### **Kevin's Review - 35 NCLEX Practice Questions**

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

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

### **Correct Answer: A. Diabetes mellitus**

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

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

### 2. What is the most important nursing diagnosis for a patient in end-stage renal disease?

- A. Risk for injury
- B. Fluid volume excess
- C. Altered nutrition: less than body requirements
- D. Activity intolerance

#### Correct Answer: B. Fluid volume excess

Kidneys are unable to rid the body of excess fluids which results in fluid volume excess during ESRD. Renal disorder impairs glomerular filtration that results in fluid overload. With fluid volume excess, hydrostatic pressure is higher than the usual pushing excess fluids into the interstitial spaces. Since fluids are not reabsorbed at the venous end, fluid volume overloads the lymph system and stays in the interstitial spaces.

• **Option A:** Assess I&O;, electrolyte panel, and creatinine; administer diuretics as ordered. Provides an indication of renal function affecting output with water and electrolyte retention as the disease progresses and nephrons are destroyed.

- **Option C:** Due to restricted foods and prescribed dietary regimen, an individual experiencing renal problems cannot maintain ideal body weight and sufficient nutrition. At the same time, patients may experience anemia due to decreased erythropoietic factors that cause a decrease in the production of RBC causing anemia and fatigue.
- **Option D:** Assess the extent of weakness, fatigue, ability to participate in active and passive activities. Provides information about the impact of activities on fatigue and energy reserves. Schedule care and provide rest periods following an activity; allow the client to set their own limits in the amount of exertion tolerated.

### 3. A 6-year-old with cystic fibrosis has an order for Creon (pancrelipase). The nurse knows that the medication will be given:

- A. Daily in the morning
- B. Twice daily
- C. With meals and snacks
- D. At bedtime

### Correct Answer: C. With meals and snacks

• Option C: Pancreatic enzyme replacement such as Creon is given with each meal and each snack to replace the enzymes that the pancreas isn't producing that usually happen in cystic fibrosis.

### 4. When caring for a patient who has started anticoagulant therapy with warfarin (Coumadin), the nurse knows not to expect therapeutic benefits for:

- A. At least 12 hours
- B. The first 24 hours
- C. 2-3 days
- D. 1 week

### Correct Answer: C. 2-3 days

The onset of action is typically 24 to 72 hours. A peak therapeutic effect is seen 5 to 7 days after initiation. However, the patient's international normalized ratio (INR) may increase within 36 to 72 hours after initiating treatment. Warfarin is a once-daily oral medication. Warfarin administration can be at any time during the day, but recommendations are for administration in the afternoon or evening. By instructing patients to take warfarin later in the day, healthcare providers can have the opportunity to individualize a patient's warfarin dose the same day based on their most current lab values.

- **Option A:** The dose-response of warfarin among patients is highly variable and depends on interpatient differences. Patient-specific factors such as drug metabolism, the presence of a vitamin K enriched diet, genetics, quantity of vitamin K-dependent clotting factors, concurrent disease states, binding proteins, concomitant drug interactions, laboratory testing, and medication adherence requires assessment when dosing warfarin.
- **Option B:** The half-life of warfarin is generally 20 to 60 hours (mean: 40 hours). However, it is highly variable among individuals. The duration of action is 2 to 5 days. Hepatic metabolism, primarily through the CYP2C9 enzyme. Other minor enzymatic pathways for metabolism include CYP2C8, 2C18, 2C19, 1A2, and 3A4. Warfarin is primarily eliminated as metabolites by glomerular

filtration in the kidney (92% via urine).

• **Option D:** Warfarin competitively inhibits the vitamin K epoxide reductase complex 1 (VKORC1), which is an essential enzyme for activating the vitamin K available in the body. Through this mechanism, warfarin can deplete functional vitamin K reserves and therefore reduce the synthesis of active clotting factors. The hepatic synthesis of coagulation factors II, VII, IX, and X, as well as coagulation regulatory factors protein C and protein S, require the presence of vitamin K. Vitamin K is an essential cofactor for the synthesis of all of these vitamin K-dependent clotting factors.

## 5. A nurse is caring for a group of clients who are taking herbal medications at home. Which of the following clients should be instructed not to take herbal medications? Select all that apply.

- A. A 60-year-old male client with rhinitis
- B. A 24-year-old male client with a lower back injury
- C. An 8-year-old uncircumcised male client with a urinary tract infection
- D. A 10-year-old female client with a urinary tract infection
- E. A 45-year-old female client with a history of migraine headaches

### Correct Answer: C & D.

Herbal supplements are products derived from plants and/or their oils, roots, seeds, berries, or flowers. Herbal supplements have been used for many centuries. They are believed to have healing properties.

- **Options A and E:** Feverfew (Tanacetum parthenium) is believed to prevent and treat migraines, arthritis, and allergies. Feverfew can interfere with blood clotting when taken internally.
- **Option B:** Arnica (Arnica montana) is applied externally to reduce pain from bruising, aches, and sprains, and to relieve constipation. Arnica is potentially toxic to the heart and can raise blood pressure if taken internally.
- **Options C and D:** Children should not be given herbal therapies, especially in the home and without professional supervision.

## 6. The nurse has a preop order to administer valium (Diazepam) 10mg and phenergan (Promethazine) 25mg. The correct method of administering these medications is to:

- A. Administer the medications together in one syringe
- B. Administer the medication separately
- C. Administer the Valium, wait 5 minutes, and then inject the Phenergan
- D. Question the order because they cannot be given at the same time

#### Correct Answer: B. Administer the medication separately

Medications should not be mixed in one syringe unless indicated by the physician.

- **Option A:** Valium is not given in the same syringe with other medications.
- **Option C:** It is not necessary to wait to inject the second medication. Valium is an antianxiety medication, and Phenergan is used as an antiemetic.

• Option D: These medications can be given to the same client.

### 7. The adrenal cortex is responsible for producing which substances?

- A. Glucocorticoids and androgens
- B. Catecholamines and epinephrine
- C. Mineralocorticoids and catecholamines
- D. Norepinephrine and epinephrine

### Correct Answer: A. Glucocorticoids and androgens

The adrenal glands have two divisions, the cortex, and medulla. The cortex produces three types of hormones: glucocorticoids, mineralocorticoids, and androgens.

- **Option B:** Epinephrine, which is a catecholamines, is produced in the medulla. It causes smooth muscle relaxation in the airways or contraction of the smooth muscle in arterioles, which results in blood vessel constriction in kidneys, decreasing or inhibiting blood flow to the nephrons.
- **Option C:** Catecholamines are produced in the medulla. They help the body respond to stress or fright and prepare the body for "fight-or-flight" reactions.
- Option D: The medulla produces catecholamines epinephrine and norepinephrine.

### 8. When teaching the client about Meniere's disease, which of the following instructions would a nurse give about vertigo?

- A. Report dizziness at once.
- B. Drive in daylight hours only.
- C. Get up slowly, turning the entire body.
- D. Change your position using the log roll method.

#### Correct Answer: C. Get up slowly, turning the entire body.

Turning the entire body, not the head, will prevent vertigo. During vertigo attacks, instruct the client to lie down and not to move so as not to accumulate injuries or pain. Place the client in bed and raise the side rails for safety. Administer medications as ordered for vertigo. Vertigo is not a life-threatening condition but the client may be at greatest risk for injury.

- **Option A:** Dizziness is expected but can be prevented. Always encourage the patient to move slowly and teach them how long to wait between movements. Remember, sudden movements can trigger dizziness. Antivertiginous medications, particularly meclizine, are prescribed widely for all ages of people who are dizzy.
- **Option B:** The client shouldn't drive as he may reflexively turn the wheel to correct vertigo. Plans should be made for alternate transportation if the patient is dizzy, and an emergency plan can be made to stop the car in a safe place if dizziness ensues while driving.
- **Option D:** Turning the client in bed slowly and smoothly will be helpful; logrolling isn't needed. Don't rush the patient, allow him/her to move at their own pace: rushing the patient will make him/her more prone to falling.

### 9. A client has been hospitalized with a diagnosis of laryngeal cancer. Which factor is most significant in the development of laryngeal cancer?

- A. A family history of laryngeal cancer
- B. Chronic inhalation of noxious fumes
- C. Frequent straining of the vocal cords
- D. A history of alcohol and tobacco use

### Correct Answer: D. A history of alcohol and tobacco use

- Option D: Alcohol may help harmful chemicals such as those found in tobacco to penetrate inside the cells that line the throat, mouth, and esophagus causing an increased risk for laryngeal cancer.
- Options A, B, and C: These are also factors in the development of laryngeal cancer, but they are not the most significant.

### 10. The nurse is reviewing the healthcare record of a male client scheduled to be seen at the health care clinic. The nurse determines that which of the following individuals is at the greatest risk for the development of an integumentary disorder?

- A. An adolescent
- B. An older female
- C. A physical education teacher
- D. An outdoor construction worker

#### Correct Answer: D. An outdoor construction worker

Prolonged exposure to the sun, unusual cold, or other conditions can damage the skin. The outdoor construction worker would fit into a high-risk category for the development of an integumentary disorder.

- **Option A:** An adolescent may be prone to the development of acne, but this does not occur in all adolescents.
- **Option B:** Immobility and lack of nutrition would increase the older person's risk but the older client is not at as high a risk as to the outdoor construction worker.
- **Option C:** The physical education teacher is at low or no risk of developing an integumentary problem.

## 11. The mother of a nine (9)-year-old who is four (4) feet tall asks a nurse which of the following car safety devices is the most appropriate to use. The best nursing response is which of the following?

- A. Booster belt
- B. Seat belt
- C. Front-facing convertible seat

### D. Rear-facing convertible seat

#### Correct Answer: A. Booster belt

A belt-positioning booster seat is typically used for children whose weight or height exceeds the forward-facing limit for the car safety seat. This is applicable for ages 8-12-year-old and at least 4 feet, 9 inches tall. Booster seats can only be used with the adult lap and shoulder belt.

- **Option B:** Children can start using a seat belt if they can easily rest their back against the seat of the vehicle and can bend their knees over the edge of the seat. Seatbelts must be worn correctly for them to work properly. Make sure the lap belt fits comfortably across the thighs (not the stomach) and that the child is not slouching. The shoulder strap should go across the chest and shoulder, and never goes beneath a child's arm, behind the back, or across the neck.
- **Option C:** When children outgrow their rear-facing seat, they are buckled in a forward-facing car seat until the age of five or when they reach the upper weight or height limit of the seat. Most convertible car seats can be used in the rear-facing position until a child reaches the weight limit, typically 40 to 50 pounds. At that point, the seat can be converted into a forward-facing car seat. These seats are larger and designed to stay installed in the vehicle.
- **Option D:** Rear-facing–only seats are used for infants up to 22 to 45 pounds. All infants and toddlers should ride in a rear-facing seat as long as possible until they reach the highest weight or height allowed by their car safety seat manufacturer. Most convertible seats have limits that will allow children to ride rear-facing for 2 years or more.

# 12. The emergency medical service has transported a client with severe chest pain. As the client is being transferred to the emergency stretcher, you note unresponsiveness, cessation of breathing, and unpalpable pulse. Which of the following task is appropriate to delegate to the nursing assistant?

- A. Assisting with the intubation
- B. Placing the defibrillator pads
- C. Doing chest compressions
- D. Initiating bag valve mask ventilation

#### Correct Answer: C. Doing chest compressions.

Performing chest compressions are within the training of a nurse assistant. Every good certified nursing assistant should be proficient at cardiopulmonary resuscitation (CPR). Basic Life Support (BLS) certification is the widely-used term for any form of CPR certification and is required for all Registered Nurses (RN) and Certified Nursing Assistants (CNA).

- **Option A:** Due to the nature of critical care patients it is inevitable that nurses working in this setting will be called on to assist with tracheal intubation. This assistant role requires a high degree of knowledge and skills in order for the intubation procedure to be executed smoothly.
- **Option B:** The defibrillator pads are clearly marked; however placement should be done by the RN or physician because of the potential for skin damage and electrical arcing. Most hospital nurses will be trained in advisory defibrillation, while a few will be trained in manual defibrillation.
- **Option C:** The use of the bag valve mask requires practice, and usually a respiratory therapist will perform the function. Bag-valve-mask ventilation can be done with one person or two, but two-person BVM ventilation is easier and more effective because a tight seal must be achieved and this usually requires two hands on the mask.

### 13. Cultural awareness is an in-depth self-examination of one's:

A. Background, recognizing biases and prejudices.

- B. Social, cultural, and biophysical factors.
- C. Engagement in cross-cultural interactions.
- D. Motivation and commitment to caring.

### Correct Answer: A. Background, recognizing biases and prejudices.

Cultural awareness is an in-depth examination of one's own background, recognizing biases and prejudices, and assumptions about other people. Cultural awareness is sensitivity to the similarities and differences that exist between two different cultures and the use of this sensitivity in effective communication with members of another cultural group.

- **Option B:** Cultural competence is necessary because it helps the nurse offer the best services to every patient, leading to high satisfaction and care on the side of the patient. Without cultural competence, the health sector will suffer a great loss and ultimately limit the services that it can offer.
- **Option C:** A strong background and knowledge of cultural competence prevent professional health caregivers from possessing stereotypes and being myopic in their thoughts. It also helps them offer the best service to all, regardless of their social status or belief.
- **Option D:** Cultural competence prepares nurses to empathize, relate more to patients, and attend more deeply to their needs. Hospital patients can often be agitated or stressed. Having someone on their care team who speaks their language or understands their unique background may help them to relax, leading to greater therapy and overall care.

### 14. Jaime has a diagnosis of schizophrenia with negative symptoms. In planning care for the client, Nurse Brienne would anticipate a problem with:

- A. Auditory hallucinations
- B. Bizarre behaviors
- C. Ideas of reference
- D. Motivation for activities

### Correct Answer: D. Motivation for activities.

In a client demonstrating negative symptoms of schizophrenia, avolition, or the lack of motivation for activities, is a common problem. These "negative" symptoms are so-called because they are an absence as much as a presence: inexpressive faces, blank looks, monotone, and monosyllabic speech, few gestures, seeming lack of interest in the world and other people, inability to feel pleasure or act spontaneously. It is important to distinguish between lack of expression and lack of feeling, between lack of will and lack of activity. When questioned, patients with schizophrenia often express a full range of feelings and desires.

• **Option A:** Schizophrenia causes a surplus of mental experiences (thoughts, feelings, behaviors). For example, hallucinations, which are not part of the normal, day-to-day experience for most people, are classified as a positive symptom for people with schizophrenia. The phrase "positive symptoms" refers to symptoms that are in ?excess or added to normal mental functioning.

- **Option B:** Another positive symptom of schizophrenia is disorganized or abnormal movements or motor behaviors. An example of this is catatonic behavior, which involves a decreased reactivity to the environment. Catatonia is marked by a significant decrease in someone's reactivity to their environment. This can involve stupor, mutism, negativism or motor rigidity, and even purposeless excitement.
- **Option C:** A belief that gestures, comments, or other cues have special meaning directed at oneself. Delusions can be bizarre, such as the belief that one's organs have been removed by aliens, or non-bizarre, such as believing one is under surveillance by the police.

### 15. Referencing the image below, what is the name of the structure marked #5.

- A. Renal nerve
- B. Renal pelvis
- C. Renal pyramid
- D. Renal vein
- E. Renal calculi
- F. Renal artery
- G. Renal calyx
- H. Renal vessel
- I. Renal neuron
- J. Renal column

### Correct answer: #5 is Option A. Renal nerve

The renal nerve, which supplies the kidney with sympathetic innervation, originates from the T9 to T13 spinal nerves in the intermediolateral cell column of the spinal cord and enters the kidney alongside the renal artery and vein. This nerve consists of both afferent fibers, transmitting sensory data like pain, pressure, and temperature from the kidney to the spinal cord, and efferent fibers, conveying motor information from the spinal cord to the kidney related to blood pressure and urine production.

## 16. The nurse is caring for a client with a history of diverticulitis. The client complains of abdominal pain, fever, and diarrhea. Which food was responsible for the client's symptoms?

- A. Eggs
- B. Yogurt
- C. Whole-grain cereal
- D. Baked fish

### Correct Answer: C. Whole-grain cereal

- Option C: Diverticulitis is a condition that causes inflamed pouches in the intestine. Symptoms associated with diverticulitis are usually reported after eating popcorn, celery, raw vegetables, whole grains, and nuts since these foods put pressure into the colon.
- Options A, B, and D: These low fiber foods are allowed in the diet of the client with diverticulitis.

## 17. A client in labor is transported to the delivery room and is prepared for cesarean delivery. The client is transferred to the delivery room table, and the nurse places the client in the:

- A. Trendelenburg's position with the legs in stirrups.
- B. Semi-Fowler position with a pillow under the knees.
- C. Prone position with the legs separated and elevated.
- D. Supine position with a wedge under the right hip.

### Correct Answer: D. Supine position with a wedge under the right hip.

Vena cava and descending aorta compression by the pregnant uterus impedes blood return from the lower trunk and extremities. This leads to decreasing cardiac return, cardiac output, and blood flow to the uterus and the fetus. The best position to prevent this would be side-lying with the uterus displaced off of abdominal vessels. Positioning for abdominal surgery necessitates a supine position; however, a wedge placed under the right hip provides displacement of the uterus.

- **Option A:** Use of Trendelenburg position during prolonged active labor does not decrease the incidence of cesarean delivery and may be associated with poor fetal outcomes. Prospective, randomized data on the topic of maternal positioning in labor would further elucidate the role, if any, for Trendelenburg position in labor.
- **Option B:** When maternal position in left lateral tilt was compared with the horizontal position, there was no influence on the incidence of hypotension, and there were no changes in systolic and diastolic blood pressure.
- **Option C:** Prone position is inappropriate during cesarean delivery. When the full left lateral tilt was compared with left lateral tilt, maternal position did not increase the risk of hypotension and there were no changes in systolic and diastolic blood pressure.

### 18. After a subtotal gastrectomy, the nurse should anticipate that nasogastric tube drainage will be what color for about 12 to 24 hours after surgery?

- A. Dark brown
- B. Bile green
- C. Bright red
- D. Cloudy white

#### Correct Answer: A. Dark brown

About 12 to 24 hours after a subtotal gastrectomy, gastric drainage is normally brown, which indicates digested blood. The aims of prophylactic drainage are to prevent repeated infection (for example by discharging remnant blood and preventing abscess formation), control possible leakage from the surgical seam (by drainage of the digestive closure, for example, a colonic anastomosis), and to provide a warning of potential complications.

• **Option B:** Bile green is not expected during the first 12 to 24 hours after subtotal gastrectomy. Bile-colored (greenish) drainage is characteristic when the tube is in the duodenum. Measure and record the amount of drainage. Dispose of measured drainage by flushing into the hopper or toilet.

- **Option C:** Drainage during the first 6 to 12 hours contains some bright red blood, but large amounts of blood or excessively bloody drainage should be reported to the physician promptly. In gastrointestinal drainage, blood varies in color–it may be dark red when fresh, dark brownish-red, or in brown particles ("coffee ground drainage") if it has been partially digested.
- **Option D:** Cloudy, pale-yellowish drainage is characteristic when the tube is in the stomach. However, this is not expected within 12 to 24 hours. Measure the contents and empty the drainage bottle at the hours ordered by the physician, when the drainage bottle is two-thirds full or when suction is discontinued.

### 19. A client taking a chemotherapeutic agent understands the effects of therapy by stating:

- A. "I should stay in my room all the time."
- B. "I will avoid eating hot and spicy foods."
- C. "I should limit my fluid intake to about 500 ml per day."
- D. "I should notify the physician immediately if a urine color change is observed."

### Correct Answer: B. "I will avoid eating hot and spicy foods."

- **Option B:** The client should prevent hot and spicy food because of the stomatitis side effect. Spicy foods can further irritate the lining of the mouth causing more ulcers.
- **Option A:** The client should avoid people with infection but should not isolate himself in his room all the time.
- **Option C:** Fluid intake should be increased to help flush out the medication and replace lost fluids caused by the other side effects of chemotherapy such as nausea and vomiting.
- **Option D:** Urine color change is normal.

### 20. With the image below, what is the name of the structure marked #3?

- A. Kidney
- B. Urethra
- C. Stomach
- D. Spleen
- E. Urinary bladder
- F. Gallbladder

#### Correct answer: E. Urinary bladder

- The urinary bladder is a hollow, muscular organ that stores urine. It is located in the pelvic cavity, behind the pubic bone. The bladder is made up of three layers:
- The outer layer is the serous layer, which is a thin membrane that covers the bladder.
- The middle layer is the muscular layer, which is made up of smooth muscle tissue. This layer contracts and relaxes to allow urine to enter and exit the bladder.
- The inner layer is the mucous layer, which is a lining that helps to protect the bladder from infection.

### 21. Which paradigm provides the basis for qualitative research?A. Empirical analytical research

- A. Empirical analytical research
- B. Constructivism
- C. Postpositivism
- D. Naturalistic research

### **Correct Answer: B. Constructivism**

The paradigm that provides the basis for qualitative research is constructivism. Constructivism implies that reality is constructed through human interaction. Knowledge is a human product and is socially and culturally constructed. Individuals create meaning through their interactions with each other and with the environment in which they live.

- **Option A:** Empirical research is a type of research methodology that makes use of verifiable evidence in order to arrive at research outcomes. In other words, this type of research relies solely on evidence obtained through observation or scientific data collection methods.
- **Option C:** Postpositivism or postempiricism is a metatheoretical stance that critiques and amends positivism and has impacted theories and practices across philosophy, social sciences, and various models of scientific inquiry.
- **Option D:** Naturalistic observation is a nonexperimental, primarily qualitative research method in which organisms are studied in their natural settings. Behaviors or other phenomena of interest are observed and recorded by the researcher, whose presence might be either known or unknown to the subjects.

### 22. Ivy, who is in the psychiatric unit is copying and imitating the movements of her primary nurse. During recovery, she says, "I thought the nurse was my mirror. I felt connected only when I saw my nurse." This behavior is known by which of the following terms?

- A. Modeling
- B. Echopraxia
- C. Ego-syntonicity
- D. Ritualism

#### **Correct Answer: B. Echopraxia**

Echopraxia is the copying of another's behaviors and is the result of the loss of ego boundaries. The involuntary imitation of the movements of another person. Echopraxia is a feature of schizophrenia (especially the catatonic form), Tourette syndrome, and some other neurologic diseases. From echo + the Greek praxia meaning action.

• **Option A:** Modeling is the conscious copying of someone's behaviors. Modeling is one way in which behavior is learned. When a person observes the behavior of another and then imitates that behavior, he or she is modeling the behavior. This is sometimes known as observational learning or social learning. Modeling is a kind of vicarious learning in which direct instruction need not occur.

- **Option C:** Ego-syntonicity refers to behaviors that correspond with the individual's sense of self. Thoughts, wishes, impulses, and behavior are said to be ego-syntonic when they form no threat to the ego and can be acted upon without interference from the superego.
- **Option D:** Ritualism behaviors are repetitive and compulsive. Ritualism is a concept developed by American sociologist Robert K. Merton as a part of his structural strain theory. It refers to the common practice of going through the motions of daily life even though one does not accept the goals or values that align with those practices.

### 23. Blurred vision or halos are signs of:

- A. Subtherapeutic digoxin levels.
- B. Digoxin toxicity.
- C. Nothing related to digoxin.
- D. Corneal side effects of digoxin.

### Correct Answer: B. Digoxin toxicity.

Halos is a hallmark sign of digoxin toxicity. Digoxin exhibits its therapeutic and toxic effects by poisoning the sodium-potassium ATPase. The subsequent increase in intracellular sodium leads to increased intracellular calcium by decreasing calcium expulsion through the sodium-calcium, cation exchanger. A, C and D are incorrect because subtherapeutic digoxin levels have no such effects.

- **Option A:** Digoxin's therapeutic half-life is between 30 to 40 hours, but this may change in overdose. Digoxin excretion is primarily renal, and for this reason, patients with poor or worsening renal function, such as patients who are elderly or have CKD, are more likely to develop toxicity.
- **Option C:** Digoxin levels start to plateau at 6 hours, which is after tissue redistribution has occurred; earlier levels may thus be misleadingly high. Cardiovascular toxicity may have delayed manifestation of up to 8 to 12 hours post-ingestion.
- **Option D:** Visual side effects might include color changes, also known as xanthopsia. But yellow or green-tinted vision is usually associated with digoxin toxicity. Patients may also highlight blurry vision or photopsia.

## 24. The nurse receives the client in the postanesthesia care unit (PACU) following a procedure requiring general anesthesia. The most important assessment made by the nurse relates to the client's:

- A. Level of consciousness.
- B. Pain.
- C. Vital signs.
- D. Respiratory status.

#### Correct Answer: D. Respiratory status.

General anesthesia causes relaxation of all muscles, including respiratory muscles, requiring mechanical ventilation. The client's respiratory status must be monitored closely following general anesthesia. After awakening, patients typically recover in the post-anesthesia care unit (PACU). In more critically ill patients, recovery may occur directly in the intensive care unit.

- **Option A:** Patients recover in the recovery unit until they have met PACU discharge criteria. The criteria for discharge from phase 1 to phase 2 of PACU are often based on the (modified) Aldrete score, which includes adequate activity, circulation, consciousness oxygen saturation, and maintenance of respiration.
- **Option B:** Phase 2 of PACU should be met prior to discharging the patient home. This includes the ability to maintain appropriate surgical site dressings, adequate pain control, normothermia, ambulation ability, absence of nausea, and omitting and stable vital signs.
- **Option C:** All patients undergoing a general anesthetic at a minimum must have a post-operative note that documents many of these items (institution dependent). Ideally, the patient should be queried after return to baseline cognition when more clandestine issues may be addressed (e.g., corneal abrasions and extremely rarely, awareness under anesthesia).

## 25. A patient who smokes tells the nurse, "I want to have a yearly chest x-ray so that if I get cancer, it will be detected early." Which response by the nurse is most appropriate?

- A. "Insurance companies do not authorize yearly x-rays just to detect early lung cancer."
- B. "Annual x-rays will increase your risk for cancer because of exposure to radiation."
- C. "Chest x-rays do not detect cancer until tumors are already at least a half-inch in size."
- D. "Frequent x-rays damage the lungs and make them more susceptible to cancer."

### Correct Answer: C. "Chest x-rays do not detect cancer until tumors are already at least a half-inch in size."

- **Option C:** A tumor must be at least 1 cm large before it is detectable by an x-ray and may already have metastasized by that time.
- **Option A:** Insurance companies do not usually authorize x-rays for this purpose, but it would not be appropriate for the nurse to give this as the reason for not doing an x-ray.
- **Options B and D**: Radiographs have low doses of radiation, and an annual x-ray alone is not likely to increase lung cancer risk.

### 26. The licensed practical nurse is assisting the charge nurse in planning care for a client with a detached retina. Which of the following nursing diagnoses should receive priority?

- A. Alteration in skin integrity
- B. Alteration in comfort
- C. Alteration in mobility
- D. Alteration in O2 perfusion

#### **Correct Answer: C. Alteration in mobility**

- Option C: Retinal detachment occurs when the retina becomes separated from the nerve tissue and blood supply underneath it. The client with a detached retina will have limitations in mobility since the vision is affected.
- Options A and D: These do not apply to the client with a detached retina.

• Option B: A detached retina produces no pain or discomfort.

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

- A. A client with a cough who may have tuberculosis
- B. A client with toxic shock syndrome and a temperature of 102.4°F (39.1°C)
- C. A client with diarrhea caused by C. difficile
- D. A client with a wound infected with Vancomycin-resistant enterococci (VRE)

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

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

- **Option B:** Standard precautions are required for the client with toxic shock syndrome. Any source of bacteria such as tampons or nasal packing should immediately be removed. Emergent surgical consultation should be obtained for any wound debridement or surgical cause. This is critical in the early management of toxic shock syndrome.
- **Option C:** The primary mode of the disease transmission is the fecal-oral route. Effective prevention of C. difficile infection includes several generalized strategies and certain targeted strategies. General strategies such as early detection of the disease, placing the patient under isolation with a dedicated toilet and contact precautions, promoting hygiene measures such as improved hand hygiene, and environmental cleaning are effective measures in preventing infections from C. difficile infections.
- **Option D:** Clients with VRE infections that require contact precautions should ideally be placed in private rooms; however, they can be placed in rooms with other clients with the same diagnosis. The primary transmission of vancomycin-resistant Enterococcus in the hospital setting is through the hands of healthcare providers. Basic infection control prevention practices such as hand hygiene can help. Contact precautions such as wearing gowns and gloves also decrease transmission.

### 28. A client has undergone a penile implant. After 24 hrs of surgery, the client's scrotum was edematous and painful. The nurse should:

- A. Assist the client with sitz bath
- B. Apply warm soaks in the scrotum
- C. Elevate the scrotum using a soft support
- D. Prepare for a possible incision and drainage

### Correct Answer: C. Elevate the scrotum using a soft support

Elevation increases lymphatic drainage, reducing edema and pain. The penis should then be placed upward on the lower abdomen, to limit any downward curvature of this penis postoperatively. Scrotal support or tight mesh underwear may be used after the sterile dressing is removed.

- **Option A:** Several warm baths per day, beginning on the third day after the procedure, would reduce the swelling. Most patients will stay in the hospital overnight following prosthesis placement. This allows for proper guidance on post-operative instructions, as well as the ability to remove the foley catheter without an additional visit to the outpatient clinic.
- **Option B:** Warm baths, instead of soaks, are recommended after three days post surgery. After the penile implant procedure, it is common for bruises and swelling of the scrotum to occur. With several warm baths per day, beginning on the third day after the penile procedure, swelling slowly disappears over a 7 to 14 day period. As healing occurs and swelling disappears, the pain will gradually subside.
- **Option D:** Edema and pain are normal manifestations 24 hours after the surgery. A short course of narcotic pain medication may be warranted. The patient is instructed to avoid any heavy lifting until the follow-up visit in 7-14 days. A drain may be placed if the patient is scheduled to stay in the hospital overnight. The drain may be removed on postoperative day number one at the same time as foley catheter removal.

### 29. Patients with Type 1 diabetes mellitus may require which of the following changes to their daily routine during periods of infection?

- A. No changes
- B. Less insulin
- C. More insulin
- D. Oral diabetic agents

### Correct Answer: C. More insulin

During periods of infection or illness, patients with Type 1 diabetes may need even more insulin to compensate for increased blood glucose levels.

- **Option A:** Changes should be applied to the patient's daily routine to avoid complications from infection.
- **Option B:** Less insulin could lead to hyperglycemia.
- Option D: Oral diabetic agents may not be enough to decrease the blood glucose.

30. A 58-year-old man is admitted to the emergency department following a motor vehicle accident. He suffered a direct blow to the anterior neck, raising concerns about potential laryngeal trauma. The emergency physician suspects an injury to the cartilaginous structures of the larynx. The team begins discussing the anatomy of the larynx, and a nursing instructor present at the scene decides to review respiratory anatomy with their students. They ask, "Considering the context of the injury and our discussion, which of the following descriptions regarding the larynx is correct?"

- A. The most inferior cartilage in the larynx is the epiglottis.
- B. Unlike the other cartilages of the larynx, the epiglottis consists of hyaline cartilage.
- C. The larynx contains four unpaired cartilages.

D. When the vestibular folds come together, they prevent air from leaving the lungs.

### Correct Answer: D. When the vestibular folds come together, they prevent air from leaving the lungs.

When the vestibular folds come together, they prevent air from leaving the lungs, such as when a person holds his breath. Along with the epiglottis, the vestibular folds also prevent food and liquids from entering the larynx.

- **Option A:** The most inferior cartilage of the larynx is the unpaired cricoid cartilage, which forms the base of the larynx on which the other cartilages rest.
- **Option B:** The epiglottis differs from the other cartilages in that it consists of elastic cartilage rather than hyaline cartilage.
- **Option C:** The larynx consists of an outer casing of nine cartilages that are connected to one another by muscles and ligaments. Three of the nine cartilages are unpaired, and six of them form three pairs.

## 31. The nurse is monitoring a client receiving peritoneal dialysis and the nurse notes that a client's outflow is less than the inflow. Select actions that the nurse should take.

- A. Place the client in good body alignment
- B. Check the level of the drainage bag
- C. Contact the physician
- D. Check the peritoneal dialysis system for kinks
- E. Reposition the client to his or her side

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

Outflow (one-way) is the most common type of obstruction. This obstruction is caused by the closeness of the distal portion of the catheter to the omentum or intestine, which allows an infusion of the solution, but little-to-no outflow.

- **Options A and E:** If outflow drainage is inadequate, the nurse attempts to stimulate outflow by changing the client's position. Turning the client to the other side or making sure that the client is in good body alignment may assist with outflow drainage.
- **Option B:** The drainage bag needs to be lower than the client's abdomen to enhance gravity drainage. Using a titanium weight at the end of the catheter, front-loading, or laparoscopic salvage of the catheter with reposition and securing the internal tip of the catheter in the true pelvis with a stitch can prevent or correct this complication.
- **Option C:** There is no reason to contact the physician. Omental wrapping can occur at any time after catheter insertion. Conservative therapy with enemas, change in position, and ambulation often remedy this problem.
- **Option D:** The connecting tubing and the peritoneal dialysis system are also checked for kinks or twisting and the clamps on the system are checked to ensure that they are open. Persistent obstruction may require catheter manipulation with reposition or replacement in extreme cases.

### 32. Which statement by the client indicates a correct understanding of rehabilitation after burn injury?

- A. "I will never be fully recovered from the burn."
- B. "I am considered fully recovered when all the wounds are closed."
- C. "I will be fully recovered when I am able to perform all the activities I did before my injury."
- D. "I will be fully recovered when I achieve the highest possible level of functioning that I can."

### Correct Answer: D. "I will be fully recovered when I achieve the highest possible level of functioning that I can."

Although a return to pre-burn functional levels is rarely possible, burned clients are considered fully recovered or rehabilitated when they have achieved their highest possible level of physical, social, and emotional functioning. The technical rehabilitative phase of rehabilitation begins with wound closure and ends when the client returns to her or his highest possible level of functioning.

- **Option A:** Rehabilitation of burns patients is a continuum of active therapy starting from admission. There should be no delineation between an 'acute phase' and a 'rehabilitation phase' as this idea can promote the inequality of secondary disjointed scar management and/or functional rehabilitation teams.
- **Option B:** The final stage in caring for a patient with a burn injury is the rehabilitative stage. This stage starts with the closure of the burn and ends when the patient has reached the optimal level of functioning. The focus is on helping the patient return to a normal injury-free life. Helping the patient adjust to the changes the injury has imposed is also a priority.
- **Option C:** Early compliance is essential to ensure the best possible long-term outcome and also to ease pain and assist with exercise regimes. Patients need to adhere to a positioning regime in the early stages of healing and this takes teamwork and dedication.

### 33. The nurse in charge measures a patient's temperature at 102 degrees F. what is the equivalent Centigrade temperature?

- A. 39 degrees C
- B. 47 degrees C
- C. 38.9 degrees C
- D. 40.1 degrees C

#### Correct Answer: C. 38.9 degrees C

To convert Fahrenheit degrees to centigrade, use this formula: C degrees = (F degrees -32) x 5/9 C degrees = (102 -32) 5/9 + 70 x 5/9 38.9 degrees C

- **Option A:** Fahrenheit and Celsius both use different temperatures for the freezing and boiling points of water, and also use differently sized degrees. Water freezes at 0 degrees Celsius, and boils at 100 degrees C, while in Fahrenheit, water freezes at 32 degrees F and boils at 212 degrees F.
- **Option B:** Use the relationship in degree size to convert between Celsius and Fahrenheit. Because Celsius degrees are larger than those in Fahrenheit, to convert from Celsius to Fahrenheit, multiply the Celsius temperature by 1.8, then add 32.

• **Option D:** The Fahrenheit and Celsius scales are the two most common temperature scales. However, the two scales use different measurements for the freezing and boiling points of water, and also use different sized degrees.

# 34. A 77-year-old male client is admitted with a diagnosis of dehydration and change in mental status. He's being hydrated with I.V. fluids. When the nurse takes his vital signs, she notes he has a fever of 103°F (39.4°C) a cough producing yellow sputum and pleuritic chest pain. The nurse suspects this client may have which of the following conditions?

- A. Adult respiratory distress syndrome (ARDS)
- B. Myocardial infarction (MI)
- C. Pneumonia
- D. Tuberculosis

### Correct Answer: C. Pneumonia

Fever, productive cough, and pleuritic chest pain are common signs and symptoms of pneumonia.

- **Option A:** The client with ARDS has dyspnea and hypoxia with worsening hypoxia over time, if not treated aggressively.
- **Option B:** Pleuritic chest pain varies with respiration, unlike the constant chest pain during an MI; so this client most likely isn't having an MI.
- **Option D:** The client with TB typically has a cough producing blood-tinged sputum. A sputum culture should be obtained to confirm the nurse's suspicions.

## 35. A patient is about to undergo bone marrow aspiration and biopsy and expresses fear and anxiety about the procedure. Which of the following is the most effective nursing response?

- A. Warn the patient to stay very still because the smallest movement will increase her pain.
- B. Encourage the family to stay in the room for the procedure.
- C. Stay with the patient and focus on slow, deep breathing for relaxation.
- D. Delay the procedure to allow the patient to deal with her feelings.

### Correct Answer: C. Stay with the patient and focus on slow, deep breathing for relaxation.

Slow, deep breathing is the most effective method of reducing anxiety and stress. It reduces the level of carbon dioxide in the brain to increase calm and relaxation. Stay with the patient during panic attacks. Use short, simple directions. Encourage the client's participation in relaxation exercises such as deep breathing, progressive muscle relaxation, guided imagery, meditation and so forth.

• **Option A:** Warning the patient to remain still will likely increase her anxiety. Maintain a calm, non-threatening manner while working with the client. Anxiety is contagious and may be transferred from health care provider to client or vice versa. Client develops feeling of security in presence of calm staff person.

- **Option B:** Encouraging family members to stay with the patient may make her worry about their anxiety as well as her own. Move the client to a quiet area with minimal stimuli such as a small room or seclusion area (dim lighting, few people, and so on.) Anxious behavior escalates by external stimuli. A smaller or secluded area enhances a sense of security as compared to a large area which can make the client feel lost and panicked.
- **Option D:** Delaying the procedure is unlikely to allay her fears. Establish and maintain a trusting relationship by listening to the client; displaying warmth, answering questions directly, offering unconditional acceptance; being available, and respecting the client's use of personal space.