefully.
- C. Administer meperidine (Demerol) every 3 hours.
- D. Apply warm compresses to the flank area.

Correct Answer: B. Strain the urine carefully

Intermittent pain that is less colicky indicates that the calculi may be moving along the urinary tract. Fluids should be encouraged to promote movement, and the urine should be strained to detect the passage of the stone. Strain all urine. Document any stones expelled and sent to the laboratory for analysis. Retrieval of calculi allows identification of the type of stone and influences choice of therapy.

- **Option A:** Hematuria is to be expected from the irritation of the stone. Assist with frequent ambulation as indicated and increased fluid intake of at least 3–4 L a day within cardiac tolerance. Renal colic can be worse in the supine position. Vigorous hydration promotes the passing of stone, prevents urinary stasis, and aids in the prevention of further stone formation.
- **Option C:** Analgesics should be administered when the client needs them, not routinely. Implement comfort measures (back rub, restful environment). Promotes relaxation, reduces muscle tension and enhances coping. Encourage use of focused breathing, guided imagery, diversional activities. Redirects attention and helps in muscle relaxation.
- **Option D:** Moist heat to the flank area is helpful when renal colic occurs, but it is less necessary as pain is lessened. Apply warm compresses to the back. Relieves muscle tension and may reduce reflex spasms. Document reports of increased and persistent abdominal pain. Complete obstruction of the ureter can cause perforation and extravasation of urine into perirenal space. This represents an acute surgical emergency.

16. For a male client with suspected increased intracranial pressure (ICP), a most appropriate respiratory goal is to:

- A. Prevent respiratory alkalosis.
- B. Lower arterial pH.
- C. Promote carbon dioxide elimination.
- D. Maintain partial pressure of arterial oxygen (PaO₂) above 80 mm Hg.

Correct Answer: C. Promote carbon dioxide elimination.

The goal of treatment is to prevent acidemia by eliminating carbon dioxide. That is because an acid environment in the brain causes cerebral vessels to dilate and therefore increases ICP. Hypercarbia lowers serum pH and can increase cerebral blood flow contributing to rising ICP, hence hyperventilation to lower pCO₂ to around 30 mm Hg can be transiently used.

- **Option A:** Cushing triad is a clinical syndrome consisting of hypertension, bradycardia and irregular respiration and is a sign of impending brain herniation. This occurs when the ICP is too high the elevation of blood pressure is a reflex mechanism to maintain CPP. High blood pressure causes reflex bradycardia and brain stem compromise affecting respiration.
- **Option B:** Preventing respiratory alkalosis and lowering arterial pH may bring about acidosis, an undesirable condition in this case. Clinical suspicion for intracranial hypertension should be raised if a patient presents with the following signs and symptoms: headaches, vomiting, and altered mental status varying from drowsiness to coma.

- **Option D:** It isn't necessary to maintain a PaO₂ as high as 80 mm Hg; 60 mm Hg will adequately oxygenate most clients. Cerebral autoregulation is the process by which cerebral blood flow varies to maintain adequate cerebral perfusion. When the MAP is elevated, vasoconstriction occurs to limit blood flow and maintain cerebral perfusion. However, if a patient is hypotensive, cerebral vasculature can dilate to increase blood flow and maintain CPP.

17. Nursing interventions for a patient with hypermagnesemia include administering calcium gluconate to:

- A. Increase calcium levels.
- B. Antagonize the cardiac effects of magnesium.
- C. Lower calcium levels.
- D. Lower magnesium levels.

Correct Answer: B. Antagonize the cardiac effects of magnesium.

In a patient with hypermagnesemia, administration of calcium gluconate will antagonize the cardiac effects of magnesium. Calcium may moderate nerve and muscle performance in hypermagnesemia. Calcium gluconate (Kalcinate) directly antagonizes neuromuscular and cardiovascular effects of magnesium. Use in patients with symptomatic hypermagnesemia that is causing cardiac effects or respiratory distress.

- **Option A:** Although calcium gluconate will raise serum calcium levels, that is not the purpose of administration. Calcium gluconate is a medication used in the management of hypocalcemia, cardiac arrest, and cardiotoxicity due to hyperkalemia or hypermagnesemia. It is classified as a calcium salt.
- **Option C:** Calcium gluconate does not lower calcium levels. The treatment of hypocalcemia initially focuses on symptomatic treatment rather than normalizing serum calcium. In severe hypocalcemia with seizures, laryngospasm, hypotension, or tetany, patients should receive emergent parenteral calcium gluconate to replenish calcium levels until severe and life-threatening abnormalities resolve.
- **Option D:** Calcium gluconate does not lower magnesium levels. It is essential to check magnesium levels during calcium repletion as hypomagnesemia is a crucial cause of hypocalcemia. Hypomagnesemia causes hypocalcemia through impairment of parathyroid hormone secretion and renal resistance to parathyroid hormone, leading to decreased renal reabsorption of calcium.

18. A client went to a health care facility to ask for instructions regarding how to administer ophthalmic medications. The nurse correctly instructs the client to?

- A. Gently allow the tip of the optic bottle to touch with the conjunctival sac.
- B. Apply gentle pressure with a clean tissue to the nasolacrimal duct for 30 seconds after the administration.
- C. Blink quickly to stimulate tearing after the administration.
- D. Blow the nose to stimulate faster absorption.

Correct Answer: B. Apply gentle pressure with a clean tissue to the nasolacrimal duct for 30 seconds after the administration.

Occluding the nasolacrimal duct with a tissue over the inner canthus for 30-60 seconds will minimize the systemic absorption of the medication.

- **Option A:** Allowing the tip to be touched with the conjunctival sac will contaminate the medication.
- **Option C:** Blinking quickly will prevent the maximum absorption of the medication.
- **Option D:** Blowing the nose is not related to the administration of the optic drops.

19. Match the acid-base status of the following blood samples to the disorders in the given choices. (PaCO₂ values are in mm Hg and bicarbonate values in mmol/l). pH 7.34, PaCO₂ 24, HCO₃⁻ 20

- A. Respiratory Acidosis, Partially Compensated
- B. Metabolic Acidosis, Partially Compensated
- C. Metabolic Acidosis, Uncompensated
- D. Metabolic Alkalosis, Partially Compensated

Correct Answer: B. Metabolic Acidosis, Partially Compensated

- Based on the given ABG values, pH is 7.34. For pH, the normal range is 7.35 to 7.45. Any blood pH below 7.35 (7.34, 7.33, 7.32, and so on...) is ACIDOSIS.
- PaCO₂ is 24. The normal range for PaCO₂ is from 35 to 45. If PaCO₂ is below 35, it is alkalosis. Based on the given ABG values, PaCO₂ is below 35, so it is considered ALKALOSIS.
- HCO₃⁻ is 20. The normal range for HCO₃ is from 22 to 26. If HCO₃ is below 22, it is acidosis. Based on the given ABG values, HCO₃ is below 22, so it is considered ACIDOSIS.
- For these ABG values, pH is ACIDOSIS and lines up with HCO₃ which is METABOLIC. Therefore, this group of ABG values is considered METABOLIC ACIDOSIS.
- Lastly, it is PARTIALLY COMPENSATED because all three (3) values are abnormal. It is considered partially compensated if all three (3) values are abnormal.

20. Your patient with chronic renal failure reports pruritus. Which instruction should you include in this patient's teaching plan?

- A. Rub the skin vigorously with a towel.
- B. Take frequent baths.
- C. Apply alcohol-based emollients to the skin.
- D. Keep fingernails short and clean.

Correct Answer: D. Keep fingernails short and clean.

Calcium-phosphate deposits in the skin may cause pruritus. Scratching leads to excoriation and breaks in the skin that increase the patient's risk of infection. Keeping fingernails short and clean helps reduce the risk of infection. Although dialysis has largely eliminated skin problems associated with uremic frost, itching can occur because the skin is an excretory route for waste products such as phosphate crystals (associated with hyperparathyroidism in ESRD).

- **Option A:** Keep linens dry, wrinkle-free. Reduces dermal irritation and risk of skin breakdown. Change position frequently; move patient carefully; pad bony prominences with sheepskin, elbow, or heel protectors. Decreases pressure on edematous, poorly perfused tissues to reduce ischemia.
- **Option B:** Recommend the patient use cool, moist compresses to apply pressure (rather than scratch) pruritic areas. Keep fingernails short; encourage the use of gloves during sleep if needed. Alleviates discomfort and reduces the risk of dermal injury.
- **Option C:** Provide soothing skincare. Restrict the use of soaps. Apply ointments or creams (lanolin, Aquaphor). Baking soda, cornstarch baths decrease itching and are less drying than soaps. Lotions and ointments may be desired to relieve dry, cracked skin.

21. In the post-surgical unit, the nurse is attending to a client who had a total hip replacement seven (7) days ago. This client has a history of hypertension, mild asthma, and is on anticoagulant therapy. The client provides feedback about their current condition. Which of the following statements by the client is most concerning and necessitates the nurse's immediate intervention?

- A. "I have bad muscle spasms in my lower leg of the affected extremity."
- B. "I just can't 'catch my breath' over the past few minutes and I think I am in grave danger."
- C. "I have to use the bedpan to pass my water at least every 1 to 2 hours. It's tiring."
- D. "It seems that the pain medication is not working as well today. I'm scared."

Correct Answer: B. "I just can't 'catch my breath' over the past few minutes, and I think I am in grave danger."

The nurse would be concerned about all of these comments, however, the most life-threatening is **Option B**. Clients who had hip or knee surgery are at higher risk for the development of postoperative pulmonary embolism. Sudden dyspnea and tachycardia are classic findings of pulmonary embolism. Without prophylaxis (e.g., anticoagulation medications), deep vein thrombosis can develop within 7 to 14 days following the surgery and can lead to pulmonary embolism. The nurse should be aware of the other signs of DVT which include pain and tenderness at or below the area of the clot, skin discoloration, swelling, or tightness of the affected leg. Signs of pulmonary embolism include acute onset of dyspnea, tachycardia, confusion, and pleuritic chest pain.

- **Option A:** Muscle spasms occur after total hip replacements and acute pain is expected after a surgical procedure.
- **Option C:** This may indicate a urinary infection and needs further assessment by the nurse.
- **Option D:** This may require a reevaluation of pain and interventions to manage pain, though it does not need immediate action.

22. When should ambulation be initiated in the client who has sustained a major burn?

- A. When all full-thickness areas have been closed with skin grafts
- B. When the client's temperature has remained normal for 24 hours
- C. As soon as possible after wound debridement is complete
- D. As soon as possible after the resolution of the fluid shift

Correct Answer: D. As soon as possible after the resolution of the fluid shift

Regular, progressive ambulation is initiated for all burn clients who do not have contraindicating concomitant injuries as soon as the fluid shift resolves. Clients can be ambulated with extensive dressings, open wounds, and nearly any type of attached lines, tubing, and other equipment.

- **Option A:** The consistent finding in the literature is that early ambulation can be safely initiated after lower extremity skin grafting without compromising graft take if external compression is applied.
- **Option B:** Following thermal injury, the innate immune system responds immediately by stimulating localized and systemic inflammatory reactions. The innate immune response participates in activating the adaptive immune response; however, in so doing it has an adverse effect on the burn victim's ability to mount a vigorous immune response to invading microorganisms and, therefore, predisposes the burn victim to infectious complications.
- **Option C:** Pain control is obtainable by performing therapies during wound dressing and debridement, if possible. Analgesics should also be administered prior to therapy sessions to encourage participation in movement activities.

23. A 58-year-old male patient has recently undergone a left thoracotomy and a partial pneumonectomy to treat lung cancer. Post-surgery, chest tubes are inserted, and one-bottle water-seal drainage is instituted. In the postanesthesia care unit, the nurse positions the client in Fowler's position on his right side or on his back. The nurse understands that this positioning is critical for postoperative recovery. Understanding the implications of postoperative positioning, the nurse is aware that placing the patient in Fowler's position on either his right side or on his back primarily:

- A. Reduce incisional pain.
- B. Facilitate ventilation of the left lung.
- C. Equalize pressure in the pleural space.
- D. Increase venous return.

Correct Answer: B. Facilitate ventilation of the left lung.

Since only a partial pneumonectomy is done, there is a need to promote expansion of this remaining left lung by positioning the client on the opposite unoperated side.

- **Option A:** This position may reduce the pressure on the surgical incision site, but it is not its priority.
- **Option C:** Fowler's position is associated with improvement of functional residual capacity, oxygenation, and reduction of work of breathing.
- **Option D:** On the transition from sitting to standing, blood is pooled in the lower extremities as a result of gravitational forces. Venous return is reduced, which leads to a decrease in cardiac stroke volume, a decline in arterial blood pressure, and an immediate decrease in blood flow to the brain.

24. Nurse Kate would expect that a client with vascular dementia would experience:

- A. Loss of remote memory related to anoxia.
- B. Loss of abstract thinking related to emotional state.
- C. Inability to concentrate related to decreased stimuli.
- D. Disturbance in recalling recent events related to cerebral hypoxia.

Correct Answer: D. Disturbance in recalling recent events related to cerebral hypoxia.

Cell damage seems to interfere with registering input stimuli, which affects the ability to register and recall recent events; vascular dementia is related to multiple vascular lesions of the cerebral cortex and subcortical structure. Second only to Alzheimer disease (AD), vascular dementia (VD) is one of the most common causes of dementia affecting the elderly (aged greater than 65 years), with a variable presentation and unpredictable disease progression. The diagnosis of VD is obtained by a thorough history and physical examination, including a measure of cognitive performance. VD is diagnostically challenging and not precise given the many causes of dementia, including the potential for a mixed dementia syndrome

- **Option A:** A thorough history should be obtained from the patient, focusing on cognitive and functional deficits, onset, and progression of symptoms. Interviewing family members and caregivers is important as patients with cognitive decline rarely have insight into their cognitive and functional limitations. Caregivers may report an abrupt or stepwise onset of cognitive decline, or the appearance of symptoms may be subtle without connection to an ischemic event.
- **Option B:** The functional assessment should evaluate for impairments in instrumental activities of daily living (IADLs), such as cooking, driving, and financial and medication management, and basic activities of daily living (ADLs), such as dressing, bathing, and toileting. Additionally, patient past medical history, current medications, and surgical history should be obtained. Regarding physical examination, one should assess patients for focal neurologic deficits.
- **Option C:** VD is preventable by modifying the risk factors like diabetes, hypertension, smoking, and hyperlipidemia. The one very important risk factor that should be modified is hypertension. Countless studies show that the use of antihypertensive medications can reduce the risk of vascular dementia. In addition, the patient's coronary artery disease, atrial fibrillation, and ischemic heart disease have to be appropriately managed.

25. A female client requires hemodialysis. Which of the following drugs should be withheld before this procedure?

- A. Phosphate binders
- B. Insulin
- C. Antibiotics
- D. Cardiac glycosides

Correct Answer: D. Cardiac glycosides

Cardiac glycosides such as digoxin should be withheld before hemodialysis. Hypokalemia is one of the electrolyte shifts that occur during dialysis, and a hypokalemic client is at risk for arrhythmias secondary to digitalis toxicity. Hyperkalemia can be a marker of severe toxicity in acute poisoning. The role of potassium is less clear in chronic toxicity, although it has been linked to higher mortality despite traditional teaching that hypokalemia worsens the dysfunction at the Na-K transporter.

- **Option A:** Phosphate binders can be administered because they aren't removed from the blood by dialysis. Kidneys excrete ninety percent of the daily phosphate load while the gastrointestinal tract

excretes the remainder. As phosphorus is not significantly bound to albumin, most of it gets filtered at the glomerulus. Therefore, the number of functional nephrons plays a significant role in phosphorus homeostasis.

- **Option B:** For hemodialysis patients with diabetes who refuse to take insulin at home, delivering insulin during dialysis is a good way to improve glycemic control, researchers reported at a meeting sponsored by the National Kidney Foundation.
- **Option C:** Some antibiotics are removed by dialysis and should be administered after the procedure to ensure their therapeutic effects. The nurse should check a formulary to determine whether a particular antibiotic should be administered before or after dialysis. Patients with diabetes make up roughly half of the end-stage renal disease (ESRD) population in the United States, and good glycemic control is essential to slow the progression of both microvascular and macrovascular disease.

26. The client admitted with angina is given a prescription for nitroglycerin. The client should be instructed to:

- A. Replenish his supply every 3 months
- B. Take one every 15 minutes if pain occurs
- C. Leave the medication in the brown bottle
- D. Crush the medication and take with water

Correct Answer: C. Leave the medication in the brown bottle

Nitroglycerine should be kept in a brown bottle (or even a special air- and water-tight, solid or plated silver or gold container) because of its instability and tendency to become less potent when exposed to air, light, or water. Store nitroglycerin pills in a dark-colored (such as brown), airtight, glass container that you cannot see through. Keep the container tightly closed. Keep nitroglycerin pills and liquid spray away from heat or moisture.

- **Option A:** The supply should be replenished every 6 months, not 3 months. Nitroglycerin is most commonly administered as a tablet that is absorbed sublingually. It is given in hospitals as well as prescribed for outpatient use. Patients may be prescribed nitroglycerin to take as prophylaxis for anginal chest pain prior to an event that may provoke anginal symptoms. They must be instructed to allow the nitroglycerin to dissolve in their mouth and allow their oral mucosa to absorb the drug.
- **Option B:** One tablet should be taken every 5 minutes until pain subsides. If the pain does not subside, the client should report to the emergency room. There currently are three doses available: 0.3 mg, 0.4 mg, and 0.6 mg. The dose is repeatable every 5 minutes until the achievement of relief. If anginal pain persists after three doses, prompt medical attention is required. After administration, the onset of vasodilatory effects occurs within 1 to 3 minutes, with a max effect occurring within 5 minutes.
- **Option D:** The medication should be taken sublingually and should not be crushed. Nitroglycerin is primarily eliminated via metabolism in the liver and has a mean half-life of approximately 2 to 3 minutes. In the event of overdose, monitoring of vital signs may be necessary to monitor the hemodynamic effects of nitroglycerin. Continuous monitoring of blood pressure, heart rate, respiratory rate, and oxygen saturation is recommended.

27. When the baby's head is out, the immediate action of the nurse is

- A. Cut the umbilical cord
- B. Wipe the baby's face and suction mouth first
- C. Check if there is a cord coiled around the neck
- D. Deliver the anterior shoulder

Correct Answer: C. Check if there is a cord coiled around the neck.

The nurse should check if there is a cord coil because the baby will not be delivered safely if the cord is coiled around its neck. Normally the umbilical cord coils to the left. Regardless of its origin, umbilical coiling appears to confer turgor to the umbilical unit, producing a cord that is strong but flexible. The role of umbilical cord coiling is not clear; nonetheless, it is thought to play a role in protecting the umbilical cord from external forces such as tension, pressure, stretching or entanglement.

- **Option A:** The World Health Organization currently recommends clamping the umbilical cord between one and three minutes after birth, "for improved maternal and infant health and nutrition outcomes," while the American College of Obstetricians and Gynecologists recommends clamping within 30 to 60 seconds.
- **Option B:** Wiping off the face should be done seconds after you have ensured that there is no cord coil but suctioning of the nose should be done after the mouth because the baby is a "nasal obligate" breather. If the nose is suctioned first before the mouth, the mucus plugging the mouth can be aspirated by the baby.
- **Option D:** Anterior shoulder in obstetrics refers to that shoulder of the fetus that faces the pubic symphysis of the mother during delivery. Depending upon the original position of the fetus, either the left or the right shoulder can be the anterior shoulder.

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

- A. Anxiety
- B. Impaired social interaction
- C. Disturbed sensory-perceptual alteration (auditory)
- D. Risk for other-directed violence

Correct Answer: D. Risk for other-directed violence

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

- **Option A:** The defining characteristics of mania are increased talkativeness, rapid speech, decreased the need for sleep (unlike depression or anxiety in which the need for sleep exists, but there is an inability to sleep), racing thoughts, distractibility, increase in goal-directed activity, and psychomotor agitation. Some other hallmarks of mania are an elevated or expansive mood, mood lability, impulsivity, irritability, and grandiosity. If the individual experiencing these symptoms requires hospitalization, then this period automatically qualifies as true mania and not hypomania, even if the symptoms are present for less than one week.

- **Option B:** Many families bring their loved ones to the emergency room due to the excessive behavioral changes they have noticed over a brief period. Patients amid a manic phase commonly engage in goal-directed activities that may result in harmful consequences, such as spending excessive money, starting businesses unprepared, traveling, or promiscuity. Many patients engage in property damage or even harm themselves or others through verbal or physical assaults. They may also become highly aggressive, agitated, or irritable.
- **Option C:** Mania also commonly presents with psychotic features, which include delusions or hallucinations. Many patients endorse grandiose delusions, believing they are high-level operatives such as spies, government officials, members of secret agencies, or that they are knowledgeable professionals (even when they have no such background). These individuals may also experience auditory or visual hallucinations, which only present when they are in the manic phases.

29. A 65 year old female is experiencing a flare-up of pruritus. Which of the client's actions could aggravate the cause of flare-ups?

- A. Sleeping in cool and humidified environment
- B. Daily baths with fragrant soap
- C. Using clothes made from 100% cotton
- D. Increasing fluid intake

Correct Answer: B. Daily baths with fragrant soap

The use of fragrant soap is very drying to the skin hence causing pruritus. Avoid factors that may contribute to skin dryness such as overheating, hot baths, and soaps, shower and bath products. Use emollients for dry skin, including for washing, bathing, and showering.

- **Option A:** A cool and humidified environment could help moisten the skin. Dry skin could be very itchy. Lay a cool flannel that has been soaked in an emollient cream on the skin or apply a cooled emollient that has been kept in the refrigerator.
- **Option C:** Cotton is non-irritating and soft for the skin. Patting the skin instead of scratching and keeping nails short. Other interventions may include the use of behavior modification including habit reversal training, phototherapy, the use of systemic medications, which include antidepressants such as tricyclic and SSRIs, and anticonvulsants such as gabapentin and pregabalin.
- **Option D:** Increasing fluid intake could make the skin supple and moist. Using anti-itch creams containing a moisturizer and additional ingredients such as crotamiton, lauromacrogols, menthol, and doxepin is possible. However, their use should be based on the classification as recent evidence does not support using these products for all types of pruritus.

30. Situation: An 18-year-old female is sexually attacked while on her way home from work. She was brought to the hospital by her mother. Rape is an example of which type of crisis:

- A. Situational
- B. Adventitious
- C. Developmental
- D. Internal

Correct Answer: B. Adventitious

Adventitious crisis is a crisis involving a traumatic event. It is not part of everyday life. An adventitious crisis is a crisis of disaster that is not a part of everyday life. It is unplanned or accidental. Adventitious crisis include natural disasters, national disasters, and crimes of violence. Sexual molestation falls within this classification.

- **Option A:** Situational crisis is from an external source that upsets one's psychological equilibrium. Situational crisis arises from an external source such as a job loss, divorce, or other loss affecting self-concept or self-esteem. These occur as part of the process of growing and developing through various periods of life. Sometimes a crisis is a predictable part of the life cycle, such as the crisis described in Erikson's stages of psychosocial development.
- **Options C & D:** These are the same. They are transitional or developmental periods in life. A life crisis in which usual coping mechanisms are inadequate in dealing with stress common to a particular stage in the life cycle or with stress caused by a transition from one stage to another.

31. The physician orders continuous intravenous nitroglycerin infusion for the client with MI. Essential nursing actions include which of the following?

- A. Obtaining an infusion pump for the medication.
- B. Monitoring BP q4h.
- C. Monitoring urine output hourly.
- D. Obtaining serum potassium levels daily.

Correct Answer: A. Obtaining an infusion pump for the medication.

IV nitro infusion requires an infusion pump for precise control of the medication. When administered as a drip in the emergency room or ICU, its effects are often very closely monitored via an arterial line for real-time blood pressure monitoring. This vigilance is necessary to maximize the effectiveness of the drip and provide rapid feedback on the patient's condition.

- **Option B:** BP monitoring would be done with a continuous system, and more frequently than every 4 hours. The drip is frequently used to treat acute coronary syndromes, hypertensive emergency, and acute congestive heart failure (CHF) exacerbations. When administered, its effect requires tight monitoring. Some patients can be more sensitive to the hypotension caused by nitrates, which can result in nausea, vomiting, diaphoresis, pallor, and collapse even at therapeutic doses.
- **Option C:** Hourly urine outputs are not always required. Nitroglycerin is both a protein-bound drug, and undergoes hepatic metabolism. Therefore it has numerous drug interactions. Before prescribing, providers should determine if the patient is taking any medications that may interact with nitroglycerin. Common interactions include alteplase, heparin, tricyclic antidepressants, and other anticholinergic drugs. Alcohol intake should also be limited.
- **Option D:** Obtaining serum potassium levels is not associated with nitroglycerin infusion. Any testing does not currently monitor nitroglycerin levels as its half-life is approximately 2 to 3 minutes, and the drug undergoes rapid metabolism from the body. Continuous monitoring of blood pressure, heart rate, respiratory rate, and oxygen saturation is recommended.

32. What's the first intervention for a patient experiencing chest pain and a pO2 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.

33. A client newly diagnosed with renal failure is receiving peritoneal dialysis. During the infusion of the dialysate the client complains of abdominal pain. Which action by the nurse is most appropriate?

- A. Slow the infusion.
- B. Decrease the amount to be infused.
- C. Explain that the pain will subside after the first few exchanges.
- D. Stop the dialysis.

Correct Answer: C. Explain that the pain will subside after the first few exchanges.

Pain during the inflow of dialysate is common during the first few exchanges because of peritoneal irritation; however, the pain usually disappears after 1 to 2 weeks of treatment. The infusion amount should not be decreased, and the infusion should not be slowed or stopped.

- **Option A:** Explain that initial discomfort usually subsides after the first few exchanges. Monitor for pain that begins during inflow and continues during the equilibration phase. Slow infusion rate as indicated. Pain occurs at these times if acidic dialysate causes a chemical irritation of the peritoneal membrane.
- **Option B:** Do not decrease the infusion amount. Note reports of discomfort that is most pronounced near the end of inflow and instill no more than 2000 mL of solution at a single time. Likely the result of abdominal distension from dialysate. The amount of infusion may have to be decreased initially.
- **Option D:** Stopping the dialysis is unnecessary. Elevate the head of bed at intervals. Turn the patient from side to side. Provide back care and tissue massage. Position changes and gentle massage may relieve abdominal and general muscle discomfort.

34. With which of the following disorders is jugular vein distention most prominent?

- A. Abdominal aortic aneurysm
- B. Heart failure
- C. MI

D. Pneumothorax

Correct Answer: B. Heart failure

Elevated venous pressure, exhibited as jugular vein distention, indicates a failure of the heart to pump. Increased blood volume, which can occur with heart failure, or anything that interferes with filling of the right atrium or movement of the blood into the right ventricle, can increase the central venous pressure and the amount of jugular vein distention.

- **Option A:** The aorta is the largest blood vessel in the body. It delivers oxygenated blood from the heart to the rest of the body. An aortic aneurysm is a bulging, weakened area in the wall of the aorta. Over time, the blood vessel balloons and is at risk for bursting (rupture) or separating (dissection). This can cause life-threatening bleeding and potentially death.
- **Option C:** An MI, if severe enough, can progress to heart failure, however, in and of itself, an MI doesn't cause JVD. In patients with acute inferior-wall MI with right ventricular involvement, distention of neck veins is commonly described as a sign of failure of the right ventricle. Impaired right ventricular function also leads to systemic venous hypertension, edema, and hepatomegaly.
- **Option D:** JVD isn't a symptom of pneumothorax. Tension pneumothorax presents with respiratory distress, jugular venous distention (JVD), diminished breath sounds, tachycardia, and narrow pulse pressure. Although tracheal deviation and jugular venous distention are commonly cited signs of this condition, they both occur late in the condition.

35. Nurse Patrick is interviewing a newly admitted psychiatric client. Which nursing statement is an example of offering a general lead?

- A. "Do you know why you are here?"
- B. "Are you feeling depressed or anxious?"
- C. "Yes, I see. Go on."
- D. "Can you chronologically order the events that led to your admission?"

Correct Answer: C. "Yes, I see. Go on."

The nurse's statement, "Yes, I see. Go on." is an example of the therapeutic communication technique of a general lead. Offering a general lead encourages the client to continue sharing information. General leads indicate that the nurse is listening and following what the client is saying without taking away the initiative for the interaction.

- **Option A:** Asking the client why he is here is a type of exploring. Exploring refers to delving further into a subject or idea. When clients deal with topics superficially, exploring can help them examine the issue more fully. Any problem or concern can be better understood if explored in depth.
- **Option B:** Asking the client if he is depressed or anxious may be inappropriate because it may put words into the client's mouth. It would be best to let the client speak out by offering him leads or encouraging him to voice out his feelings through exploring.
- **Option D:** Placing events in time or sequences refer to clarifying the relationship of events in time. Putting events in proper sequence helps both the nurse and the client to see them in perspective. The client may gain insight into cause-and-effect behavior and consequences.

36. Epinephrine is used to treat cardiac arrest and status asthmaticus because of which of the following actions?

- A. Increased speed of conduction and gluconeogenesis.
- B. Bronchodilation and increased heart rate, contractility, and conduction.
- C. Increased vasodilation and enhanced myocardial contractility.
- D. Bronchoconstriction and increased heart rate.

Correct Answer: B. Bronchodilation and increased heart rate, contractility, and conduction.

Bronchodilation results from stimulated beta receptors, and cardiac effects result from the stimulation of β_1 receptors. Epinephrine is a sympathomimetic catecholamine that exerts its pharmacologic effects on both alpha and beta-adrenergic receptors using a G protein-linked second messenger system. It has a greater affinity for beta receptors in small doses.

- **Option A:** This does not address respiratory effects of medication. However, large doses produce selective action on alpha receptors. Through its action on alpha-1 receptors, epinephrine induces increased vascular smooth muscle contraction, pupillary dilator muscle contraction, and intestinal sphincter muscle contraction.
- **Option C:** A-stimulating drugs cause vasoconstriction. Other significant effects include increased heart rate, myocardial contractility, and renin release via beta-1 receptors.
- **Option D:** Bronchodilation, not bronchoconstriction, results from β_2 activity. Beta-2 effects produce bronchodilation, which may be useful as an adjunct treatment of asthma exacerbations as well as vasodilation, tocolysis, and increased aqueous humor production.

37. Chloride is absorbed in the:

- A. Stomach
- B. Bowel
- C. Liver
- D. Kidney

Correct Answer: B. Bowel

Chloride is absorbed in the bowel, mainly the duodenum and jejunum. Sodium chloride is absorbed from the intestinal lumen by several mechanisms, most prominently by cotransport with glucose and amino acids, and by Na^+/H^+ exchange, both of which move sodium from the lumen into the enterocyte.

- **Option A:** Absorbed sodium is rapidly exported from the cell via sodium pumps – when a lot of sodium is entering the cell, a lot of sodium is pumped out of the cell, which establishes a high osmolarity in the small intercellular spaces between adjacent enterocytes.
- **Option C:** Levels of chlorine closely parallel levels of sodium intake and output, since a primary source of both is sodium chloride, or common table salt. Chlorine is stored to a limited extent in the skin, subcutaneous tissues, and skeleton and constitutes two-thirds of the negatively charged ions (anions) in the blood.
- **Option D:** The majority of the filtered chloride is reabsorbed with sodium during transport through the first portion of the tubule, the proximal tubule. The reabsorption of chloride in this segment occurs in two phases. Both of these active processes raise the intraluminal chloride concentration thus producing, in the later segments of the proximal tubule, the passive movement of chloride along a favorable concentration and electrochemical gradient.

38. The American Association on Mental Deficiency (AAMD), now American Association on Intellectual and Developmental Disabilities (AAIDD) definition of mental retardation emphasizes which of the following?

- A. An IQ level that must be below 50
- B. Cognitive impairment occurring after age 22 years
- C. Deficits in adaptive behavior with intellectual impairment
- D. No responsiveness to contact

Correct Answer: C. Deficits in adaptive behavior with intellectual impairment.

Mental retardation is part of a broad category of developmental disability and is defined by the American Association of Mental Deficiency as “significantly subaverage, general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period (18 years of age).”

- **Option A:** IQ of 70 or below is considered significantly subaverage intellectual functioning. One way to measure intellectual functioning is an IQ test. Generally, an IQ test score of around 70 or as high as 75 indicates a limitation in intellectual functioning.
- **Option B:** Cognitive impairment isn't part of the definition. However, the definition does state that the impairment or compromise must occur before age 22 years old. This condition is one of several developmental disabilities—that is, there is evidence of the disability during the developmental period, which is defined as before the age of 22.
- **Option D:** But in defining and assessing intellectual disability, the AAIDD stresses that additional factors must be taken into accounts, such as the community environment typical of the individual's peers and culture. Professionals should also consider linguistic diversity and cultural differences in the way people communicate, move, and behave.

39. In an infectious diseases ward of a tertiary care facility, you, as a seasoned nurse manager, are assigned the case of Mr. Johnson, a 34-year-old male who has been newly admitted with a diagnosis of streptococcal pharyngitis. This clinical scenario is accompanied by a constellation of symptoms including a sore throat, fever, and swollen lymph nodes. The infection control protocol at your facility necessitates the initiation of droplet precautions to mitigate the risk of transmission of pathogenic microorganisms via respiratory droplets among patients and healthcare personnel alike. With the advent of morning rounds, you engage with a multidisciplinary team to orchestrate a robust management plan for Mr. Johnson. Amid the discussion, you underscore the paramount importance of adhering to infection control measures to curb cross-contamination. This prompts a dialogue among your team regarding the nuances of droplet precaution protocol. Which of the following assertions, when voiced by a team member, mirrors an optimal understanding of the droplet precaution measures warranted in the care of Mr. Johnson?

- A. Positioning Mr. Johnson in a shared room with another patient diagnosed with measles (rubeola) is a viable option to optimize space utilization.

- B. Donning a specialized high-efficiency particulate air-filtering N95 respirator mask is mandatory while delivering care to Mr. Johnson.
- C. Upholding a spatial distancing of a minimum of 3 feet is imperative to avert the dissemination of respiratory droplets to others.
- D. The protocol necessitates the wearing of gloves solely during the provision of direct care to Mr. Johnson.
- E. The implementation of meticulous hand hygiene before and after patient contact is a cornerstone of droplet precaution measures.
- F. It's obligatory to wear a surgical mask when engaged in tasks within the vicinity of Mr. Johnson, even without direct patient contact.

Correct Answer: F. It's obligatory to wear a surgical mask when engaged in tasks within the vicinity of Mr. Johnson, even without direct patient contact.

Wearing a surgical mask is a key aspect of droplet precautions, especially when working within close proximity to the patient, to prevent the inhalation of potentially infectious respiratory droplets. This reflects an optimal understanding of the droplet precaution measures in the given scenario.

- **Option A:** Co-housing patients with different infectious diseases can lead to cross-infections, and this practice is usually not recommended. Measles (rubeola) and streptococcal pharyngitis are caused by different pathogens with different transmission dynamics.
- **Option B:** An N95 respirator mask is specifically designed for airborne precautions (such as tuberculosis or COVID-19), not droplet precautions. In droplet precautions, a regular surgical mask is typically adequate.
- **Option C:** Upholding a spatial distance of 3 feet or more is a part of the CDC's guidelines for droplet precautions to prevent the spread of pathogens via respiratory droplets, which makes this statement accurate. However, donning a surgical mask is more reflective of the primary protective measure under droplet precautions.
- **Option D:** Glove usage is important but is not the primary or sole element of droplet precautions. Moreover, gloves should be worn as per standard precautions, which are applicable to all patients, not just those on droplet precautions.
- **Option E:** While hand hygiene is indeed a cornerstone of infection control measures, it is a standard practice across all types of precautions, not specific to droplet precautions.

40. The nurse is evaluating the discharge teaching for a client who has an ileal conduit. Which of the following statements indicates that the client has correctly understood the teaching? Select all that apply.

- A. "If I limit my fluid intake I will not have to empty my ostomy pouch as often."
- B. "I can place an aspirin tablet in my pouch to decrease odor."
- C. "I can usually keep my ostomy pouch on for 3 to 7 days before changing it."
- D. "I must use a skin barrier to protect my skin from urine."
- E. "I should empty my ostomy pouch of urine when it is full."

Correct Answer: C & D.

The client with an ileal conduit must learn self-care activities related to care of the stoma and ostomy appliances. The ileal conduit is not continent because of its small size. Urine is not collected and held in

the pouch but continuously flows out of the stoma. An ileal conduit requires the client to wear an external urostomy bag that adheres to the skin around the stoma and collects urine.

- **Option A:** The client should be taught to increase fluid intake to about 3,000 ml per day and should not limit intake. Adequate fluid intake helps to flush mucus from the ileal conduit.
- **Option B:** Aspirin should not be used as a method of odor control because it can be an irritant to the stoma and lead to ulceration. Devrom is a chewable odor eliminator that contains bismuth subgallate, which works to neutralize odors from stool and flatulence. Always make sure to talk to a doctor before using any medications and understand any side effects that may occur.
- **Option C:** The ostomy appliance should be changed approximately every 3 to 7 days and whenever a leak develops. If there is itching and burning around the stoma, it is a sign to change the pouching system and clean the surrounding skin.
- **Option D:** A skin barrier is essential to protecting the skin from the irritation of the urine. Cleaning the stoma and skin with water is enough. If the client wishes to use soap, rinse well as soap might affect the adhesiveness of the skin barrier. Pat the skin dry before putting on the skin barrier and pouch.
- **Option E:** The ostomy pouch should be emptied when it is one-third to one-half full to prevent the weight from pulling the appliance away from the skin. The nighttime drainage bag and leg bag should be replaced every 30 days, with a limited number covered by insurance. The drainage bags should be cleansed, especially when switching from a leg bag to a night bag. Both should be rinsed with warm water after each use.

41. A female adult client has a tracheostomy but doesn't require continuous mechanical ventilation. When weaning the client from the tracheostomy tube, the nurse initially should plug the opening in the tube for:

- A. 15 to 60 seconds.
- B. 5 to 20 minutes.
- C. 30 to 40 minutes.
- D. 45 to 60 minutes.

Correct Answer: B. B. 5 to 20 minutes.

Initially, the nurse should plug the opening in the tracheostomy tube for 5 to 20 minutes, then gradually lengthen this interval according to the client's respiratory status. Tracheal plugging is ordered by the doctor to help the client wean off an artificial airway. Plugging covers the opening of the trach tube in the throat, and allowing her to breathe through her nose mouth. Plugging will also help make the sound of her voice stronger.

- **Option A:** A client who doesn't require continuous mechanical ventilation already is breathing without assistance, at least for short periods; therefore, plugging the opening of the tube for only 15 to 60 seconds wouldn't be long enough to reveal the client's true tolerance to the procedure.
- **Option C:** Plugging the opening for more than 20 minutes would increase the risk of acute respiratory distress because the client requires an adjustment period to start breathing normally. Weaning from a tracheostomy tube by either decannulation cap or speaking valve increases the workload of breathing.
- **Option D:** During the weaning process, one of the benefits that can be achieved for the patient is the ability to vocalize for short periods of time. Adjuncts that allow patients to vocalize increase the

workload of breathing and therefore should only be considered for use in patients in whom it has been agreed within the multidisciplinary team to commence weaning from the tracheostomy tube.

42. Hormones secreted by Islets of Langerhans

- A. Progesterone
- B. Testosterone
- C. Insulin
- D. Hemoglobin

Correct Answer: C. Insulin

The Islets of Langerhans are the regions of the pancreas that contain its endocrine cells. Insulin is a peptide hormone secreted in the body by beta cells of islets of Langerhans of the pancreas and regulates blood glucose levels. Medical treatment with insulin is indicated when there is inadequate production or increased demands of insulin in the body.

- **Option A:** Progesterone (Choice A) is produced by the ovaries. Progesterone is an endogenous steroid hormone that is commonly produced by the adrenal cortex as well as the gonads, which consist of the ovaries and the testes. Progesterone is also secreted by the ovarian corpus luteum during the first ten weeks of pregnancy, followed by the placenta in the later phase of pregnancy.
- **Option B:** Testosterone (Choice B) is secreted by the testicles of males and ovaries of females. Testosterone is the primary male hormone responsible for regulating sex differentiation, producing male sex characteristics, spermatogenesis and fertility. Testosterone is responsible for the development of primary sexual development, which includes testicular descent, spermatogenesis, enlargement of the penis and testes, and increasing libido.
- **Option D:** Hemoglobin (Choice D) is a protein molecule in the red blood cells that carries oxygen from the lungs to the body's tissues and returns carbon dioxide. Hemoglobin is an oxygen-binding protein found in erythrocytes which transports oxygen from the lungs to tissues. Each hemoglobin molecule is a tetramer made of four polypeptide globin chains. Each globin subunit contains a heme moiety formed of an organic protoporphyrin ring and a central iron ion in the ferrous state (Fe²⁺). The iron molecule in each heme moiety can bind and unbind oxygen, allowing for oxygen transport in the body.

43. 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.

44. A client with a peptic ulcer reports epigastric pain that frequently awakens her at night, a feeling of fullness in the abdomen, and a feeling of anxiety about her health. Based on this information, which nursing diagnosis would be most appropriate?

- A. Imbalanced Nutrition: Less than Body Requirements related to anorexia.
- B. Disturbed Sleep Pattern related to epigastric pain.
- C. Ineffective Coping related to exacerbation of duodenal ulcer.
- D. Activity Intolerance related to abdominal pain.

Correct Answer: B. Disturbed Sleep Pattern related to epigastric pain.

Based on the data provided, the most appropriate nursing diagnosis would be Disturbed Sleep pattern. A client with a duodenal ulcer commonly awakens at night with pain. Clients with a gastric ulcer typically demonstrate pain 1 to 2 hours after eating. The client with duodenal ulcers demonstrates pain 2 to 4 hours after eating or in the middle of the night. With both gastric and duodenal ulcers, the pain is located in the upper abdomen and is intermittent. The client may report relief after eating or taking an antacid.

- **Option A:** Clients need to learn what foods they can tolerate without gastric pain. Soft, bland, non-acidic foods cause less gastric irritation. The client is more likely to increase food intake if the foods are not associated with pain. Foods that may contribute to mucosal irritation include spicy foods, pepper, and raw fruits and vegetables.
- **Option C:** The client's feelings of anxiety do not necessarily indicate that she is coping ineffectively. Provide emotional support to the client. Providing emotional support will give a client a calming and relaxing mood that will lower anxiety and stress related to the condition.
- **Option D:** Encourage the use of nonpharmacological pain relief measures. Non Pharmacological relaxation techniques will decrease the production of gastric acid, which in turn will reduce pain.

45. An elderly client has been ill with the flu, experiencing headache, fever, and chills. After 3 days, she developed a cough productive of yellow sputum. The nurse auscultates her lungs and hears diffuse crackles. How would the nurse

best interpret these assessment findings?

- A. It is likely that the client is developing a secondary bacterial pneumonia.
- B. The assessment findings are consistent with influenza and are to be expected.
- C. The client is getting dehydrated and needs to increase her fluid intake to decrease secretions
- D. The client has not been taking her decongestants and bronchodilators as prescribed.

Correct Answer: A. It is likely that the client is developing a secondary bacterial pneumonia.

Pneumonia is the most common complication of influenza, especially in the elderly. The development of a purulent cough and crackles may be indicative of a bacterial infection that is not consistent with a diagnosis of influenza.

- **Option B:** Diagnosis of influenza can be reached clinically, especially during the influenza season. Most of the cases will recover without medical treatment, and they would not need a laboratory test for the diagnosis. Signs and symptoms of influenza in mild cases include a cough, fever, sore throat, myalgia, headache, runny nose, and congested eyes. A frontal or retro-orbital headache is a common presentation with selected ocular symptoms that include photophobia and pain with different qualities.
- **Option C:** These findings are not indicative of dehydration. The clinical presentation of influenza ranges from mild to severe depending on the age, comorbidities, vaccination status, and natural immunity to the virus. Usually, patients who received the seasonal vaccine present with milder symptoms, and they are less likely to develop complications.
- **Option D:** Decongestants and bronchodilators are not typically prescribed for the flu. Influenza infection is self-limited and mild in most healthy individuals who do not have other comorbidities. No antiviral treatment is needed during mild infections in healthy individuals. Antiviral medications can be used to treat or prevent influenza infection, especially during outbreaks in healthcare settings such as hospitals and residential institutions.

46. A client with a bowel resection and anastomosis returns to his room with an NG tube attached to intermittent suction. Which of the following observations indicates that the nasogastric suction is working properly?

- A. The client is able to swallow
- B. The client's abdomen is soft
- C. The client has active bowel sounds
- D. The client's abdominal dressing is dry and intact

Correct Answer: B. The client's abdomen is soft

- Option B: Nasogastric suction decompresses the stomach and leaves the abdomen soft and non distended.
- Options A, C, and D: Ability of the patient to swallow, active bowel sounds, and abdominal dressing does not relate to the effectiveness of the NG suction.

47. Which of the following statements about intravenous administration of steroids is true?

- A. Steroids administered intravenously must be diluted.
- B. Steroids administered intravenously can be either in diluted or undiluted form.
- C. Steroids should be given IV push only.
- D. Intravenous administration of steroids is contraindicated in acutely ill clients.

Correct Answer: B. Steroids administered intravenously can be either in diluted or undiluted form.

IV steroids can either be diluted or given without dilution. The route of administration for corticosteroids depends on many factors, primarily being the disorder treated. The route can be parenteral, oral, inhaled, topical, injected (intramuscular, intraarticular, intralesional, intradermal, etc.), and rectal. The clinician must keep many factors in mind upon deciding to initiate corticosteroid therapy, including the route of administration, preparation, dosing, frequency, and duration of treatment.

- **Option A:** Parenteral administration is often used in more emergent therapy as well as in those unable to tolerate medication by mouth. Oral administration is more common for chronic treatment. Patients should receive non-systemic therapy whenever possible, to minimize systemic exposure.
- **Option C:** When administering Methylprednisolone sodium succinate in high doses intravenously it should be given over a period of at least 30 minutes. Doses up to 250 mg should be given intravenously over a period of at least five minutes.
- **Option D:** The toxicity of corticosteroids accounts for one of the most common causes of iatrogenic illness in patients on chronic therapy. No specific reversal agent exists for corticosteroids. Their effect in excess is manageable by gradual taper and addressing the particular complication (e.g., hyperglycemia, infection, hypertension).

48. Which of the following is the most important nursing order in a client with major head trauma who is about to receive bolus enteral feeding?

- A. Measure intake and output
- B. Check albumin level
- C. Monitor glucose levels
- D. Increase enteral feeding

Correct Answer: A. Measure intake and output

It is important to measure intake and output, which should be equal. Water given before feeding will present a hyperosmotic diuresis. I and O measures assess fluid balance. A urinary catheter is inserted to assess the adequacy of renal perfusion. The kidney requires 20% to 25% of cardiac output; commonly, it's the first organ to show the effects of impaired perfusion or intravascular volume.

- **Option B:** Osmotherapy aims to increase the osmolality of the intravascular space, which in turn helps mobilize excess fluid from brain tissue. If ICP increases, mannitol (an osmotic diuretic) may be given to decrease cerebral edema, transiently increase intravascular volume, and improve cerebral blood flow.
- **Option C:** Low peripheral oxygen saturation values or low arterial blood oxygen values (as shown by arterial blood gas testing) should be avoided. Maintaining adequate brain tissue oxygenation seems to improve patient outcomes.

- **Option D:** Enteral feedings are hyperosmotic agents pulling fluid from cells into the vascular bed. Initially, a nasogastric or orogastric tube is inserted to decompress the stomach and reduce the aspiration risk. (Typically, the nasal route is avoided as it can obstruct sinus drainage, leading to sinusitis or VAP).

49. The client asks the nurse to explain the action of infiltration anesthesia. The nurse's response is based on the knowledge that infiltration anesthesia:

- A. Is applied only to mucous membranes to provide local anesthesia.
- B. Blocks a specific group of nerves in tissues close to the operative area.
- C. Blocks sensation to an entire limb, or a large area of the face.
- D. Produces numbing to large, regional areas such as the lower abdomen and legs.

Correct Answer: B. Blocks a specific group of nerves in tissues close to the operative area.

Infiltration anesthesia blocks a specific group of nerves close to the operative area by diffusion of a drug into the tissues. It is used to anesthetize small areas. Lower concentrations of local anesthetics are typically used for infiltration anesthesia. Infiltration anesthesia is accomplished with the administration of the local anesthetic solution intradermally (ID), subcutaneously (SC), or submucosally across the nerve path that supplies the area of the body that requires anesthesia.

- **Option A:** Topical anesthetics are applied to mucous membranes. Topical anesthetics reversibly block nerve conduction near their site of administration, thereby producing temporary loss of sensation in a limited area. Nerve impulse conduction is blocked by decreasing nerve cell membrane permeability to sodium ions, possibly by competing with calcium-binding sites that control sodium permeability. This change in permeability results in decreased depolarization and an increased excitability threshold that, ultimately, prevents the nerve action potential from forming.
- **Option C:** Nerve blocks provide anesthesia to a large surface area. Peripheral nerve blocks are a type of regional anesthesia. The anesthetic is injected near a specific nerve or bundle of nerves to block sensations of pain from a specific area of the body. Nerve blocks usually last longer than local anesthesia.
- **Option D:** Spinal anesthesia affects large, regional areas. Spinal anesthesia is a neuraxial anesthesia technique in which local anesthetic is placed directly in the intrathecal space (subarachnoid space). The subarachnoid space houses sterile cerebrospinal fluid (CSF), the clear fluid that bathes the brain and spinal cord.

50. Nurse Melinda is caring for a client who is postoperative following a pelvic exenteration and the physician changes the client's diet from NPO status to clear liquids. The nurse makes which priority assessment before administering the diet?

- A. Ability to ambulate
- B. Urine specific gravity
- C. Bowel sounds
- D. Incision appearance

Correct Answer: C. Bowel sounds

- **Option C:** The client is kept NPO until peristalsis returns, usually in 4 to 6 days. When signs of bowel function return, clear fluids are given to the client. If no distention occurs, the diet is advanced as tolerated. The most important assessment is to assess bowel sounds before feeding the client.
- **Options A, B, and D:** These are unrelated to the subject of the question.

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

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

Correct Answer: B. The dose is too low

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

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

52. For which time period would the nurse notify the health care provider that the client had no bowel sounds?

- A. 2 minutes
- B. 3 minutes
- C. 4 minutes
- D. 5 minutes

Correct Answer: D. 5 minutes

To completely determine that bowel sounds are absent, the nurse must auscultate each of the four quadrants for at least 5 minutes; 2, 3, or 4 minutes is too short a period to arrive at this conclusion. The first item to listen for is the presence of bowel sounds. To chart an assessment finding of no bowel

sounds, the nurse needs to listen over the quadrant for at least five minutes. The nurse should also do the auscultation before palpation and percussion to avoid influencing bowel sounds.

- **Option A:** In most cases, bowel sounds are present, but the nurse needs to categorize them. She should listen for the intensity of the sound – whether it is soft or strong. The nurse should also listen for frequency. Hypoactive bowel sounds could indicate a problem, so if the nurse is having trouble hearing them, this is significant.
- **Option B:** Auscultating bowel sounds can allow the nurse to pinpoint areas where an obstruction may have occurred. Finding no bowel sounds can mean an ileus or obstruction above that area of the intestine.
- **Option C:** Hypoactive bowel sounds are considered as one every three to five minutes, and this can indicate diarrhea, anxiety, or gastroenteritis. Hyperactive bowel sounds are often found before a blockage. It is quite common to find one quadrant with hyperactive bowel sounds and one with none or hypoactive ones.

53. A patient has returned to his room after femoral arteriography. All of the following are appropriate nursing interventions except:

- A. Assess femoral, popliteal, and pedal pulses every 15 minutes for 2 hours.
- B. Check the pressure dressing for sanguineous drainage.
- C. Assess vital signs every 15 minutes for 2 hours.
- D. Order a hemoglobin and hematocrit count 1 hour after the arteriography.

Correct Answer: D. Order a hemoglobin and hematocrit count 1 hour after the arteriography

A hemoglobin and hematocrit count would be ordered by the physician if bleeding were suspected. Arterial puncture occurs at the start of angiography and interventional radiology, and is a very important factor determining the success or failure of successive procedures. Recently, this procedure has been performed by a range of approaches depending on the type of surgery, e.g, through the radial artery.

- **Option A:** The methods of hemostasis for the femoral artery include manual compression, which is the removal of the sheath and compression with the hands, and methods that apply compression devices¹). Of these, manual compression requires absolute bed rest for a few hours. On the other hand, the level of patient discomfort is increased due to lengthy bed rest and the restriction of walking.
- **Option B:** Moreover, hematoma in the punctured area of blood vessels, formation of a pseudoaneurysm, and vascular occlusions develop in approximately 1–5% of cases). A variety of hemostasis devices have been developed to treat these complications that allow for rapid recovery of patients from bed rest. These include Angio-seal device (collagen sponge and copolymer anchor) and percutaneous placement of a device (Prostar) that utilizes two nonabsorbable sutures (Perclose, Redwood City, CA, USA).
- **Option C:** The other answers are appropriate nursing interventions for a patient who has undergone femoral arteriography. The Angio-seal device uses a method of adsorption with a collagen sponge placed within the blood vessels. The Prostar device uses a method in which the blood vessels are sutured. These hemostasis devices can reduce the discomfort and the time to hemostasis (clotting time) in the puncture area when used in patients, who cannot lie down in bed for a long time or in patients with low platelet values who have received anticoagulation treatments.

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

- A. Nausea
- B. Fatigue
- C. Early decelerations of the fetal heart rate
- D. Uterine hyperstimulation

Correct Answer: D. Uterine hyperstimulation.

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

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

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

- A. Blood-streaked sputum
- B. Dry cough
- C. Hematuria
- D. Bronchospasm

Correct Answer: D. Bronchospasm

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

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

56. What would be the appropriate first nursing action when caring for a 20-year old G1P0 woman at 39 weeks gestation who is in active labor and for whom an assessment reveals mild variable fetal heart rate deceleration

- A. Notify the physician
- B. Prepare the client for immediate delivery
- C. Readjust the fetal monitor
- D. Change the maternal position

Correct Answer: D. Change the maternal position

The cause of variable fetal heart decelerations is umbilical cord compression, which can usually be corrected by changing the maternal position.

- **Option A:** Before informing the physician, the nurse must first intervene. Common causes of variable decelerations include vagal reflex triggered by head compression during pushing and cord compression such as that caused by short cord, nuchal cord, body entanglement, prolapsed cord, decreased amniotic fluid, and fetal descent.
- **Option B:** Perform a cervical exam to rule out prolapsed cord and funic presentation and check for imminent delivery only if appropriate.
- **Option C:** Variable decelerations occur when the fetal heart rate decrease is greater than or equal to 15 beats per minute and last for longer than or equal to 15 seconds but less than 2 minutes from onset to return to baseline.

57. A male client has a history of painful, continuous muscle spasms. He has taken several skeletal muscle relaxants without experiencing relief. His physician prescribes diazepam (Valium), two (2) mg P.O. twice daily. In addition to being used to relieve painful muscle spasms, Diazepam also is recommended for:

- A. Long-term treatment of epilepsy.
- B. Postoperative pain management of laminectomy clients.
- C. Postoperative pain management of diskectomy clients.
- D. Treatment of spasticity associated with spinal cord lesions.

Correct Answer: D. Treatment of spasticity associated with spinal cord lesions.

In addition to relieving painful muscle spasms, Diazepam also is recommended for treatment of spasticity associated with spinal cord lesions. Diazepam's use is limited by its central nervous system effects and the tolerance that develops with prolonged use. It is a fast-acting, long-lasting benzodiazepine commonly used in the treatment of anxiety disorders, as well as alcohol detoxification, acute recurrent seizures, severe muscle spasm, and spasticity associated with neurologic disorders.

- **Option A:** The parenteral form of diazepam can treat status epilepticus, but the drug's sedating properties make it an unsuitable choice for long-term management of epilepsy. Diazepam HAS FDA approval for the management of anxiety disorders, short-term relief of anxiety symptoms, spasticity associated with upper motor neuron disorders, adjunct therapy for muscle spasms, preoperative anxiety relief, management of certain refractory epilepsy patients and adjunct in severe recurrent convulsive seizures, and an adjunct in status epilepticus.
- **Option B:** Diazepam is not used for pain management. Specifically, the allosteric binding within the limbic system leads to the anxiolytic effects seen with diazepam. Allosteric binding within the spinal cord and motor neurons is the primary mediator of the myorelaxant effects seen with diazepam.

Mediation of the sedative, amnestic, and anticonvulsant effects of diazepam is through receptor binding within the cortex, thalamus, and cerebellum.

- **Option C:** Diazepam isn't an analgesic agent. Benzodiazepines have largely replaced barbiturates in the treatment of anxiety and sleep disorders because of their improved safety profile, fewer side effects, and the availability of the antagonist flumazenil to reverse oversedation and benzodiazepine intoxication.

58. The nurse develops a countertransference reaction. This is evidenced by:

- A. The client feels angry towards the nurse who resembles his mother.
- B. Focusing on the feelings of the client.
- C. Confronting the client about discrepancies in verbal or non-verbal behavior.
- D. Revealing personal information to the client.

Correct Answer: D. Revealing personal information to the client.

Countertransference is an emotional reaction of the nurse on the client based on her unconscious needs and conflicts. Countertransference, which occurs when a therapist transfers emotions to a person in therapy, is often a reaction to transference, a phenomenon in which the person in treatment redirects feelings for others onto the therapist. Signs of countertransference in therapy can include a variety of behaviors, including excessive self-disclosure on the part of the therapist or an inappropriate interest in irrelevant details from the life of the person in treatment. A therapist who acts on their feelings toward the person being treated or that person's situation or engages in behavior not appropriate to the treatment process may not be effectively managing countertransference.

- **Option A:** This is a transference reaction where a client has an emotional reaction towards the nurse based on her past. Transference describes a situation where the feelings, desires, and expectations of one person are redirected and applied to another person. Most commonly, transference refers to a therapeutic setting, where a person in therapy may apply certain feelings or emotions toward the therapist.
- **Option B:** Focusing, an approach to therapeutic treatment in which the therapist works to help the individual in treatment gain awareness into their bodily felt sense, is meant to help people seeking treatment learn to direct their attention toward things they experience that are difficult to describe in a concrete way.
- **Option C:** Nurses should only apply this technique after they have established trust. It can be vital to the care of patients to disagree with them, present them with reality, or challenge their assumptions. Confrontation, when used correctly, can help patients break destructive routines or understand the state of their situation.

59. You're a pediatric nurse working with a family who has recently adopted a 2-year-old child named Mia. This is the family's first time adopting, and they are particularly concerned about ensuring they provide the right environment for her developmental needs. Mia is an active toddler who loves exploring but has had minor falls. During your nursing education session, you emphasized the importance of balancing safety, exploration, and skill development at this stage of Mia's life. Which of the following statements made by Mia's mother indicates that she has a clear understanding of her daughter's developmental needs at this age?

- A. "I want to protect my child from any falls."
- B. "I will set limits on exploring the house."
- C. "I understand the need to use those new skills."
- D. "I intend to keep control over our child."

Correct Answer: C. "I understand the need to use those new skills."

Erikson describes the stage of the toddler as being the time when there is normally an increase in autonomy. The child must use motor skills to explore the environment and develop autonomy.

- **Option A:** The statement in Option A is correct but pertains to the risks associated with a toddler.
- **Option B:** Setting limits on a toddler may cause frustration instead of independence.
- **Option D:** Controlling the child may harm her development as toddlers should develop autonomy at this stage.

60. With the image below, what is the name of the structure marked #1?

- A. Ureter
- B. Urinary bladder
- C. Urethra
- D. Spleen
- E. Pancreas
- F. Kidney

Correct answer: F. Kidney

- The kidneys are two bean-shaped organs that are located in the back of the abdomen, one on each side of the spine. They are responsible for filtering waste products from the blood and producing urine.
- The kidneys are about 10-12 centimeters long and 5-7 centimeters wide. They are made up of three main parts:
- **The cortex:** This is the outer layer of the kidney. It contains the nephrons, which are the functional units of the kidney.
- **The medulla:** This is the inner layer of the kidney. It contains the collecting ducts, which carry urine from the nephrons to the ureters.
- **The pelvis:** This is the central part of the kidney. It collects urine from the collecting ducts and channels it into the ureters.

61. The physician has ordered a histoplasmosis test for the elderly client. The nurse is aware that histoplasmosis is transmitted to humans by:

- A. Cats
- B. Dogs

- C. Turtles
- D. Birds

Correct Answer: D. Birds

Histoplasmosis is a fungus carried by birds.

- **Options A, B, C:** Histoplasmosis is not transmitted to humans by cats, dogs, or turtles.

62. Situation: A 30-year-old male employee frequently complains of low back pain that leads to frequent absences from work. Consultation and tests reveal negative results. The client has which somatoform disorder?

- A. Somatization Disorder
- B. Hypochondriasis
- C. Conversion Disorder
- D. Somatoform Pain Disorder

Correct Answer: D. Somatoform Pain Disorder

This is characterized by severe and prolonged pain that causes significant distress. Pain disorder is fairly common. Although the pain is associated with psychological factors at its onset (e.g., unexplained chronic headache that began after a significant stressful life event), its onset, severity, exacerbation, or maintenance may also be associated with a general medical condition. Pain is the focus of the disorder, but psychological factors are believed to play the primary role in the perception of pain.

- **Option A:** This is a chronic syndrome of somatic symptoms that cannot be explained medically and is associated with psychosocial distress. Somatization disorder is a mental disorder characterized by recurring, multiple, and current, clinically significant complaints about somatic symptoms. It was recognized in the DSM-IV-TR classification system, but in the latest version of DSM-5, it was combined with undifferentiated somatoform disorder to become somatic symptom disorder, a diagnosis which no longer requires a specific number of somatic symptoms.
- **Option B:** This is an unrealistic preoccupation with a fear of having a serious illness. Illness anxiety disorder (IAD) is a recent term for what used to be diagnosed as hypochondriasis, or hypochondria. People diagnosed with IAD strongly believe they have a serious or life-threatening illness despite having no, or only mild, symptoms. Yet IAD patients' concerns are to them very real. Even if they go to doctors and no illnesses are found, they are generally not reassured and their obsessive worry continues.
- **Option C:** Characterized by alteration or loss in sensory or motor function resulting from a psychological conflict. Conversion disorder is a mental condition in which a person has blindness, paralysis, or other central nervous system (neurologic) symptoms that cannot be explained by medical evaluation. People who have conversion disorder are not making up their symptoms in order to obtain shelter, for example (malingering). They are also not intentionally injuring themselves or lying about their symptoms just to become a patient (factitious disorder). Some health care providers falsely believe that conversion disorder is not a real condition and may tell people that the problem is all in their head. But this condition is real. It causes distress and cannot be turned on and off at will.

63. A nurse evaluates the blood theophylline level of a client receiving aminophylline (theophylline) by intravenous infusion. The nurse would

determine that a therapeutic blood level exists if any of the following were noted in the laboratory report?

- A. 5 mcg/mL
- B. 15 mcg/mL
- C. 25 mcg/mL
- D. 30 mcg/mL

Correct Answer: B. 15 mcg/mL

Therapeutic theophylline blood levels range from 10-20 mcg/mL. Patients can be administered IV theophylline for acute bronchospasm. Those who are not currently taking theophylline should be given a loading dose of 5 to 7 mg/kg intravenously, followed by a maintenance dose of 0.4 to 0.6 mg/kg per hour intravenously to maintain serum concentrations at 10 to 15 mg/L.

- **Option A:** In patients with cardiac decompensation, cor pulmonale, older patients or those on medications that are known to decrease theophylline clearance, the infusion rate of theophylline should not be increased above 17 mg per hour unless the patient remains symptomatic, their steady-state serum concentrations are consistently below 10 mcg/mL, and their serum concentrations are observable at 24-hour intervals.
- **Option C:** The serum theophylline concentrations require monitoring directly to avoid toxicity as the adverse effects of theophylline are related to its plasma concentration and have been observed when plasma concentrations exceed 20 mg/L.
- **Option D:** Serum concentration of theophylline should be measured to one expected half-life (approximately 4 hours in young children [ages 1 to 9 years], or around 8 hours in otherwise healthy adults, who do not smoke) after administering a continuous infusion, then checked every 12 to 24 hours to establish if any further adjustments are required, and then at 24-hour intervals for the remainder of the infusion.

64. A client, age 41, visits the gynecologist. After examining her, the physician suspects cervical cancer. The nurse reviews the client's history for risk factors for this disease. Which history finding is a risk factor for cervical cancer?

- A. Pregnancy complicated with eclampsia at age 27
- B. Spontaneous abortion at age 19
- C. Onset of sporadic sexual activity at age 17
- D. Human papillomavirus infection at age 32

Correct Answer: D. Human papillomavirus infection at age 32

- **Option D:** Like other viral and bacterial venereal infections, human papillomavirus is a risk factor for cervical cancer. Other risk factors for this disease include multiple sex partners, multiple pregnancies, long-term use of oral contraceptives and diethylstilbestrol (DES).
- **Options A and B:** A spontaneous abortion and pregnancy complicated by eclampsia aren't risk factors for cervical cancer.
- **Option C:** Risk factors for this disease include frequent sexual intercourse before age 16.

65. The nurse is evaluating neurological signs of the male client in spinal shock following spinal cord injury. Which of the following observations by the nurse indicates that spinal shock persists?

- A. Positive reflexes
- B. Hyperreflexia
- C. Inability to elicit a Babinski's reflex.
- D. Reflex emptying of the bladder.

Correct Answer: C. Inability to elicit a Babinski's reflex.

Resolution of spinal shock is occurring when there is a return of reflexes (especially flexors to noxious cutaneous stimuli), a state of hyperreflexia rather than flaccidity, reflex emptying of the bladder, and a positive Babinski's reflex. It is more appropriate to use the trauma activation code announced when a patient with spinal shock arrives at the emergency department, that way the trauma team can complete a full workup for the patient. The full spinal examination should include motor, sensory reflexes including bulbocavernosus reflex and anal wink reflex.

- **Option A:** Often it is observed that the patient starts losing neurologic function above the level of injury, which brings anxiety to an inexperienced provider prompting more imaging of the patient's spinal cord. Loss of function that happens several days post-injury above the level of the injury is mostly due to spinal cord pathways rearrangement.
- **Option B:** Once this process abates, the function above the injury returns to normal, although the exact time needed for this process is not precisely defined and could last from weeks to months. If a patient survives the initial injury but remains immobile, the area fills with gliotic tissue.
- **Option D:** Motor activity and strength decrease not only in the skeletal muscles but the motor activity of internal organs like bowel and bladder. This decrease leads to constipation and urinary retention. It is of utmost importance to record an American Spinal Injury Association (ASIA) score as prognostic long-term expectations can be made with fair accuracy before any discussion with family and the patient. While evaluating the patient, assume their spine is unstable and take all the necessary precautions to keep it stable until final imaging is obtained and stability is established.

66. Nurse Errol is administering 2 drops of medication in OS prior to ophthalmic surgery. Which interventions should he implement? Select all that apply.

- A. Instructing the client to look up prior to administering the medication.
- B. Administering the medication into the right eye.
- C. Administering the medication into the upper conjunctiva.
- D. Pulling the left ear up and back prior to administering the medication.
- E. Wiping the excess medication from the inner to the outer canthus.
- F. Pressing on the nasal-lacrimal canal.

Correct Answers: A, E, F

The nurse is administering medication into the left eye (OS) for ophthalmic surgery, which includes instructing the client to look up, administering the medication into the lower conjunctiva, pressing on the nasal-lacrimal canal to prevent systemic drug absorption, and wiping excess secretions with a sterile cotton ball from the inner to outer canthus.

- **Option A:** Tilt the client's head back slightly and lookup. Some people find it helpful to focus on a specific point on the ceiling. It might help to tape a photo or clipping from a magazine to the ceiling so that the eyes can focus on it.
- **Option B:** The abbreviation for left eye is OS. The abbreviation for the right eye is OD and both eyes are OU. Make sure that the medication is administered to the right eye to prevent any side effects on the good eye.
- **Option C:** Remove the cap of the eye drop medication but do not touch the dropper tip. Hold the dropper tip directly over the eyelid pocket. Squeeze the bottle gently and let the eye drop fall into the pocket.
- **Option D:** Pulling the ear up and back is used to administer ear drops to an adult client. In administering eye drops, use one hand to pull your lower eyelid down, away from the eye. This forms a pocket to catch the drop. Don't touch the bottle to the eye or eyelid. This can give bacteria or other contaminants a chance to grow in the eye drops.
- **Option E:** Use clean tissues to wipe off any extra ointment around the eye. Wipe the top of the tube before replacing the cap. It's important that the tip of the tube never touches anything.
- **Option F:** Apply gentle pressure to the nasal-lacrimal canal or the tear ducts, where the eyelid meets the nose. Hold the tear ducts closed for a minute or two—or as long as the ophthalmologist recommends—before opening the eyes. This will give the drop time to be absorbed by the eye, instead of draining into the nose.

67. Which of the following measures can reduce or prevent the incidence of atelectasis in a postoperative client?

- A. Chest physiotherapy
- B. Mechanical ventilation
- C. Reducing oxygen requirements
- D. Use of an incentive spirometer.

Correct Answer: D. Use of an incentive spirometer.

Using an incentive spirometer requires the client to take deep breaths and promotes lung expansion. Incentive spirometry is designed to mimic natural sighing or yawning by encouraging the patient to take long, slow, deep breaths. This decreases pleural pressure, promoting increased lung expansion and better gas exchange. When the procedure is repeated on a regular basis, atelectasis may be prevented or reversed.

- **Option A:** Chest physiotherapy helps mobilize secretions but won't prevent atelectasis. Techniques that help the client breathe deeply after surgery to re-expand collapsed lung tissue are very important. These techniques are best learned before surgery. Positioning the body so that the head is lower than the chest (postural drainage). This allows mucus to drain better from the bottom of the lungs.
- **Option B:** Reducing oxygen requirements doesn't affect the development of atelectasis. Removal of airway obstructions may be done by suctioning mucus or by bronchoscopy. During bronchoscopy, the doctor gently guides a flexible tube down the throat to clear the airways.
- **Option C:** Placing someone on mechanical ventilation doesn't improve atelectasis. Continuous positive airway pressure (CPAP) may be helpful in some people who are too weak to cough and have low oxygen levels (hypoxemia) after surgery.

68. A man brings his elderly wife to the emergency department. He states that she has been vomiting and has had diarrhea for the past two days. She appears lethargic and is complaining of leg cramps. What should the nurse do first?

- A. Start an IV.
- B. Review the results of serum electrolytes.
- C. Offer the woman foods that are high in sodium and potassium content.
- D. Administer an antiemetic.

Correct Answer: B. Review the results of serum electrolytes.

Further assessment is needed to determine appropriate action. While the nurse may perform some of the interventions in options one, three, and four, assessment is needed initially. Electrolyte abnormalities may be addressed on an individual level, although often these are caused by an overall fluid volume depletion which, when corrected, will also cause electrolytes to normalize. Both saline and lactated Ringer's solutions appear to be effective for the treatment of dehydration due to viral gastroenteritis.

- **Option A:** The most important goal of treatment is to maintain hydration status and effectively counter fluid and electrolyte losses. Fluid therapy is a fundamental part of treatment. Intravenous fluids may be administered to those individuals who appear dehydrated or to those unable to tolerate oral fluids.
- **Option C:** No specific nutritional recommendations are universal for patients with viral gastroenteritis. A diet of banana, rice, apples, tea, and toast is often advised, but several studies have failed to show any significant outcome difference when compared to regular diets.
- **Option D:** Antiemetic medications such as ondansetron or metoclopramide may be used to assist with controlling nausea and vomiting symptoms. Patients demonstrating severe dehydration or intractable vomiting may require hospital admission for continued intravenous fluids and careful monitoring of electrolyte status.

69. A client in the family planning clinic asks the nurse about the most likely time for her to conceive. The nurse explains that conception is most likely to occur when:

- A. Estrogen levels are low.
- B. Luteinizing hormone is high.
- C. The endometrial lining is thin.
- D. The progesterone level is low.

Correct Answer: B. Luteinizing hormone is high.

Luteinizing hormone released by the pituitary is responsible for ovulation. At about day 14, the continued increase in estrogen stimulates the release of luteinizing hormone from the anterior pituitary. The LH surge is responsible for ovulation, or the release of the dominant follicle in preparation for conception, which occurs within the next 10–12 hours after the LH levels peak.

- **Option A:** Estrogen levels are high at the beginning of ovulation. At about day 14 in the menstrual cycle, a sudden surge in luteinizing hormone causes the ovary to release its egg. The egg begins its five-day travel through a narrow, hollow structure called the fallopian tube to the uterus. As the

egg is traveling through the fallopian tube, the level of progesterone, another hormone, rises, which helps prepare the uterine lining for pregnancy.

- **Option C:** The endometrial lining is thick, not thin. The blastocyst then attaches itself to the lining of the uterus (the endometrium). This attachment process is called implantation. Release of the hormones estrogen and progesterone causes the endometrium to thicken, which provides the nutrients the blastocyst needs to grow and eventually develop into a baby.
- **Option D:** The progesterone levels are high, not low. As cells continue to divide — some developing into the baby, others forming the nourishment and oxygen supply structure called the placenta — hormones are released that signal the body that a baby is growing inside the uterus. These hormones also signal the uterus to maintain its lining rather than shedding it.

70. An inborn error of metabolism that causes premature destruction of RBC?

- A. G6PD
- B. Homocystinuria
- C. Phenylketonuria
- D. Celiac Disease

Correct Answer: A. G6PD

Glucose-6-phosphate dehydrogenase deficiency (G6PD) is an X-linked recessive hereditary disease characterized by abnormally low levels of glucose-6-phosphate dehydrogenase (abbreviated G6PD or G6PDH), a metabolic enzyme involved in the pentose phosphate pathway, especially important in red blood cell metabolism.

- **Option B:** Homocystinuria is a disorder of methionine metabolism, leading to an abnormal accumulation of homocysteine and its metabolites (homocysteine, homocysteine-cysteine complex, and others) in blood and urine. Normally, these metabolites are not found in appreciable quantities in blood or urine.
- **Option C:** Phenylketonuria (PKU) is an inborn error of metabolism (IEM) most often caused by missense mutations in the gene encoding phenylalanine hydroxylase (PAH), which catalyzes the hydroxylation of phenylalanine (Phe) to generate tyrosine (Tyr). Elevated blood Phe levels and decreased Tyr levels characterize PKU. Newborns with PKU can appear normal at birth with the first signs appearing after several months.
- **Option D:** Celiac disease, also known as gluten-sensitive enteropathy, is an autoimmune disease of the small intestine. Celiac disease is a condition in which the body responds to gluten with an inappropriate immune response causing small intestinal inflammation and damage.

71. A child with β -thalassemia is undergoing a blood transfusion. To prevent organ damage from the excessive amount of iron, chelation therapy is prescribed. Which of the following medications will be added to this therapy?

- A. Dextromethorphan
- B. Desirudin
- C. Deferasirox
- D. Desipramine

Correct Answer: C. Deferasirox.

Chelation therapy with deferasirox (Exjade) or deferoxamine (Desferal) is prescribed to prevent organ damage from the presence of too much iron in the body as a result of the transfusion.

Transfusion-related iron overload occurs in patients that require frequent transfusions throughout their life. These patients include those affected by Thalassemia, Sickle cell disease, myelodysplastic syndromes, ineffective hematopoiesis, and other inherited anemia disorders.

- **Option A:** This is a cough suppressant. Dextromethorphan received FDA approval in 1958 for its use as a cough suppressant. It is one of the most common compounds found in most over-the-counter antitussives for the past 50 years.
- **Option B:** This is a thrombin inhibitor. Desirudin is used to prevent a type of blood clot called deep vein thrombosis (DVT), which can lead to blood clots in the lungs (pulmonary embolism).
- **Option D:** This is an antidepressant. Desipramine is a secondary amine tricyclic antidepressant that is FDA approved for the treatment of depression. This drug has off-label use to treat bulimia nervosa, irritable bowel syndrome, neuropathic pain, overactive bladder, post-herpetic neuralgia, and ADHD.

72. Four hours after a difficult labor and birth, a primiparous woman refuses to feed her baby, stating that she is too tired and just wants to sleep. The nurse should: Select all that apply.

- A. Tell the woman she can rest after she feeds her baby.
- B. Recognize this as a behavior of the taking-in stage.
- C. Record the behavior as ineffective maternal-newborn attachment.
- D. Take the baby back to the nursery, reassuring the woman that her rest is a priority at this time.
- E. Acknowledge this as a behavior of the letting go stage.

Correct Answer: B and D.

The behavior described is typical of this stage and not a reflection of ineffective attachment unless the behavior persists. Mothers need to reestablish their own well-being in order to effectively care for their baby. The taking-in phase usually sets 1 to 2 days after delivery. This is the time of reflection for the woman because within the 2 to 3 day period, the woman is passive. The woman prefers to talk about her experiences during labor and birth and also her pregnancy. The woman becomes dependent on her healthcare provider or support person with some of the daily tasks and decision-making. The changes that the woman undergoes are crucial within the first 24 hours of postpartum, especially the psychological changes. These changes might affect the woman permanently if not given the appropriate attention and care.

- **Option A:** This does not take into consideration the need for the new mother to be nurtured and have her needs met during the taking-in stage. The taking-in phase provides time for the woman to regain her physical strength and organize her rambling thoughts about her new role. Encouraging the woman to talk about her experiences during labor and birth would greatly help her adjust and let her incorporate it into her new life.
- **Option C:** This dependence is mainly due to her physical discomfort from hemorrhoids or the after pains, from the uncertainty of how she could care for the newborn, and also from the extreme tiredness she feels that follows childbirth. The taking-in phase provides time for the woman to regain her physical strength and organize her rambling thoughts about her new role.

- **Option E.** During the letting go phase, the woman finally accepts her new role and gives up her old roles like being a childless woman or just a mother of one child.

73. A client with a new stoma who has not had a bowel movement since surgery last week reports feeling nauseous. What is the appropriate nursing action?

- A. Prepare to irrigate the colostomy.
- B. After assessing the stoma and surrounding skin, notify the surgeon.
- C. Assess bowel sounds and administer antiemetic.
- D. Administer a bulk forming laxative, and encourage increased fluids and exercise.

Correct Answer: B. After assessing the stoma and surrounding skin, notify the surgeon.

The client has assessment findings consistent with complications of surgery. Providers and nurses should monitor stomas at regular intervals to look for the multiple complications of colostomies as an integrated team approach. Some complications are extremely troublesome to patients, and they come to the hospital with these presentations, but others may be more occult and have to be looked for.

- **Option A:** Irrigating the stoma is a dependent nursing action, and is also intervention without appropriate assessment. Some procedures like irrigation or enema should be avoided in case of stoma prolapse, chemotherapy, pelvic or abdominal radiation treatments, diarrhea-producing medication, or in case of an irregular functioning stoma and may lead to dependence.
- **Option C:** Assessing the peristomal skin area is an independent action, but administering an antiemetic is an intervention without appropriate assessment. Antiemetics are generally ordered to treat immediate postoperative nausea, not several days postoperative.
- **Option D:** Administering a bulk-forming laxative to a nauseated postoperative client is contraindicated. The surgeon must call the patient for regular follow up to assess the condition of the stoma and look for any complications and also assess the disease process for which the colostomy was made and also plan for colostomy closure in case of temporary colostomies.

74. 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.

75. The client is receiving cisplatin (Platinol-AQ). Which of the following side effect is related to the medication?

- A. Depressed tendon reflexes
- B. Photosensitivity
- C. Tinnitus
- D. Ptosis

Correct Answer: C. Tinnitus

Cisplatin (Platinol-AQ), an alkylating medication, may cause ototoxicity, tinnitus, hypokalemia, hypomagnesemia, hypocalcemia, and nephrotoxicity.

- **Option A:** This is a sign of hypermagnesemia.
- **Options B & D:** These are side effects not related to this medication.

76. Situation: The nurse assigned to the detoxification unit attends to various patients with substance-related disorders. A 45 years old male revealed that he experienced a marked increase in his intake of alcohol to achieve the desired effect. This indicates:

- A. Withdrawal
- B. Tolerance
- C. Intoxication
- D. Psychological dependence

Correct Answer: B. Tolerance

Tolerance refers to the increase in the amount of the substance to achieve the same effects. Tolerance means that after continued drinking, consumption of a constant amount of alcohol produces a lesser effect or increasing amounts of alcohol are necessary to produce the same effect. Despite this uncomplicated definition, scientists distinguish between several types of tolerance that are produced by different mechanisms.

- **Option A:** Withdrawal refers to the physical signs and symptoms that occur when the addictive substance is reduced or withheld. Alcohol withdrawal symptoms occur when patients stop drinking or significantly decrease their alcohol intake after long-term dependence. Withdrawal has a broad range of symptoms from mild tremors to a condition called delirium tremens, which results in seizures and could progress to death if not recognized and treated promptly.
- **Option B:** Intoxication refers to the behavioral changes that occur upon recent ingestion of substance. Intoxication is a condition that follows the administration of a psychoactive substance and results in disturbances in the level of consciousness, cognition, perception, judgement, affect, or behaviour, or other psychophysiological functions and responses. The term is most commonly used with regard to alcohol use: its equivalent in everyday speech is "drunkenness". Alcohol intoxication is manifested by such signs as facial flushing, slurred speech, unsteady gait, euphoria,

increased activity, volubility, disorderly conduct, slowed reactions, impaired judgement and motor incoordination, insensibility, or stupefaction.

- **Option D:** Psychological dependence refers to the intake of the substance to prevent the onset of withdrawal symptoms. The term psychological dependence is generally meant to describe the emotional and mental processes that are associated with the development of, and recovery from, a substance use disorder or process addiction.

77. The physician has prescribed supplemental iron for a prenatal client. The nurse should tell the client to take the medication with:

- A. Tomato juice, to increase absorption
- B. Milk, to prevent stomach upset
- C. Oatmeal, to prevent constipation
- D. Water, to increase serum iron levels

Correct Answer: A. Tomato juice, to increase absorption

78. A 56-year-old male patient who recently underwent surgery for a colostomy is learning colostomy irrigation techniques from the nurse. The patient is anxious about managing his colostomy independently and is attentive to the instructions. The nurse wants to ensure that the patient has understood the process correctly. Which of the following statements by the patient would indicate to the nurse that the instructions for colostomy irrigation have been understood correctly?

- A. "I should lie on my left side while instilling the irrigating solution."
- B. "I should keep the irrigating container less than 18 inches above the stoma."
- C. "I should instill a minimum of 1200 ml of irrigating solution to stimulate evacuation of the bowel."
- D. "I should insert the irrigating catheter deeper into the stoma if cramping occurs during the procedure."

Correct Answer: B. Keep the irrigating container less than 18 inches above the stoma."

This height permits the solution to flow slowly with little force so that excessive peristalsis is not immediately precipitated.

- **Option A:** The client must turn on the appropriate side to allow the nurse to do the procedure without difficulty.
- **Option C:** Ask the physician how much water is needed to irrigate.
- **Option D:** Cramping during an irrigation may mean that the water is too cold, the irrigation bag is too high, or the water is going too fast. Clamp off the tubing if this occurs.

79. Which of the following recurring conditions most commonly occurs in clients with cardiomyopathy?

- A. Heart failure
- B. Diabetes
- C. MI
- D. Pericardial effusion

Correct Answer: A. Heart failure

Because the structure and function of the heart muscle is affected, heart failure most commonly occurs in clients with cardiomyopathy. Heart failure can occur when the heart muscle is weak (systolic failure) or when it is stiff and unable to relax normally (diastolic failure). Cardiomyopathy, which means “disease of the heart muscle,” is one of many causes of heart failure.

- **Option B:** One of the most devastating consequences of DM is its effect on cardiovascular disease (ASCVD). Approximately two-thirds of those with DM will die from a myocardial infarction or stroke. In T2DM, fasting glucose of more than 100 mg/dL significantly contributes to the risk of ASCVD, and cardiovascular risk can develop before frank hyperglycemia.
- **Option C:** MI results from prolonged myocardial ischemia due to reduced blood flow through one of the coronary arteries. Ischemic cardiomyopathy (ICM) is a term that refers to the heart’s decreased ability to pump blood properly, due to myocardial damage brought upon by ischemia.
- **Option D:** Pericardial effusion is most predominant in clients with pericarditis. Pericardial effusion is an acute or chronic accumulation of fluid within the pericardial space. Effusion can be transudative, exudative, or sanguineous. The pericardium has limited elasticity, and in acute settings, only 100 ml to 150 mL of fluid is necessary to cause cardiac tamponade.

80. Which of the following is characteristic of a preschooler with mild-mental retardation?

- A. Slow to feed self.
- B. Lack of speech.
- C. Marked motor delays.
- D. Gait disability.

Correct Answer: A. Slow to feed self.

Mild mental retardation refers to developmental disability involving an IQ of 50 to 70. Typically, the child is not noted as being retarded, but exhibits slowness in performing tasks, such as self-feeding, walking, and taking.

- **Option B:** A speech delay might be due to an oral impairment, like problems with the tongue or palate (the roof of the mouth) or a short frenulum (the fold beneath the tongue), which can limit tongue movement.
- **Option C:** Gross motor delays are common and vary in severity and outcome. Some children with gross motor delays attain typical milestones at a later age. Other children have a permanent motor disability, such as cerebral palsy, which has a prevalence of 3.3 per 1000.
- **Option D:** Gait disabilities would be seen in more severe forms of mental retardation. During a child’s first few years walking, they may have obvious gait abnormalities — disturbances in what is considered the normal walking cycle for that age group.

81. A multigravida at 38 weeks' gestation is admitted with painless, bright red bleeding and mild contractions every 7 to 10 minutes. Which of the following assessments should be avoided?

- A. Maternal vital sign
- B. Fetal heart rate
- C. Contraction monitoring
- D. Cervical dilation

Correct Answer: D. Cervical dilation

The signs indicate placenta previa and vaginal exam to determine cervical dilation would not be done because it could cause hemorrhage.

- **Option A:** Assessing maternal vital signs can help determine maternal physiologic status.
- **Option B:** Fetal heart rate is important to assess fetal well-being and should be done.
- **Option C:** Monitoring the contractions will help evaluate the progress of labor.

82. Which of the following diets is most commonly associated with colon cancer?

- A. Low-fiber, high fat
- B. Low-fat, high-fiber
- C. Low-protein, high-carbohydrate
- D. Low carbohydrate, high protein

Correct Answer: A. Low-fiber, high fat

A low-fiber, high-fat diet reduces motility and increases the chance of constipation. The metabolic end products of this type of diet are carcinogenic. A high-fat, low-fiber diet is implicated in the development of colorectal cancer. Specifically, people who ingest a diet high in saturated animal fats and highly saturated vegetable oils (eg, corn, safflower) have a higher incidence of colorectal cancer.

- **Option B:** A low-fat, high-fiber diet is recommended to prevent colon cancer. The ingestion of a high-fiber diet may be protective against colorectal cancer. Fiber causes the formation of a soft, bulky stool that dilutes carcinogens; it also decreases colonic transit time, allowing less time for harmful substances to contact the mucosa. The decreased incidence of colorectal cancer in Africans is attributed to their high-fiber, low-animal-fat diet.
- **Option C:** Saturated fats from dairy products do not have the same carcinogenic effect, nor do oils containing oleic acid (eg, olive, coconut, fish oils). Omega-3 monounsaturated fatty acids and omega-6 monounsaturated fatty acids also appear to be less carcinogenic than unsaturated or polyunsaturated fats. In fact, epidemiologic data suggest that high fish consumption may provide a protective effect against the development of colorectal cancer. Long-term diets high in red meat or processed meats appear to increase the risk of distal colon and rectal cancers.
- **Option D:** Increased dietary intake of calcium appears to have a protective effect on colorectal mucosa by binding with bile acids and fatty acids. The resulting calcium salts may have antiproliferative effects, decreasing crypt cell production in the mucosa. A double-blind placebo-controlled study showed a statistically significant reduction in the incidence of

metachronous colorectal adenomas.

83. Which of the following nursing interventions is applicable for a hospitalized client with mania who is exhibiting manipulative behavior. Select all that apply.

- A. Communicate expected behaviors to the client.
- B. Enforce rules and inform the client that he or she will not be allowed to attend group therapy sessions.
- C. Ensure that the client knows that he or she is not in charge of the nursing unit.
- D. Be clear with the client regarding the consequences of exceeding limits set regarding behavior.
- E. Assist the client in testing out alternative behaviors for obtaining needs.

Correct Answers: A, D, & E

Interventions for dealing with the client exhibiting manipulative behavior include setting clear, consistent, and enforceable limits on manipulative behaviors; being clear with the client regarding the consequences of exceeding limits set; following through with the consequences in a non-punishment manner; and assisting the client in identifying strengths and in testing out alternative behaviors for obtaining needs. Decrease environmental stimuli (e.g., by providing a calming environment or assigning a private room).

- **Option B:** Enforcing rules and informing the client that he or she will not be allowed to attend group therapy sessions is a violation of the client's rights. Remain neutral as possible; Do not argue with the client. The client can use inconsistencies and value judgments as justification for arguing and escalating mania.
- **Option C:** Ensuring the client knows that he or she is not in charge of the nursing unit is inappropriate, power struggles need to be avoided. Maintain a consistent approach, employ consistent expectations, and provide a structured environment. Clear and consistent limits and expectations minimize the potential for the client's manipulation of staff.

84. When doing perineal care in preparation for delivery, the nurse should observe the following, except?

- A. Use up-down technique with one stroke.
- B. Clean from the mons veneris to the anus.
- C. Use mild soap and warm water.
- D. Paint the inner thighs going towards the perineal area.

Correct Answer: D. Paint the inner thighs going towards the perineal area

Painting of the perineal area in preparation for delivery of the baby must always be done but the stroke should be from the perineum going outwards to the thighs. The perineal area is the one being prepared for the delivery and must be kept clean

- **Option A:** Wipe the perineum in one stroke to prevent the transfer of infectious microorganisms from the anal area to the perineum.
- **Option B:** Always wash from front to back to prevent spreading fecal matter from the anal area to the vagina or urethra.

- **Option C:** Use mild soap and warm water. Mild soap would avoid killing the normal flora that lives in and around the perineum.

85. The nurse is assessing a six-month-old child. Which developmental skills are normal and should be expected?

- A. Pulling up to a standing position
- B. Can feed self with a spoon
- C. Sits alone
- D. Speaks in short sentences

Correct Answer: C. Sits alone

A six-month-old child begins to sit alone without support, rolls over in both directions (front to back and vice versa), bounces when in a standing position, supports weight on legs, and rocks back and forth on hands and knees. To get ready, babies first prop themselves up with their hands, but over time they can start to let go and sit unsupported.

- **Option A:** According to the Denver II Developmental Assessment milestone's chart, infants can usually begin to pull to a standing position between 8 to 10 months. Most younger infants are able to stand up with support and bear some weight on their legs between 2 and 4 ½ months. This is an expected and safe developmental stage that will progress to pulling up independently and won't cause them to have bow-legs.
- **Option B:** Babies can start to use a spoon by themselves at around 10 to 12 months old. The child will continue to get better at using tools like spoons and forks. Give the child a chance to use spoons and forks—even if it is messy.
- **Option D:** The child develops language skills between the ages of one and three. In order to communicate, children must know how to use the words they are learning. In this stage of language development, children are able to recognize the difference between nouns and verbs. Generally, the first words in a child's vocabulary are nouns.