

Kevin's Review - 100 NCLEX Practice Questions

1. Which of the following symptoms indicate acute rejection of a transplanted kidney?

- A. Edema, Nausea
- B. Fever, Anorexia
- C. Weight gain, pain at graft site
- D. Increased WBC count, pain with voiding

Correct Answer: C. Weight gain, pain at graft site

Pain at the graft site and weight gain indicates the transplanted kidney isn't functioning and possibly is being rejected. In general, when transplanting tissue or cells from a genetically different donor to the graft recipient, the alloantigen of the donor induces an immune response in the recipient against the graft. This response can destroy the graft if not controlled. The whole process is called allograft rejection.

- **Option A:** Transplant clients usually have edema, anorexia, fever, and nausea before transplantation, so those symptoms may not indicate rejection. Allograft rejection is inflammation with specific pathologic changes in the allograft, due to the recipient's immune system recognizing the non-self antigen in the allograft, with or without dysfunction of the allograft.
- **Option B:** Renal transplant rejection, as stated earlier, is an immunological response that leads to inflammation with specific pathological changes in the allograft, due to the recipient's immune system recognizing the non-self (foreign) antigen in the allograft.
- **Option D:** Hyperacute rejection is related to preexisting circulating antibodies in the recipient's blood against the donor antigen (usually ABO blood group or HLA antigen), which is present at the time of transplantation. These antibodies attack and destroy the transplanted organ as soon as or within a few hours after allograft is revascularized.

2. The nurse formulates a nursing diagnosis of Impaired social interaction related to disorganized thinking for a client with schizotypal personality disorder. Based on this nursing diagnosis, which nursing intervention takes the highest priority?

- A. Helping the client to participate in social interactions.
- B. Establishing a one-on-one relationship with the client.
- C. Exploring the effects of the client's behavior on social interactions.
- D. Developing a schedule for the client's participation in social interactions.

Correct Answer: B. Establishing a one-on-one relationship with the client

By establishing a one-on-one relationship, the nurse helps the client learn how to interact with people in new situations. Regardless of the clinical setting, the nurse must provide structure and limit setting in the therapeutic relationship; in a clinic setting, this may mean seeing the client for scheduled appointments of a predetermined length rather than whenever the client appears and demands the nurse's immediate attention.

- **Option A:** It is important to teach basic communication skills such as eye contact, active listening, taking turns talking, validating the meaning of another's communication, and using "I" statements. The nurse must be quite clear about establishing the boundaries of the therapeutic relationship to

ensure that neither the client's nor the nurse's boundaries are violated.

- **Option C:** Cognitive restructuring is a technique useful in changing patterns of thinking by helping clients to recognize negative thoughts and feelings and to replace them with positive patterns of thinking; thought stopping is a technique to alter the process of negative or self-critical thought patterns.
- **Option D:** The other options are appropriate but should take place only after the nurse-client relationship is established. Minimizing unstructured time by planning activities can help clients to manage time alone; clients can make a written schedule that includes appointments, shopping, reading the paper, and going for a walk. The nurse can help the clients to identify their feelings and learn to tolerate them without exaggerated responses such as destruction of property or self-harm; keeping a journal often helps clients gain awareness of feelings.

3. A pregnant client in the last trimester has been admitted to the hospital with a diagnosis of severe preeclampsia. A nurse monitors for complications associated with the diagnosis and assesses the client for:

- A. Any bleeding, such as in the gums, petechiae, and purpura.
- B. Enlargement of the breasts.
- C. Periods of fetal movement followed by quiet periods.
- D. Complaints of feeling hot when the room is cool.

Correct Answer: A. Any bleeding, such as in the gums, petechiae, and purpura.

Severe preeclampsia can trigger disseminated intravascular coagulation because of the widespread damage to vascular integrity. Bleeding is an early sign of DIC and should be reported to the M.D.

- **Option B:** Estrogen stimulates growth of the breast duct cells and generates the secretion of prolactin, another hormone. Prolactin stimulates breast enlargement and milk production. Progesterone supports the formation and growth of milk-producing cells within the glands of the breasts.
- **Option C:** The first fetal movements which are felt by the mother are called quickening. One function of these movements is to alert the pregnant woman that she has a fetus growing in her uterus. Most providers recommend that pregnant women monitor fetal movements, especially by the third trimester. This can be accomplished by simply instructing the woman to have a general awareness of the fetus and determine if the fetus is moving less than normal on any given day or about the same as other days.
- **Option D:** At the beginning of your pregnancy, new hormones are like little workers that help keep everything humming along smoothly. These hormonal changes also raise your body temperature a small amount.

4. Which of the following behaviors characterizes the PP mother in the taking in phase?

- A. Passive and dependent
- B. Striving for independence and autonomy
- C. Curious and interested in care of the baby

D. Exhibiting maximum readiness for new learning

Correct Answer: A. Passive and dependent

During the taking in phase, which usually lasts 1-3 days, the mother is passive and dependent and expresses her own needs rather than the neonate's needs. The woman becomes dependent on her healthcare provider or support person with some of the daily tasks and decision-making. 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.

- **Option B:** The taking hold phase usually lasts from days 3-10 PP. During this stage, the mother strives for independence and autonomy. The woman starts to initiate actions on her own and makes decisions without relying on others. She starts to focus on the newborn instead of herself and begins to actively participate in newborn care. The woman still needs positive reinforcements despite the independence that she is already showing because she might still feel insecure about the care of her child.
- **Option C:** During the taking hold phase, demonstrate newborn care to the mother and watch her do a return demonstration of every procedure. Allow the woman to settle in gradually into her new role while still at the hospital or healthcare facility because making decisions about the child's welfare is a difficult part of motherhood.
- **Option D:** She also is most ready to learn. She is concerned about her ability to take care of her newborn. This phase is associated with a great deal of anxiety (especially by a new mother). She may have several mood swings. The mother might be involved in a lot of activity trying to accomplish tasks.

5. Dennis has a lithium level of 2.4 mEq/L. The nurse immediately would assess the client for which of the following signs or symptoms?

- A. Weakness
- B. Diarrhea
- C. Blurred vision
- D. Fecal incontinence

Correct Answer: C. Blurred vision

At lithium levels of 2 to 2.5 mEq/L the client will experience blurred vision, muscle twitching, severe hypotension, and persistent nausea and vomiting. Intoxication degree is of utmost importance for understanding lithium toxicity diagnosis and management. The severity of lithium toxicity is often divided into the following three grades: mild, moderate, and severe. In mild, there is nausea, vomiting, lethargy, tremor, and fatigue (Serum lithium concentration between 1.5-2.5 mEq/L).

- **Option A:** Symptoms of intoxication include coarse tremor, hyperreflexia, nystagmus, and ataxia. Patients often show varying consciousness levels, ranging from mild confusion to delirium. Although the neurological symptoms are mostly reversible, some reports indicate that symptoms might persist for 12 months and never resolve.
- **Option B:** With levels between 1.5 and 2 mEq/L the client experiencing vomiting, diarrhea, muscle weakness, ataxia, dizziness, slurred speech, and confusion. Symptoms typically occur within 1 hour of ingestion and are more common in the acute overdose setting. To determine the extent of lithium toxicity, one must determine the ingested amount, time of ingestion, whether there are coingestants, and if the ingestion was intentional or unintentional. It is worth noting that lithium

toxicity signs do not often conform to the measured lithium level.

- **Option D:** At lithium levels of 2.5 to 3 mEq/L or higher, urinary and fecal incontinence occurs, as well as seizures, cardiac dysrhythmias, peripheral vascular collapse, and death. Renal toxicity is more common in patients on chronic lithium treatment. Toxicity includes impaired urinary concentrating ability, nephrogenic diabetes insipidus (the most common cause of drug-induced NDI), sodium-losing nephritis, nephrotic syndrome along other manifestations.

6. During electroconvulsive therapy (ECT) the client receives oxygen by mask via positive pressure ventilation. The nurse assisting with this procedure knows that positive pressure ventilation is necessary because?

- A. Anesthesia is administered during the procedure.
- B. Decreasing oxygen to the brain increases confusion and disorientation.
- C. Grand mal seizure activity depresses respirations.
- D. Muscle relaxations given to prevent injury during seizure activity depress respirations.

Correct Answer: D. Muscle relaxations given to prevent injury during seizure activity depress respirations.

A short-acting skeletal muscle relaxant such as succinylcholine (Anectine) is administered during this procedure to prevent injuries during seizure. A nerve stimulator is utilized to monitor succinylcholine, a depolarizing muscle relaxant used to reduce tonic-clonic contractions during the procedure. As an alternative to EMG, a blood pressure cuff is inflated on the patient's ankle to prevent succinylcholine from entering the foot, allowing a visual monitor of seizure activity with measurement of tonic-clonic contractions.

- **Option A:** ECT utilizes general anesthesia. Anesthetic induction medications used include barbiturates such as thiopental and methohexital and nonbarbiturate agents such as propofol and etomidate. Seizure-induced by ECT should last longer than 30 seconds. Methohexital is the most commonly used induction agent due to its quick onset, effectiveness, low cost, and minimal effect on seizure duration. Propofol and thiopental have been shown to reduce seizure duration. Etomidate has correlations with myoclonus and increased seizure duration.
- **Option B:** Preoxygenation of the patient via nasal cannula or face mask is followed by anesthetic induction and paralysis. Administration of an anticholinergic medication before ECT may prevent arrhythmias such as bradycardia or asystole and excessive oral secretions. To induce cerebral vasoconstriction via hypocarbia, the patient is often hyperventilated via bag valve mask before delivery of the electrical stimulus to increase seizure intensity.
- **Option C:** Skeletal muscle relaxation during ECT is integral to minimize a motor seizure and avoid musculoskeletal injury. The depolarizing neuromuscular relaxant succinylcholine is used at 0.75 to 1 mg/kg with an elimination half-life of 41 seconds. In cases where succinylcholine is contraindicated including neuromuscular disease or injury, burn injury, pseudocholinesterase deficiency or hyperkalemia, nondepolarizing neuromuscular relaxants are the preferred option.

7. A client 12 weeks' pregnant came to the emergency department with abdominal cramping and moderate vaginal bleeding. Speculum examination reveals 2 to 3 cm cervical dilation. The nurse would document these findings as which of the following?

- A. Threatened abortion
- B. Imminent abortion
- C. Complete abortion
- D. Missed abortion

Correct Answer: B. Imminent abortion

Cramping and vaginal bleeding coupled with cervical dilation signify that termination of the pregnancy is inevitable and cannot be prevented. Thus, the nurse would document an imminent abortion.

- **Option A:** In a threatened abortion, cramping and vaginal bleeding are present, but there is no cervical dilation. The symptoms may subside or progress to abortion.
- **Option C:** In a complete abortion all the products of conception are expelled.
- **Option D:** A missed abortion is early fetal intrauterine death without expulsion of the products of conception.

8. 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.

9. A male client tells the nurse he was involved in a car accident while he was intoxicated. What would be the most therapeutic response from nurse Julia?

- A. "Why didn't you get someone else to drive you?"

- B. "Tell me how you feel about the accident."
- C. "You should know better than to drink and drive."
- D. "I recommend that you attend an Alcoholics Anonymous meeting."

Correct Answer: B. "Tell me how you feel about the accident."

An open-ended statement or question is the most therapeutic response. It encourages the widest range of client responses, makes the client an active participant in the conversation, and shows the client that the nurse is interested in his feelings. mix open-ended questions with focus questions. Open-ended questions may allow the patient to express their thoughts and feelings, and focused questions allow the interviewer to obtain important details with yes or no answers in a more time-efficient manner.

- **Option A:** Asking the client why he drove while intoxicated can make him feel defensive and intimidated. The first question posed in the interview is often open-ended. For example, "What is the main reason you seek medical assistance today?" This provides an opportunity for the interviewer to allow the patient to share their concerns, and the interviewer can show he or she is actively listening. This includes listening without judgment and displaying concern for the patient during communication.
- **Option C:** A judgmental approach isn't therapeutic. During the interview, meaningful questions inquired positively will reduce defensiveness from the patient. Often this can be accomplished by suggesting or sharing a common behavior associated with the actions of the patient. For example, the interviewer may convey the commonality for people to consume alcohol when under stress. It then becomes acceptable to inquire if this is also occurring with the patient. The patient may feel a sense of trust and therefore share pertinent information.
- **Option D:** By giving advice, the nurse suggests that the client isn't capable of making decisions, thus fostering dependency. At the conclusion of the patient interview, an appropriate transition statement to begin the physical exam may be, "Is there anything else that you would like to share with me before I start the physical examination?" This statement serves 2 purposes. First, it elicits any additional information the patient deems necessary, and second, it signals a transition to the physical exam. Lastly, before concluding the interview, it is important to discuss the probable follow-up plan and further treatment. In the outpatient setting, this may include admission to the hospital or going home and returning for a follow-up appointment at a designated time.

10. Which of the following parameters should be checked before administering digoxin?

- A. Apical pulse
- B. Blood pressure
- C. Radial pulse
- D. Respiratory rate

Correct Answer: A. Apical pulse

An apical pulse is essential for accurately assessing the client's heart rate before administering digoxin. The apical pulse is the most accurate point in the body.

- **Option B:** Blood pressure is usually only affected if the heart rate is too low, in which case the nurse would withhold digoxin.
- **Option C:** The radial pulse can be affected by cardiac and vascular disease and therefore, won't always accurately depict the heart rate.

- **Option D:** Digoxin has no effect on respiratory function. Digoxin is used to treat heart failure, usually along with other medications. It is also used to treat a certain type of irregular heartbeat (chronic atrial fibrillation).

11. The nurse is assessing a postoperative adult patient. Which of the following should the nurse document as subjective data?

- A. Vital signs
- B. Laboratory test result
- C. Patient's description of pain
- D. Electrocardiographic (ECG) waveforms

Correct Answer: C. Patient's description of pain

Subjective data come directly from the patient and usually are recorded as direct quotations that reflect the patient's opinions or feelings about a situation. Subjective data provide clues to possible physiologic, psychological, and sociologic problems. They also provide the nurse with information that may reveal a client's risk for a problem as well as areas of strengths for the client. The information is obtained through interviewing. Vital signs, laboratory test results, and ECG waveforms are examples of objective data.

- **Option A:** Vital sign monitoring is a fundamental component of nursing care. A patient's pulse, respirations, blood pressure, and body temperature are essential in identifying clinical deterioration and that these parameters must be measured consistently and recorded accurately.
- **Option B:** Many other tests are reported as numbers or values. Laboratory test results reported as numbers are not meaningful by themselves. Their meaning comes from comparison to reference values. Reference values are the values expected for a healthy person. They are sometimes called "normal" values.
- **Option D:** The standard 12-lead electrocardiogram (ECG) is one of the most commonly used medical studies in the assessment of cardiovascular disease. It is the most important test for interpretation of the cardiac rhythm, detection of myocardial ischemia and infarction, conduction system abnormalities, preexcitation, long QT syndromes, atrial abnormalities, ventricular hypertrophy, pericarditis, and other conditions.

12. The client, who is 2 weeks postburn with a 40% deep partial-thickness injury, still has open wounds. On taking the morning vital signs, the client is found to have a below-normal temperature, is hypotensive, and has diarrhea. What is the nurse's best action?

- A. Nothing, because the findings are normal for clients during the acute phase of recovery.
- B. Increase the temperature in the room and increase the IV infusion rate.
- C. Assess the client's airway and oxygen saturation.
- D. Notify the burn emergency team.

Correct Answer: D. Notify the burn emergency team.

These findings are associated with systemic gram-negative infection and sepsis. This is a medical emergency and requires prompt attention. Invasive infection of burn wounds is a surgical emergency

because of the high concentrations of bacteria (>105 CFU) in the wound and surrounding area, together with new areas of necrosis in unburned tissues.

- **Option A:** Invasive infection is now the chief reason for death and morbidity after burn injury, with it being responsible for 51% of the deaths. The importance of prevention, surveillance, and sampling for infections in this immunocompromised group has been well established; however, there is a dearth of standard-of-care guidelines and novel approaches.
- **Option B:** Urgent resuscitation measures are required, along with broad-spectrum antimicrobial agents, antifungals, and surgical debridement of the affected area. Specimens of this tissue must undergo histopathologic and microbiologic analysis to assist in the identification of the causative organism(s).
- **Option C:** Assessment of the airway and oxygen saturation would not help in diagnosing a burn infection. Burn wound colonization may be diagnosed when bacteria are present at low concentrations (<105 colony-forming units [CFU]) on the wound's surface. This situation often is accompanied by signs of sepsis and changes in the burn wound such as black, blue, or brown discoloration of the eschar.

13. Malingering is different from somatoform disorder because the former:

- A. Has evidence of an organic basis.
- B. It is a deliberate effort to handle upsetting events.
- C. Gratification from the environment is obtained.
- D. Stress is expressed through physical symptoms.

Correct Answer: B. It is a deliberate effort to handle upsetting events

Malingering is a conscious simulation of an illness while somatoform disorder occurs unconsciously. Malingering is falsification or profound exaggeration of illness (physical or mental) to gain external benefits such as avoiding work or responsibility, seeking drugs, avoiding trial (law), seeking attention, avoiding military services, leave from school, paid leave from a job, among others.

- **Option A:** Both disorders do not have an organic or structural basis. It is not a psychiatric illness according to DSM-5 (Diagnostic and Statistical Manual of Mental Diseases, Fifth edition). The DSM-IV-TR failed to provide any precise criteria because malingering is not considered a psychiatric diagnosis, but the manual does state it is a "condition that may be a focus of clinical attention."
- **Option C:** Both have primary gains. External (secondary) gain is necessary for differentiating malingering from factitious disorder (a disorder in which a patient consciously creates physical or psychological symptoms to assume a sick role, the primary gain). Malingers show poor compliance with treatment and stop complaining about the assumed illness only after gaining the external benefit.
- **Option D:** This is a characteristic of the somatoform disorder. The unexplained symptoms of somatoform disorders often lead to general health anxiety; frequent or recurrent and excessive preoccupation with unexplained physical symptoms; inaccurate or exaggerated beliefs about somatic symptoms; difficult encounters with the health care system; disproportionate disability; displays of strong, often negative emotions toward the physician or office staff; unrealistic expectations; and, occasionally, resistance to or noncompliance with diagnostic or treatment efforts.

14. A female client is undergoing a complete physical examination as a requirement for college. When checking the client's respiratory status, the nurse observes respiratory excursion to help assess:

- A. Lung vibrations
- B. Vocal sounds
- C. Breath sounds
- D. Chest movements.

Correct Answer: D. Chest movements

The nurse observes respiratory excursion to help assess chest movements. Normally, thoracic expansion is symmetrical; unequal expansion may indicate pleural effusion, atelectasis, pulmonary embolism, or a rib or sternum fracture. During the inspection, the examiner should pay attention to the pattern of breathing: thoracic breathing, thoracoabdominal breathing, costal markings, and use of accessory breathing muscles. The use of accessory breathing muscles (i.e., scalenes, sternocleidomastoid muscle, intercostal muscles) could point to excessive breathing effort caused by pathologies.

- **Option A:** After asking the client to say "99," the nurse palpates the vibrations transmitted from the bronchopulmonary system along the solid surfaces of the chest wall to the nurse's palms. An increase in the tactile fremitus points towards an increased intraparenchymal density and a decreased fremitus hints towards a pleural process that separates the pleura from the parenchyma (pleural effusion, pneumothorax).
- **Option B:** The nurse assesses vocal sounds to evaluate air flow when checking for tactile fremitus. Palpation should focus on detecting abnormalities like masses or bony crepitus. Of note, the fremitus can also be auscultated and can be referred to as vocal fremitus.
- **Option C:** The nurse assesses breath sounds during auscultation. The movement of air generates normal breath sounds through the large and small airways. Normal breath sounds have a frequency of approximately 100 Hz. The absence of breath sounds should prompt the health care provider to consider shallow breath, abnormal anatomy, or pathologic entities such as airway obstruction, bulla, hyperinflation, pneumothorax, pleural effusion or thickening, and obesity.

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

- A. "This makes the skin feel soft."
- B. "This prevents evaporation of water from the hydrated epidermis."
- C. "This minimizes cracking of the dermis."
- D. "This prevents inflammation of the skin."

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

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

- **Option A:** Although emollients make the skin feel soft, this effect occurs whether or not the client has just bathed or showered. The role of water within the stratum corneum is pivotal to the maintenance of normal skin integrity and turnover. Water allows for the increased flexibility of the tissues and is a crucial component of the enzymatic reactions responsible for cleavage of the corneodesmosome connections between corneocytes during the desquamation process.
- **Option C:** An emollient minimizes cracking of the epidermis, not the dermis (the layer beneath the epidermis). The stratum corneum contains high concentrations of osmotically active molecules, including amino acids and their derivatives, lactic acid, urea, and electrolytes. These molecules form from the breakdown of filaggrin and are referred to as natural moisturizing factor (NMF). The molecules that make up NMF are hygroscopic and absorb atmospheric water at concentrations as low as 50%.
- **Option D:** An emollient doesn't prevent skin inflammation. The goals of moisturizing the skin are to improve the appearance and function of the skin. In patients with medical conditions associated with impaired barrier function of the skin, like atopic dermatitis, the diligent use of moisturizers is a fundamental component of their treatment.

16. Which information is most important for the nurse Trinity to include in a teaching plan for a male schizophrenic client taking clozapine (Clozaril)?

- A. Monthly blood tests will be necessary.
- B. Report a sore throat or fever to the physician immediately.
- C. Blood pressure must be monitored for hypertension.
- D. Stop the medication when symptoms subside.

Correct Answer: B. Report a sore throat or fever to the physician immediately.

A sore throat and fever are indications of an infection caused by agranulocytosis, a potentially life-threatening complication of clozapine. The risk of developing agranulocytosis is around 1% in patients who take clozapine, which may be independent of dosing. Most cases occur early in the treatment, within six weeks to six months, and require extensive monitoring of blood absolute neutrophil counts. The definition of neutropenia is an ANC level below 1500/mm, and agranulocytosis is an ANC level below 500/mm.

- **Option A:** Because of the risk of agranulocytosis, white blood cell (WBC) counts are necessary weekly, not monthly. If the WBC count drops below 3,000/?!, the medication must be stopped. Many have tried to explain the link between clozapine and agranulocytosis by attributing this adverse effect to drug interactions with the immune system and genetic predisposition. A study in 2015 looked into the benefits of pharmacogenetic testing and how it may affect monitoring in patients at risk for clozapine-induced agranulocytosis. The study suggested that patients with a lower genetic risk may benefit from a more relaxed hematological monitoring schedule.
- **Option C:** Hypotension may occur in clients taking this medication. Warn the client to stand up slowly to avoid dizziness from orthostatic hypotension. Risk factors include old age, female, genetics, and concurrent treatment with other drugs known to cause agranulocytosis. Clinicians must place patients taking clozapine on a national registry. Granulocyte colony-stimulating factor may be an option to increase levels of white blood cells.
- **Option D:** The medication should be continued, even when symptoms have been controlled. If the medication must be stopped, it should be slowly tapered over 1 to 2 weeks and only under the supervision of a physician. Weekly complete blood count (CBC) to measure ANC levels. ANC levels less than 1500 indicate neutropenia. Levels less than 500 indicate agranulocytosis. A

complete blood count should be taken weekly for the first six months, then every other week for the next six months. A national registry is in place to monitor for safe use.

17. Methotrexate is a folate antagonist. It inhibits enzymes required for DNA base synthesis. To prevent harm to normal cells, a fully activated form of folic acid known as leucovorin (folinic acid; citrovorum factor) can be administered. Administration of leucovorin is known as:

- A. Induction therapy.
- B. Consolidation therapy.
- C. Pulse therapy.
- D. Rescue therapy.

Correct Answer: B. Consolidation therapy.

Leucovorin is used to save or “rescue” normal cells from the damaging effects of chemotherapy allowing them to survive while the cancer cells die. Therapy to rapidly reduce the number of cancerous cells is the induction phase. Consolidation therapy seeks to complete or extend the initial remission and often uses a different combination of drugs than that used for induction.

- **Option A:** The first treatment given for a disease. It is often part of a standard set of treatments, such as surgery followed by chemotherapy and radiation. When used by itself, induction therapy is the one accepted as the best treatment. If it doesn't cure the disease or it causes severe side effects, other treatment may be added or used instead. Also called first-line therapy, primary therapy, and primary treatment.
- **Option C:** Chemotherapy is often administered in intermittent courses called pulse therapy. Pulse therapy allows the bone marrow to recover function before another course of chemotherapy is given. Pulse therapy means the administration of large (supra pharmacologic) doses of drugs in an intermittent manner to enhance the therapeutic effects and reduce the side-effects.
- **Option D:** Salvage therapy, also known as rescue therapy, is a form of therapy given after an ailment does not respond to standard therapy. The most common diseases that require salvage therapy are HIV and various cancers. The term is not clearly defined; it is used both to mean a second attempt and a final attempt.

18. 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.

19. Nurse Isabelle enters the room of a client with a cognitive impairment disorder and asks what day of the week it is; what the date, month, and year are; and where the client is. The nurse is attempting to assess:

- A. Confabulation.
- B. Delirium.
- C. Orientation.
- D. Perseveration.

Correct Answer: C. Orientation.

The initial, most basic assessment of a client with cognitive impairment involves determining his level of orientation (awareness of time, place, and person). The tools for reality orientation aim to reinforce the naming of objects and people as well as a timeline of events, past or present. Multiple studies have demonstrated that the use of reality orientation has improved cognitive functioning for people living with dementia when compared to control groups who did not receive it. As a rule, reality orientation must be mixed with compassion and used appropriately to benefit someone living with the confusion of dementia. Applying it without evaluating if it might cause emotional distress to the individual since there are some times when it would not be appropriate.

- **Option A:** Confabulation is a type of memory error in which gaps in a person's memory are unconsciously filled with fabricated, misinterpreted, or distorted information. When someone confabulates, they are confusing things they have imagined with real memories. A person who is confabulating is not lying. They are not making a conscious or intentional attempt to deceive. Rather, they are confident in the truth of their memories even when confronted with contradictory evidence.
- **Option B:** Delirium is a type of cognitive impairment; however, other symptoms are necessary to establish this diagnosis. Delirium, also known as the acute confusional state, is a clinical syndrome that usually develops in the elderly. It is characterized by an alteration of consciousness and cognition with reduced ability to focus, sustain, or shift attention. It develops over a short period and fluctuates during the day. The clinical presentation can vary, but usually, it flourishes with psychomotor behavioral disturbances such as hyperactivity or hypoactivity with increased sympathetic activity and impairment in sleep duration and architecture.
- **Option D:** The nurse may also assess for perseveration in a client with cognitive impairment but the questions in this situation would not elicit the symptom response. Perseveration according to psychology, psychiatry, and speech-language pathology, is the repetition of a particular response (such as a word, phrase, or gesture) regardless of the absence or cessation of a stimulus. It is usually caused by a brain injury or other organic disorder.

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

- A. The age of the child
- B. The child's ability to understand instruction
- C. The overall mental and physical abilities of the child

D. Frequent attempts with positive reinforcement

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

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

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

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

- A. Observe for evidence of spontaneous bleeding.
- B. Limit visitors to family only.
- C. Give aspirin in case of headaches.
- D. Impose immune precautions.

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

Platelet counts under 30,000/microliter may cause spontaneous petechiae and bruising, particularly in the extremities. When the count falls below 15,000, spontaneous bleeding into the brain and internal organs may occur. Headaches may be a sign and should be watched for.

- **Options B and D:** Thrombocytopenia does not compromise immunity, and there is no reason to limit visitors as long as any physical trauma is prevented.
- **Option C:** Aspirin disables platelets and should never be used in the presence of thrombocytopenia.

22. 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.

23. The nurse is evaluating nutritional outcomes for a with anorexia nervosa. Which data best indicates that the plan of care is effective?

- A. The client selects a balanced diet from the menu.
- B. The client's hemoglobin and hematocrit improve.
- C. The client's tissue turgor improves.
- D. The client gains weight.

Correct Answer: D. The client gains weight.

The client with anorexia shows the most improvement by weight gain. Expect weight gain of about 1 lb (0.5 kg) per week to see the effectiveness of the treatment regimen. Establish a minimum weight goal and daily nutritional requirements. Malnutrition is a mood-altering condition, leading to depression and agitation and affecting cognitive function and decision making. Improved nutritional status enhances thinking ability, allowing initiation of psychological work.

- **Option A:** Selecting a balanced diet does little good if the client will not eat. Make a selective menu available, and allow the patient to control choices as much as possible. Patient who gains confidence in herself and feels in control of the environment is more likely to eat preferred foods.
- **Option B:** The hematocrit might improve by several means, such as blood transfusion, but that does not indicate improvement in the anorexic condition. Use a consistent approach. Sit with the patient while eating; present and remove food without persuasion and comment. Promote a pleasant environment and record intake. Patient detects urgency and may react to pressure. Any comment that might be seen as coercion provides focus on food. When staff responds in a consistent manner, the patient can begin to trust staff responses. The single area in which the patient has exercised power and control is food or eating, and he or she may experience guilt or rebellion if forced to eat. Structuring meals and decreasing discussions about food will decrease power struggles with the patient and avoid manipulative games.
- **Option C:** The tissue turgor indicates fluid stasis, not an improvement of anorexia. Maintain a regular weighing schedule, such as Monday and Friday before breakfast in the same attire, and graph results. Provides an accurate ongoing record of weight loss or gain. Also diminishes obsessing about changes in weight.

24. A newly admitted client is suspected to have avian influenza (“bird flu”) due to increasing dyspnea and dehydration. Which of these prescribed actions will the nurse implement first?

- A. Give first dose of oseltamivir (Tamiflu)
- B. Instill 5% dextrose in water at 100 mL/hr
- C. Collect blood and sputum specimens for testing
- D. Start oxygen using a non-rebreather mask

Correct Answer: D. Start oxygen using a non-rebreather mask

The nurse’s first action should be to start oxygen therapy because the respiratory manifestations linked to avian influenza are most likely life-threatening. Patients with respiratory compromise should be placed on supplemental oxygen and monitored closely for signs of deterioration as these patients are at high risk of requiring intubation and mechanical ventilation.

- **Option A:** The World Health Organization released Rapid Advice Guidelines in 2007, outlining consensus treatment recommendations for H5N1 influenza outbreaks. Similar recommendations can likely be used in avian influenza outbreaks due to other strains of the virus. These recommendations include neuraminidase inhibitors (especially oseltamivir) for strongly suspected or confirmed cases of H5N1.
- **Option B:** Treatment of avian influenza usually consists of supportive care and antiviral medications. The majority of care should aim at managing the sequelae of infection. For instance, patients with volume loss or possible electrolyte imbalances should receive volume resuscitation and treatment to correct imbalances.
- **Option C:** The preferred source of a sample for testing is a nasopharyngeal swab or aspirate, but other body fluids are usable if the nasopharyngeal swab or aspirate is not available. Because the infection carries high mortality risk, a negative rapid antigen test should not rule out AIV infection when high suspicion exists.

25. A male client suffers acute respiratory distress syndrome as a consequence of shock. The client’s condition deteriorates rapidly, and endotracheal (ET) intubation and mechanical ventilation are initiated. When the high-pressure alarm on the mechanical ventilator sounds, the nurse starts to check for the cause. Which condition triggers the high-pressure alarm?

- A. Kinking of the ventilator tubing.
- B. A disconnected ventilator tube.
- C. An ET cuff leak.
- D. A change in the oxygen concentration without resetting the oxygen level alarm.

Correct Answer: A. Kinking of the ventilator tubing

Conditions that trigger the high-pressure alarm include kinking of the ventilator tubing, bronchospasm or pulmonary embolism, mucus plugging, water in the tube, coughing or biting on the ET tube, and the client’s being out of breathing rhythm with the ventilator.

- **Option B:** A disconnected ventilator tube or an ET cuff leak would trigger the low-pressure alarm. The low-pressure alarm indicates a possible disconnection or mechanical ventilator malfunction.

- **Option C:** The high peak pressure alarm indicates bronchospasm, retained secretions, obstruction of ET tube, atelectasis, acute respiratory distress syndrome (ARDS), or pneumothorax, among others.
- **Option D:** Changing the oxygen concentration without resetting the oxygen level alarm would trigger the oxygen alarm. Listen for alarms. Know the range in which the ventilator will set off the alarm and how to troubleshoot.

26. The client with cancer is receiving chemotherapy and develops thrombocytopenia. The nurse identifies which intervention is the highest priority in the nursing plan of care?

- A. Monitoring temperature
- B. Monitoring for pathological factors
- C. Ambulation three times a day
- D. Monitoring the platelet count

Correct Answer: D. Monitoring the platelet count

- **Option D:** Thrombocytopenia indicates a decrease in the number of platelets in the circulating blood. A major concern is monitoring for and preventing bleeding.
- **Option A:** Relates to monitoring for infection particularly if leukopenia is present.
- **Options B and C:** Although monitoring the pathological factors and ambulation are important in the plan of care. They are not related directly to thrombocytopenia.

27. A nurse is providing instructions to a client in the first trimester of pregnancy regarding measures to assist in reducing breast tenderness. The nurse tells the client to:

- A. Avoid wearing a bra.
- B. Wash the nipples and areola area daily with soap and massage the breasts with lotion.
- C. Wear tight-fitting blouses or dresses to provide support.
- D. Wash the breasts with warm water and keep them dry.

Correct Answer: D. Wash the breasts with warm water and keep them dry.

The pregnant woman should be instructed to wash the breasts with warm water and keep them dry. Breasts can become sore in early pregnancy for several reasons, but one of the primary causes is changing hormone levels (such as estrogen, progesterone, and prolactin).

- **Option A:** Wearing a supportive bra with wide adjustable straps can decrease breast tenderness. Back closures rather than front closures will give you the ability to adjust as necessary.
- **Option B:** The woman should be instructed to avoid using soap on the nipples and areola area to prevent the drying of tissues.
- **Option C:** Tight-fitting blouses or dresses will cause discomfort. The woman might instinctually do everything she can to avoid allowing anything to touch her breasts. For example, if the seatbelt is uncomfortable, adjust the strap that zigzags across the torso so that it runs between the breasts

and not across the top of one of them.

28. A 25-year-old client with Grave's disease is admitted to the unit. What would the nurse expect the admitting assessment to reveal?

- A. Bradycardia
- B. Decreased appetite
- C. Exophthalmos
- D. Weight gain

Correct Answer: C. Exophthalmos

Exophthalmos (protrusion of eyeballs) often occurs with hyperthyroidism. Graves' orbitopathy (ophthalmopathy) is caused by inflammation, cellular proliferation and increased growth of extraocular muscles and retro-orbital connective and adipose tissues due to the actions of thyroid stimulating antibodies and cytokines released by cytotoxic T lymphocytes (killer cells). These cytokines and thyroid stimulating antibodies activate periorbital fibroblasts and preadipocytes, causing synthesis of excess hydrophilic glycosaminoglycans (GAG) and retro-orbital fat growth.

- **Option A:** Physical signs of hyperthyroidism include tachycardia, systolic hypertension with increased pulse pressure, signs of heart failure (like edema, rales, jugular venous distension, tachypnea), atrial fibrillation, fine tremors, hyperkinesia, hyperreflexia, warm and moist skin, palmar erythema and onycholysis, hair loss, diffuse palpable goiter with thyroid bruit and altered mental status.
- **Option B:** Hyperthyroidism usually increases the appetite. If the client is taking in a lot more calories, they can gain weight even if their body is burning more energy. Make sure to eat healthy foods, get regular exercise, and work with a doctor on a nutrition plan. These steps can all help combat weight gain from an increased appetite.
- **Option D:** In younger patients, common presentations include heat intolerance, sweating, fatigue, weight loss, palpitation, hyper defecation, and tremors. Other features include insomnia, anxiety, nervousness, hyperkinesia, dyspnea, muscle weakness, pruritus, polyuria, oligomenorrhea or amenorrhea in the female, loss of libido, and neck fullness.

29. A client being treated for chronic cholecystitis should be given which of the following instructions?

- A. Increase rest.
- B. Avoid antacids.
- C. Increase protein in diet.
- D. Use anticholinergics as prescribed.

Correct Answer: D. Use anticholinergics as prescribed.

Conservative therapy for chronic cholecystitis includes weight reduction by increasing physical activity, a low-fat diet, antacid use to treat dyspepsia, and anticholinergic use to relax smooth muscles and reduce ductal tone and spasm, thereby reducing pain. Anticholinergics such as atropine and propantheline (Pro-Banth?-ne) relieve reflex spasms and smooth muscle contraction and assists with pain management.

- **Option A:** Promote bedrest, allowing the patient to assume a position of comfort. Bedrest in low-Fowler's position reduces intra-abdominal pressure; however, the patient will naturally assume the least painful position. Encourage use of relaxation techniques. Provide diversional activities.
- **Option B:** Administer bile salts: Bilron, Zanchol, dehydrocholic acid (Decholin), as indicated. Promotes digestion and absorption of fats, fat-soluble vitamins, cholesterol. Useful in chronic cholecystitis.
- **Option C:** Begin a low-fat liquid diet after the NG tube is removed. Limiting fat content reduces stimulation of the gallbladder and pain associated with incomplete fat digestion and is helpful in preventing recurrence. Advance diet as tolerated, usually low-fat, high-fiber. Restrict gas-producing foods (onions, cabbage, popcorn) and foods or fluids high in fats (butter, fried foods, nuts).

30. A male client who weighs 175 lb (79.4 kg) is receiving aminophylline (Aminophylline) (400 mg in 500 ml) at 50 ml/hour. The theophylline level is reported as 6 mcg/ml. The nurse calls the physician who instructs the nurse to change the dosage to 0.45 mg/kg/hour. The nurse should:

- A. Question the order because it's too low.
- B. Question the order because it's too high.
- C. Set the pump at 45 ml/hour.
- D. Stop the infusion and have the laboratory repeat the theophylline measurement.

Correct Answer: A. Question the order because it's too low.

A therapeutic theophylline level is 10 to 20 mcg/ml. The client is currently receiving 0.5 mg/kg/hour of aminophylline. Because the client's theophylline level is sub-therapeutic, reducing the dose (which is what the physician's order would do) would be inappropriate. Therefore, the nurse should question the order.

- **Option B:** Intravenous administration of aminophylline occurs via two methods. A loading dose is given to achieve a serum concentration of 10 mcg/ml. Once the serum concentration has reached 10 to 15 mcg/ml, the maintenance constant infusion follows. The dosage given depends on the clearance of theophylline and whether the person has taken theophylline in the last 24 hours. These dosages vary by age, body weight, and the health status of the patient.
- **Option C:** The loading dose is 5.7 mg/kg based on the ideal body weight for all age groups. Loading doses should be administered over 30 minutes at a rate not to exceed 21 mg/hr and should be calculated using ideal body weight. This dose is for patients who have not taken aminophylline in the past 24 hours. The loading dose calculation must use the formula given below for patients who have taken aminophylline in the last 24 hours.
- **Option D:** Patients taking aminophylline require monitoring for CNS effects, respiratory rate, arterial blood gasses, and serum theophylline concentrations. Clinicians must measure serum concentrations before initiating a loading dose in a person who has taken theophylline in the last 24 hours. A repeat serum concentration is necessary before starting the maintenance dose, as well.

31. A 12-year-old boy, Timmy, presents to a pediatric clinic accompanied by his parents. He has a history of recurrent sore throat infections over the past 6 months. His mother reports that although they initially completed antibiotic courses, the last two times, Timmy only took antibiotics for a couple of days

until he felt better, and they still have the leftover medication at home. Upon examination, the healthcare provider notes erythema and exudate in Timmy's pharynx along with tender, enlarged cervical lymph nodes. A rapid antigen detection test (RADT) confirms the presence of Group A beta-hemolytic streptococci (GABHS). Given Timmy's history of inadequate antibiotic treatment, the healthcare provider is concerned about the potential complications that may arise from repeated, partially treated GABHS infections. Which of the following conditions is a known complication that may result from unresolved or partially treated GABHS infection?

- A. Influenza
- B. Sickle cell anemia
- C. Histoplasmosis
- D. Rheumatic Fever
- E. Glomerulonephritis
- F. Scarlet Fever

Correct Answer: D. Rheumatic Fever

Rheumatic fever is a known serious complication of untreated or inadequately treated GABHS pharyngitis. It is an inflammatory disease that can affect many of the body's connective tissues — especially those of the heart, joints, brain, or skin.

- **Option A:** Influenza is caused by viruses usually known as type A, B, and C, not by a bacterial infection like GABHS.
- **Option B:** Sickle cell anemia is a genetic disorder and is not related to GABHS infections.
- **Option C:** Histoplasmosis is a pulmonary fungal infection caused by spores of *Histoplasma capsulatum*.
- **Option E:** Although post-streptococcal glomerulonephritis (PSGN) can occur after certain strains of streptococcal infections, it is not as directly related to untreated pharyngeal infections by GABHS as rheumatic fever is. The scenario provided focuses on recurrent sore throat infections which more align with rheumatic fever as a complication.
- **Option F:** While scarlet fever is associated with certain strains of GABHS, it isn't a result of unresolved or inadequately treated GABHS pharyngitis like rheumatic fever. Scarlet fever tends to manifest shortly after a GABHS infection with a characteristic rash.

32. Which intervention should the nurse in charge try first for a client that exhibits signs of sleep disturbance?

- A. Administer sleeping medication before bedtime.
- B. Ask the client each morning to describe the quantity of sleep during the previous night.
- C. Teach the client relaxation techniques, such as guided imagery, medication, and progressive muscle relaxation.
- D. Provide the client with normal sleep aids, such as pillows, back rubs, and snacks.

Correct Answer: D. Provide the client with normal sleep aids, such as pillows, back rubs, and snacks

The nurse should begin with the simplest interventions, such as pillows or snacks, before interventions that require greater skill such as relaxation techniques. Sleep is a complex biological process. It is a reversible state of unconsciousness in which there are reduced metabolism and motor activity. Sleep disorders are a group of conditions that disturb the normal sleep patterns of a person. Sleep disorders are one of the most common clinical problems encountered. Inadequate or non-restorative sleep can interfere with normal physical, mental, social, and emotional functioning. Sleep disorders can affect overall health, safety, and quality of life.

- **Option A:** Sleep medication should be avoided whenever possible. Histamine type 1 receptor blockers: due to their sedative effects, these drugs can be helpful in patients with sleep disorders. Benzodiazepines (BZD) are the mainstay in the treatment of insomnia. Non-benzodiazepine hypnotics are used for the treatment of acute and short term insomnia.
- **Option B:** At some point, the nurse should do a thorough sleep assessment, especially if common sense interventions fail. The sleep diary, or sleep log, is a subjective paper record of sleep and wakefulness over a period of weeks to a month. Patients should record the detailed description of sleep, such as bedtime, duration until sleep onset, the number of awakenings, duration of awakenings, and nap times.
- **Option C:** Relaxation techniques may be implemented before sleep. Meditation and breathing exercises are some of the relaxation techniques. It begins with being in a comfortable position and closing eyes. The mind and thoughts should be redirected towards a peaceful image, and relaxation should be allowed to spread throughout the body.

33. The nurse is caring for the client following a laryngectomy when suddenly the client becomes unresponsive and pale, with a BP of 90/40 systolic. The initial nurse's action should be to:

- A. Place the client in Trendelenburg position
- B. Increase the infusion of Dextrose in normal saline
- C. Administer atropine intravenously
- D. Move the emergency cart to the bedside

Correct Answer: B. Increase the infusion of Dextrose in normal saline

Dextrose in normal saline is indicated as a source of water, electrolytes, and calories. Early complications after total laryngectomy are bleeding, postoperative edema, and airway compromise, these, especially in the immediate postoperative, should be carefully monitored.

- **Option A:** In clients who have not had surgery to the face or neck, however, in this situation, this could further interfere with the airway. Increasing the infusion and placing the client in supine position would be better.
- **Option C:** Administration of atropine IV is not necessary at this time and could cause hyponatremia and further hypotension. Administration of corticosteroids is recommended to minimize postoperative edema and airway compromise, hematoma or seroma, that should be promptly surgically evacuated, wound infection related to the perioperative exposure of the wound to bacteria, it could be minimized using a broad-spectrum antibiotic coverage and pharyngocutaneous fistula; total laryngectomy patients are at risk for pharyngeal suture line dehiscence with a resultant pharyngocutaneous fistula.

- **Option D:** Moving the emergency cart at the bedside is not necessary at this time. The primary goal for the treatment of laryngeal cancer is the control of the disease. Preservation of speech, swallowing functions, and avoidance of the tracheostomy are secondary goals. Traditionally the treatment of laryngeal carcinomas has been radiotherapy or surgery or a combination of both.

34. A client arrives in the emergency unit and reports that a concentrated household cleaner was splashed in both eyes. Which of the following nursing actions is a priority?

- A. Examine the client's visual acuity
- B. Patch the eye
- C. Use Restasis (Allergan) drops in the eye
- D. Flush the eye repeatedly using sterile normal saline

Correct Answer: D. Flush the eye repeatedly using sterile normal saline.

Initial emergency action during a chemical splash to the eye includes immediate continuous irrigation of the affected eye with normal saline. Immediate irrigation with copious amounts of an isotonic solution as described previously is the mainstay of treatment for chemical burns. Never use any substance to neutralize chemical exposure as the exothermic reaction can lead to secondary thermal injuries.

- **Option A:** After irrigation, visual acuity then is assessed. Irrigation should continue until the pH of the eye is between 7.0 to 7.4 and remains within this range for at least 30 minutes after the irrigation has been discontinued.
- **Option B:** Patching the eye is not part of the first-line treatment of a chemical splash. Irrigation should be gentle, and care should be taken to avoid direct irrigation to the cornea to prevent further injury. Use of a commercial irrigation lens such as a Morgan lens may be helpful.
- **Option C:** Restasis (Allergan) drops are used to treat dry eyes. A topical anesthetic such as tetracaine can be applied directly to the eye, or 10 mL of 1% lidocaine can be added to a liter of irrigating fluid, taking care not to reach a toxic dose if copious irrigation is required.

35. Which nursing intervention is most appropriate for a client with Alzheimer's disease who has frequent episodes of emotional lability?

- A. Attempt humor to alter the client's mood.
- B. Explore reasons for the client's altered mood.
- C. Reduce environmental stimuli to redirect the client's attention.
- D. Use logic to point out reality aspects.

Correct Answer: C. Reduce environmental stimuli to redirect the client's attention.

The client with Alzheimer's disease can have frequent episodes of labile mood, which can best be handled by decreasing a stimulating environment and redirecting the client's attention. Maintain a nice quiet neighborhood. Noise, crowds, the crowds are usually the excessive sensory neurons and can increase interference.

- **Option A:** The client with Alzheimer's disease loses the cognitive ability to respond to either humor or logic. Assess the level of cognitive disorders such as a change to orientation to people, places

and times, range, attention, thinking skills. It provides the basis for the evaluation or comparison that will come and influencing the choice of intervention.

- **Option B:** An over-stimulating environment may cause a labile mood, which will be difficult for the client to understand. Maintain consistent scheduling with allowances for patient's specific needs, and avoid frustrating situations and overstimulation. It prevents patient agitation, erratic behaviors, and combative reactions. Scheduling may need revision to show respect for the patient's sense of worth and to facilitate the completion of tasks.
- **Option D:** The client lacks any insight into his or her own behavior and therefore will be unaware of any causative factors. Assist with establishing cues and reminders for patient's assistance. Assists patients with early AD to remember the location of articles and facilitates some orientation.

36. A 25-year-old professional ballet dancer presents to the physiotherapy clinic after sustaining an injury during a performance. While demonstrating a specific move, she describes a motion where she had to bend her elbow joint, decreasing the angle between her forearm and upper arm. The physiotherapist recognizes this motion as a fundamental joint movement. Which term best describes this action?

- A. Flexion
- B. Extension
- C. Abduction
- D. Adduction

- **Option D:** Adduction is the movement of a body part toward the midline.
- **Option B:** Extension is the opposite, where the joint straightens, increasing the angle between the bones.
- **Option C:** Abduction is the movement of a body part away from the midline.
- **Option D:** Adduction is the movement of a body part toward the midline.

37. The superego is that part of the psyche that:

- A. Uses defensive function for protection.
- B. Is impulsive and without morals.
- C. Determines the circumstances before making decisions.
- D. The censoring portion of the mind.

Correct Answer: D. The censoring portion of the mind.

The critical censoring portion of one's personality; the conscience. The superego is the final aspect of personality to emerge, and it contains our ideals and values. The values and beliefs that our parents and society instill in us are the guiding force of the superego and it strives to make us behave according to these morals.

- **Option A:** This refers to the ego function that protects itself from anything that threatens it. The second aspect of personality to emerge is known as the ego. This is the part of the personality that must deal with the demands of reality. It helps control the urges of the id and makes us behave in

ways that are both realistic and acceptable.

- **Option B:** The Id is composed of the untamed, primitive drives and impulses. The first of the key elements of personality to emerge is known as the id. The id contains all of the unconscious, basic, and primal urges.
- **Option C:** This refers to the ego that acts as the moderator of the struggle between the id and the superego. Rather than engaging in behaviors that are designed to satisfy our desires and needs, the ego forces us to fulfill our needs in ways that are socially acceptable and realistic. In addition to controlling the demands of the id, the ego also helps strike a balance between our basic urges, our ideals, and reality.

38. A 34-year-old woman with a history of asthma is admitted to the emergency department. The nurse notes that the client is dyspneic, with a respiratory rate of 35 breaths/minute, nasal flaring, and use of accessory muscles. Auscultation of the lung fields reveals greatly diminished breath sounds. Based on these findings, what action should the nurse take to initiate care of the client?

- A. Initiate oxygen therapy and reassess the client in 10 minutes.
- B. Draw blood for an ABG analysis and send the client for a chest x-ray.
- C. Encourage the client to relax and breathe slowly through the mouth.
- D. Administer bronchodilators.

Correct Answer: D. Administer bronchodilators.

In an acute asthma attack, diminished or absent breath sounds can be an ominous sign indicating lack of air movement in the lungs and impending respiratory failure. The client requires immediate intervention with inhaled bronchodilators, intravenous corticosteroids, and possibly intravenous theophylline.

- **Option A:** Administering oxygen and reassessing the client 10 minutes later would delay needed medical intervention. A favorable response to initial treatment of status asthmaticus should be a visible improvement in symptoms that sustains 30 minutes or beyond the last bronchodilator dose and a PEFr greater than 70% of predicted.
- **Option B:** Drawing an ABG and obtaining a chest x-ray would be a delay. The absolute value of PEFr less than 120 L per minute and FEV1 less than 1 L corresponds with the proportional reduction. These absolute numbers should prompt an assessment of arterial blood gas (ABG) immediately. Initial blood gas results indicate respiratory alkalosis with hypoxemia.
- **Option C:** It would be futile to encourage the client to relax and breathe slowly without providing necessary pharmacologic intervention. An initial aggressive treatment trial of beta-agonists, corticosteroids, and anticholinergics has to be tried, followed by adjunct measures, which may not be based on robust guidelines but evidence.

39. Rifabutin (Mycobutin) is prescribed to a client with active Mycobacterium avium complex disease and tuberculosis. The nurse determines that the client is experiencing side effects in which of the following, except?

- A. Tingling and numbness of the fingers
- B. Blurred vision

- C. Arthralgia
- D. Flu-like symptoms

Correct Answer: A. Tingling and numbness of the fingers

Tingling and numbness of the fingers (peripheral neuropathy) is associated with the use of isoniazid (INH) due to the ability of the medication to damage nerves.

- **Options B, C, & D:** These are the side effects of Rifabutin.

40. For a male client with dysthymic disorder, which of the following approaches would the nurse expect to implement?

- A. ECT
- B. Psychotherapeutic approach
- C. Psychoanalysis
- D. Antidepressant therapy

Correct Answer: B. Psychotherapeutic approach

Dysthymia is a less severe, chronic depression diagnosed when a client has had a depressed mood for more days than not over a period of at least 2 years. Clients with dysthymic disorder benefit from psychotherapeutic approaches that assist the client in reversing the negative self-image, negative feelings about the future. In addition to pharmacotherapy, psychotherapy may be helpful. However, Dunner cautions that "treatment with psychotherapy is difficult." A number of psychotherapies have been advocated including cognitive behavioral analysis system of psychotherapy (CBASP), interpersonal psychotherapy (IPT), cognitive behavioral therapy, manualized group therapy and problem-solving therapy. These do not exclude the potential value of supportive or psychodynamic psychotherapies.

- **Option A:** ECT is indicated in patients with treatment-resistant depression or severe major depression that impairs activities of daily living. The definition of treatment-resistant depression is depression that is unresponsive to multiple antidepressant medication trials. There are also suggestions for ECT as a treatment for suicidality, severe psychosis, food refusal secondary to depression, and catatonia. Bipolar depressive and manic patients can also receive treatment with ECT. ECT may have a safer profile than antidepressants or antipsychotics in debilitated, elderly, pregnant, and breastfeeding patients.
- **Option C:** Psychoanalysis is defined as a set of psychological theories and therapeutic techniques that have their origin in the work and theories of Sigmund Freud. The core of psychoanalysis is the belief that all people possess unconscious thoughts, feelings, desires, and memories. Psychoanalysis suggests that people can experience catharsis and gain insight into their current state of mind by bringing the content of the unconscious into conscious awareness. Through this process, a person can find relief from psychological distress.
- **Option D:** Antidepressants are a popular treatment choice for depression. Although antidepressants may not cure depression, they can reduce symptoms. The first antidepressant you try may work fine. But if it doesn't relieve your symptoms or it causes side effects that bother you, you may need to try another.

41. A nurse is admitting a client with a possible diagnosis of chronic bronchitis. The nurse collects data from the client and notes which of the following signs

supports this diagnosis? Select all that apply.

- A. Scant mucus
- B. Early onset cough
- C. Marked weight loss
- D. Purulent mucus production
- E. Mild episodes of dyspnea

Correct Answer: B, D, & E.

Key features of pulmonary emphysema include dyspnea that is often marked, late cough (after the onset of dyspnea), scant mucus production, and marked weight loss. By contrast, chronic bronchitis is characterized by an early onset of cough (before dyspnea), copious purulent mucus production, minimal weight loss, and milder severity of dyspnea.

- **Option A:** Most patients with emphysema present with very nonspecific symptoms of chronic shortness of breath and cough with or without sputum production. As the disease process advances, the shortness of breath and cough progressively get worse.
- **Option B:** The most common symptom of patients with chronic bronchitis is a cough. The history of a cough typical of chronic bronchitis is characterized to be present for most days in a month lasting for 3 months with at least 2 such episodes occurring for 2 years in a row. The characteristic cough of bronchitis is caused by the copious secretion of mucus in chronic bronchitis.
- **Option C:** As COPD advances, patients can lose significant body weight due to systemic inflammation and increased energy spent in the work of breathing. Also, there are frequent intermittent exacerbations as the obstruction of the airways increases.
- **Option D:** The airways become clogged by debris and this further increases the irritation. A productive cough with sputum is present in about 50% of patients. The sputum color may vary from clear, yellow, green, or at times blood-tinged. The color of the sputum may be dependent on the presence of secondary bacterial infection.
- **Option E:** During an acute exacerbation of chronic bronchitis, the bronchial mucous membrane becomes hyperemic and edematous with diminished bronchial mucociliary function. This, in turn, leads to airflow impediment because of luminal obstruction to small airways.

42. A 21-year-old male with Hodgkin's lymphoma is a senior at the local university. He is engaged to be married and is to begin a new job upon graduation. Which of the following diagnoses would be a priority for this client?

- A. Sexual dysfunction related to radiation therapy
- B. Anticipatory grieving related to terminal illness
- C. Tissue integrity related to prolonged bed rest
- D. Fatigue related to chemotherapy

Correct Answer: A. Sexual dysfunction related to radiation therapy

Radiation therapy often causes sterility in male clients and would be of primary importance to this client. The psychosocial needs of the client are important to address in light of the age and life choices. Hodgkin's disease, however, has a good prognosis when diagnosed early. Know the importance of sex

to individual, partner, and patient's motivation for change. Because lymphomas often affect the relatively young who are in their productive years, these people may be affected more by these problems and may be less knowledgeable about the possibilities of change.

- **Option B:** Grieving may not be an appropriate diagnosis since the client would be experiencing new milestones in his life despite his condition. Let the patient describe the problem in own words. Provides a more accurate picture of patient experience with which to develop a plan of care.
- **Option C:** Option B is not applicable since the client is not on bed rest. Encourage the patient to share thoughts and concerns with his partner and to clarify values and impact of condition on relationship. Helps the couple begin to deal with issues that can strengthen or weaken the relationship.
- **Option D:** Fatigue may occur during chemotherapy, but it is not the priority diagnosis. Identify pre-existing and current stress factors that may be affecting the relationship. The patient may be concerned about other issues, such as job, financial, and illness-related problems.

43. A nurse is providing instruction to a client who is prescribed with repaglinide (Prandin). All of which is true regarding this medication, except?

- A. Do not skip the dose when a meal is not taken
- B. Dizziness may occur while taking it
- C. Has quicker and shorter duration of action
- D. Used to treat type II diabetes mellitus

Correct Answer: A. Do not skip the dose when a meal is not taken

Repaglinide (Prandin) is a meglitinide type of antidiabetic that has a quick onset of action which allows a client to take the medication with meals and skip a dose when a meal is skipped.

- **Options B, C, & D:** Repaglinide is an oral antihyperglycemic agent used for the management of type II diabetes. It has a fast onset and duration of action making it a good medication for treating postprandial blood glucose spikes. Since the medication causes changes in the blood sugar, a client may experience signs of hypoglycemia such as dizziness or lightheadedness.

44. A client is hospitalized in the end stage of terminal cancer. His family members are sitting at his bedside. What can the nurse do to best aid the family at this time?

- A. Limit the time visitors may stay so they do not become overwhelmed by the situation.
- B. Avoid telling family members about the client's actual condition so they will not lose hope.
- C. Discourage spiritual practices because this will have little connection to the client at this time.
- D. Find simple and appropriate care activities for the family to perform.

Correct Answer: D. Find simple and appropriate care activities for the family to perform.

It is helpful for the nurse to find simple care activities for the family to perform, such as feeding the client, washing the client's face, combing hair, and filling out the client's menu. This helps the family demonstrate their caring for the client and enables the client to feel their closeness and concern. a. Older adults often become particularly lonely at night and may feel more secure if a family member

stays at the bedside during the night.

- **Option A:** The nurse should allow visitors to remain with dying clients at any time if the client wants them. It is up to the family to determine if they are feeling overwhelmed, not the nurse. Provide family-focused interventions that assist parents in connecting or reconnecting with their existing families, friends, and networks of support as a means of re-establishing coherence and meaning as they go forward.
- **Option B:** Truthful and open communication between the healthcare provider and patient is essential for trust in the relationship and for respect for autonomy. Withholding pertinent medical information from patients in the belief that disclosure is medically contraindicated creates a conflict between the healthcare provider's obligations to promote patient welfare and to respect patient autonomy.
- **Option C:** It is important to keep in mind that there are numerous individual, familial, and cultural differences that make responding appropriately to another person's grief anything but a formula. The United States, as most Western countries, has a variety of cultural, religious, and ethnic variations that mediate and modulate the experience of grief and mourning.

45. During the acute phase of a burn, the nurse in-charge should assess which of the following?

- A. Client's lifestyle
- B. Alcohol use
- C. Tobacco use
- D. Circulatory status

Correct Answer: D. Circulatory status

During the acute phase of a burn, the nurse should assess the client's circulatory and respiratory status, vital signs, fluid intake, and output, ability to move, bowel sounds, wounds, and mental status. Information about the client's lifestyle and alcohol and tobacco use may be obtained later when the client's condition has stabilized.

- **Option A:** Assess color, sensation, movement, peripheral pulses, and capillary refill on extremities with circumferential burns. Compare with findings of unaffected limb. Edema formation can readily compress blood vessels, thereby impeding circulation and increasing venous stasis or edema. Comparisons with unaffected limbs aid in differentiating localized versus systemic problems.
- **Option B:** Obtain BP in unburned extremity when possible. Remove BP cuff after each reading, as indicated. If BP readings must be obtained on an injured extremity, leaving the cuff in place may increase edema formation and reduce perfusion, and convert partial thickness burn to a more serious injury.
- **Option C:** Check for irregular pulses. Cardiac dysrhythmias can occur as a result of electrolyte shifts, electrical injury, or release of myocardial depressant factor, compromising cardiac output.

46. A nurse is caring for a client who will perform fecal occult blood testing at home. Which of the following information should the nurse include when explaining the procedure to the client?

- A. Eating more protein is optimal prior to testing.

- B. One stool specimen is sufficient for testing.
- C. A red color changes indicates a positive test.
- D. The specimen cannot be contaminated with urine.

Correct Answer: D. The specimen cannot be contaminated with urine.

For fecal occult blood testing at home, the stool specimens cannot be contaminated with water or urine. The fecal occult blood test (FOBT) is a diagnostic test to assess for occult blood in the stool. This test has commonly been used for colorectal cancer screening, especially in developed nations. When used correctly for screening, this testing modality has established associations with decreased morbidity and mortality. When performing at home, the stool should be collected in a dry, clean container.

- **Option A:** Some proteins such as red meat, fish, and poultry can alter the test results. Three days prior to fecal occult blood testing, avoidance of certain foods should be to help prevent false test results. False-positive results have been associated with red or rare meat as well as raw fruits and vegetables, including but not limited to horseradish, raw turnips, cantaloupe, broccoli, cauliflower, parsnips, and red radishes. False-negative results are also known to occur in patients taking ascorbic acid (vitamin C) in excess of 250mg/day.
- **Option B:** Three specimens from three different bowel movements are required. One problem with FOBT is the need for medication and dietary restrictions before testing. These restrictions are in order to decrease the risk of false negative and false-positive results. Many studies assessing the risk of these false results exist. One particular retrospective study evaluated the medications that could create false-positive results and encouraged patients to avoid these medications, if possible, for seven days before testing. The listed medications include acetylsalicylic acid, unfractionated or low-molecular-weight heparin, warfarin, clopidogrel, nonsteroidal anti-inflammatory drugs, and selective serotonin reuptake inhibitors.
- **Option C:** A blue color indicates blood in the stool. If the patient's fecal occult blood test does not turn blue, it is negative. If the card turns blue, this is positive and requires further gastroenterological workup.

47. What is the priority nursing diagnosis for a client in the rehabilitative phase of recovery from a burn injury?

- A. Acute Pain
- B. Impaired Adjustment
- C. Deficient Diversional Activity
- D. Imbalanced Nutrition: Less than Body Requirements

Correct Answer: B. Impaired Adjustment

Recovery from a burn injury requires a lot of work on the part of the client and significant others. Seldom is the client restored to the preburn level of functioning. Adjustments to changes in appearance, family structure, employment opportunities, role, and functional limitations are only a few of the numerous life-changing alterations that must be made or overcome by the client.

- **Option A:** By the rehabilitation phase, acute pain from the injury or its treatment is no longer a problem. 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:** Diversional activity for pain is applicable during the intermediate phase of the burn injury. Provide diversional activities appropriate for age and condition. This helps lessen concentration on pain experience and refocus attention.
- **Option D:** Imbalanced nutrition is more appropriate during the emergent and intermediate phases of the burn injury. Appropriate guides to proper caloric intake include 25 kcal/kg body weight, plus 40 kcal per percentage of TBSA burn in the adult. As the burn wound heals, the percentage of burned areas is reevaluated to calculate prescribed dietary formulas, and appropriate adjustments are made.

48. Which of the following cells is the precursor to the red blood cell (RBC)?

- A. B cell
- B. Macrophage
- C. Stem cell
- D. T cell

Correct Answer: C. Stem cell

The precursor to the RBC is the stem cell. B cells, macrophages, and T cells, and lymphocytes, not RBC precursors. Precursor cells are known as the intermediate cell before they become differentiated after being a stem cell. Usually, a precursor cell is a stem cell with the capacity to differentiate into only one cell type. Sometimes, precursor cells are used as an alternative term for unipotent stem cells.

- **Option A:** B cells are at the center of the adaptive humoral immune system and are responsible for mediating the production of antigen-specific immunoglobulin (Ig) directed against invasive pathogens (typically known as antibodies).
- **Option B:** Macrophages are specialized cells involved in the detection, phagocytosis, and destruction of bacteria and other harmful organisms. In addition, they can also present antigens to T cells and initiate inflammation by releasing molecules (known as cytokines) that activate other cells.
- **Option D:** T cells are so-called because they are predominantly produced in the thymus. They recognize foreign particles (antigen) by a surface-expressed, highly variable, T cell receptor (TCR).

49. For a client in hepatic coma, which outcome would be the most appropriate?

- A. The client is oriented to time, place, and person.
- B. The client exhibits no ecchymotic areas.
- C. The client increases oral intake to 2,000 calories/day.
- D. The client exhibits increased serum albumin level.

Correct Answer: A. The client is oriented to time, place, and person.

Hepatic coma is the most advanced stage of hepatic encephalopathy. As hepatic coma resolves, improvement in the client's level of consciousness occurs. The client should be able to express orientation to time, place, and person. Throughout the intermediate stages, patients tend to experience worsening levels of confusion, lethargy, and personality changes.

- **Option B:** Ecchymotic areas are related to decreased synthesis of clotting factors. In order to make a diagnosis of hepatic encephalopathy, there must be confirmed the presence of liver disease (e.g., abnormal liver function tests, ultrasound or liver biopsy demonstrating liver disease) or a portosystemic shunt, and exclusion of other potential etiologies (e.g., intracranial lesions, masses, hemorrhage or stroke; seizure activity; post-seizure encephalopathy; intracranial infections; or toxic encephalopathy from other causes).
- **Option C:** Although oral intake may be related to the level of consciousness, it is more closely related to anorexia. Triggers of hepatic encephalopathy include renal failure, gastrointestinal bleeding (e.g., esophageal varices), constipation, infection, medication non-compliance, excessive dietary protein intake, dehydration (e.g., fluid restriction, diuretics, diarrhea, vomiting, excessive paracentesis), electrolyte imbalance, consumption of alcohol, or consumption of certain sedatives, analgesics or diuretics all in the setting of chronic liver disease.
- **Option D:** The serum albumin level reflects hepatic synthetic ability, not level of consciousness. Elevated blood ammonia levels are often seen in patients with hepatic encephalopathy. It is more useful, however, to assess the clinical improvement or deterioration of a patient undergoing treatment rather than monitor serial arterial blood ammonia measurements.

50. When a client is confused, left alone with the side rails down, and the bed in a high position, the client falls and breaks a hip. What law has been broken?

- A. Assault
- B. Battery
- C. Negligence
- D. Civil tort

Correct Answer: C. Negligence

Knowing what to do to prevent injury is a part of the standards of care for nurses to follow. Safety guidelines dictate raising the side rails, staying with the client, lowering the bed, and observing the client until the environment is safe. As a nurse, these activities are known as basic safety measures that prevent injuries, and to not perform them is not acting in a safe manner. Negligence is conduct that falls below the standard of care that protects others against unreasonable risk of harm.

- **Option A:** Assault is the intentional act of making someone fear that the nurse will cause them harm. One does not have to actually harm them to commit assault. Threatening them verbally or pretending to hit them are both examples of assault.
- **Option B:** Battery is the intentional act of causing physical harm to someone. Unlike assault, one doesn't have to warn the victim or make him fearful before they hurt them for it to count as a battery. If a nursing home attendant surprises the patient and pushes the patient from behind, that would qualify as a battery.
- **Option D:** Torts are civil laws that address the legal rights of patients and the responsibilities of the nurse in the nurse-patient relationship. Some torts specific to nursing and nursing practice include things like malpractice, negligence, and violations relating to patient confidentiality.

51. Cataract surgery results in aphakia. Which of the following statements best describes this term?

- A. Absence of the crystalline lens.

- B. A “keyhole” pupil.
- C. Loss of accommodation.
- D. Retinal detachment.

Correct Answer: A. Absence of the crystalline lens

Aphakia means without a lens. Aphakia is a condition that involves not having an eye lens. The lens of the eye is a clear, flexible structure that allows the eye to focus. This condition is most common in adults with cataracts, but it can also affect infants and children.

- **Option B:** A keyhole pupil results from iridectomy. Coloboma of the iris is a hole or defect of the iris of the eye. Most colobomas are present since birth (congenital). A cat-eye is a type of coloboma. Any defect in the iris that allows light to enter the eye, other than through the pupil, is called a coloboma.
- **Option C:** Loss of accommodation is a normal response to aging. Loss of accommodation is a normal process of aging, called presbyopia. However, premature or acute accommodation loss in a child or young adult necessitates systemic evaluation and laboratory work-up to determine the etiology.
- **Option D:** A retinal detachment is usually associated with retinal holes created by vitreous traction. Retinal detachments constitute a serious ocular condition and can lead to permanent vision loss. When the retina, the neurosensory layer, detaches from the back of the eye, it loses its oxygen and nutrient supply leading to the death of the tissue.

52. The nurse is administering a psychotropic drug to an elderly client who has a history of benign prostatic hypertrophy. It is most important for the nurse to teach this client to:

- A. Add fiber to his diet.
- B. Exercise on a regular basis.
- C. Report incomplete bladder emptying.
- D. Take the prescribed dose at bedtime.

Correct Answer: C. Report incomplete bladder emptying

Urinary retention is a common anticholinergic side effect of psychotic medications, and the client with benign prostatic hypertrophy would have increased risk for this problem. First-generation antipsychotics (FGAs) are associated with significant extrapyramidal side effects. Anticholinergic adverse effects like dry mouth, constipation, urinary retention are common with low potency dopamine receptor antagonists like chlorpromazine, thioridazine.

- **Option A:** Neuroleptic malignant syndrome is a rare but fatal adverse effect that can occur at any time during treatment with FGAs. The onset of symptoms is over 24 to 72 hours with increased temperature, severe muscular rigidity, confusion, agitation, elevation in white blood cell count, elevated creatinine phosphokinase concentrations, elevated liver enzymes, myoglobinuria, and acute renal failure.
- **Option B:** Adding fiber to one’s diet and exercising regularly are measures to counteract another anticholinergic effect, constipation. Second-generation antipsychotics (SGAs) have a decreased risk of extrapyramidal side effects as compared to first-generation antipsychotics. SGAs are associated with significant weight gain and the development of metabolic syndrome.

- **Option D:** Depending on the specific medication and how it is prescribed, taking the medication at night may or may not be important. However, it would have nothing to do with urinary retention in this client. The FDA recommends monitoring personal and family history of diabetes mellitus, dyslipidemia, weight, and height, waist circumference, blood pressure, fasting plasma glucose, and fasting lipid profile for all patients.

53. Which statement by the client during the initial assessment in the emergency department is most indicative of suspected domestic violence?

- A. "I am determined to leave my house in a week."
- B. "No one else in the family has been treated like this."
- C. "I have only been married for two (2) months."
- D. "I have tried leaving, but have always gone back."

Correct Answer: D. "I have tried leaving, but have always gone back."

Victims develop a high tolerance for abuse. They blame themselves for being victimized. All members of the family suffer from the effects of abuse, even if they are not the actual victims. For these reasons, victims often have an extensive history of abuse and struggle for a long time before they can leave permanently.

- **Option A:** Even when victims decide to leave, it takes them 5 attempts on average before they succeed (Stroshine & Robinson, 2003). Furthermore, some of the problems persist even after they leave (i.e. harassment and violence from the abuser).
- **Option B:** If motivated to do so, victims can learn to overcome learned helplessness, which leads to depression, inadequate problem solving and loss of self-esteem (Lysaker, Clements, Wright, Evans, & Marks, 2001). In certain immigrant communities that do not condone intimate partner abuse, victims can become completely isolated and will need help moving on with their lives (Raj & Silverman, 2003). In general, victims need help creating models of abuse-free relationships with or without their partners, and finding social support that can enhance their independence and self-efficacy.
- **Option C:** Sometimes, victims do not leave because they want to provide a family for their children, depend on the abuser financially, emotionally or their religion forbids them from breaking up a marriage. Mental health professionals usually help victims decide whether to stay or leave the relationship, find shelter if they do decide to leave as well as provide training for skills necessary for independent living.

54. Cataracts result in the opacity of the crystalline lens. Which of the following best explains the functions of the lens?

- A. The lens controls stimulation of the retina.
- B. The lens orchestrates eye movement.
- C. The lens focuses light rays on the retina.
- D. The lens magnifies small objects.

Correct Answer: C. The lens focuses light rays on the retina.

The lens allows light to pass through the pupil and focus light on the retina. The lens is a curved structure in the eye that bends light and focuses it for the retina to help you see images clearly. The crystalline lens, a clear disk behind the iris, is flexible and changes shape to help you see objects at varying distances.

- **Option A:** Retinal tissue is stimulated by light but also responds to mechanical disturbances. Flashing lights usually are caused by separation of the posterior vitreous. As the vitreous gel separates from the retina, it stimulates the retinal tissue mechanically, resulting in the release of phosphenes and the sensation of light.
- **Option B:** Because only a small portion of the retina, the fovea, is actually employed for distinct vision, it is vitally important that the motor apparatus governing the direction of gaze be extremely precise in its operation, and rapid.
- **Option D:** The lens works much like a camera lens, bending and focusing light to produce a clear image. The crystalline lens is a convex lens that creates an inverted image focused on the retina. The brain flips the image back to normal to create what you see around you. In a process called accommodation, the elasticity of the crystalline lens allows you to focus on images at far distances and near with minimal disruption.

55. Which of the following nursing interventions should the nurse perform for a female client receiving enteral feedings through a gastrostomy tube?

- A. Change the tube feeding solutions and tubing at least every 24 hours.
- B. Maintain the head of the bed at a 15-degree elevation continuously.
- C. Check the gastrostomy tube for position every 2 days.
- D. Maintain the client on bed rest during the feedings.

Correct Answer: A. Change the tube feeding solutions and tubing at least every 24 hours.

Tube feeding solutions and tubing should be changed every 24 hours, or more frequently if the feeding requires it. Doing so prevents contamination and bacterial growth. The feeding bag should be changed every 24 hours. Food (formula) should not be left in the bag for more than 4 hours. So, only put 4 hours (or less) worth of food in the feeding bag at a time.

- **Option B:** The head of the bed should be elevated 30 to 45 degrees continuously to prevent aspiration. Lying prone/supine during feeding increases the risk of aspiration and therefore where clinically possible the client should be placed in an upright position. If unable to sit up for a bolus feed or if receiving continuous feeding, the head of the bed should be elevated 30-45 degrees during feeding and for at least 30 minutes after the feed to reduce the risk of aspiration.
- **Option C:** Checking for gastrostomy tube placement is performed before initiating the feedings and every 4 hours during continuous feedings. Correct placement of the tube should be confirmed prior to administration of an enteral feed by checking the insertion site at the abdominal wall and observing the client for abdominal pain or discomfort. If the nurse is unsure regarding the position of the gastrostomy or jejunostomy tube contact the medical team immediately.
- **Option D:** Clients may ambulate during feedings. Tube feeding doesn't need to keep the client from most physical activities. He can run or walk, but the client should talk to a doctor about yoga or other exercises that work the abdomen muscles. Even swimming is fine if the incision site has healed and the water is clean.

56. The adolescent patient has symptoms of meningitis: nuchal rigidity, fever, vomiting, and lethargy. The nurse knows to prepare for the following test:

- A. blood culture.
- B. throat and ear culture.
- C. CAT scan.
- D. lumbar puncture.

Correct Answer: D. Lumbar puncture.

Meningitis is an infection of the meninges, the outer membrane of the brain. Since it is surrounded by cerebrospinal fluid, a lumbar puncture will help to identify the organism involved. The CSF findings expected in bacterial, viral, and fungal meningitis are listed in the chart: Expected CSF findings in bacterial versus viral versus fungal meningitis.

- **Option A:** Blood work should include blood culture, serum electrolytes as the syndrome of inappropriate antidiuretic hormone secretion (SIADH) is not uncommon, serum glucose, renal and liver function, and testing for HIV.
- **Option B:** Ideally, the CSF sample should be obtained before initiating antimicrobials. However, when the diagnosis of bacterial meningitis is seriously considered, and the patient is severely ill, antibiotics should be initiated before performing the LP.
- **Option C:** It is important to note that a normal head CT does not preclude increased intracranial pressure or impending brain herniation. If the clinical symptoms are consistent with impending herniation, regardless of whether or not the CT head is normal, avoid the LP and start treatment.

57. Which of the following measures should the nurse focus on for the client with esophageal varices?

- A. Recognizing hemorrhage.
- B. Controlling blood pressure.
- C. Encouraging nutritional intake.
- D. Teaching the client about varices.

Correct Answer: A. Recognizing hemorrhage.

Recognizing the rupture of esophageal varices, or hemorrhage is the focus of nursing care because the client could succumb to this quickly. A patient with bleeding esophageal varices is to be considered in critical condition. Nursing management is aimed at assisting the physician in controlling bleeding and preventing shock and death.

- **Option B:** Controlling blood pressure is also important because it helps reduce the risk of variceal rupture. As portal pressure increases, blood backs up into the spleen and bypasses the liver, returning to the right atrium via collateral circulation. The result is splenomegaly, ascites, and varicosities of the collateral veins (esophageal and gastric varices).
- **Option C:** It is also important to teach the client what foods he should avoid such as spicy foods. Additional teaching includes abstaining from alcohol, eating a healthy diet, and adhering to short-term antibiotic therapy to prevent infection. Because rebleeding is common.

- **Option D:** It is also important to teach the client what varices are. Assess for ecchymosis, epistaxis, petechiae, and bleeding gums. Monitor level of consciousness, vital signs, and urinary output to evaluate fluid balance. Use small-gauge needles, and apply pressure or cold for bleeding.

58. A child is admitted to the hospital with an uncontrolled seizure disorder. The admitting physician writes orders for actions to be taken in the event of a seizure. Which of the following actions would not be included?

- A. Notify the physician.
- B. Restrain the patient's limbs.
- C. Position the patient on his/her side with the head flexed forward.
- D. Administer rectal diazepam.

Correct Answer: B. Restrain the patient's limbs.

During a witnessed seizure, nursing actions should focus on securing the patient's safety and curtailing the seizure. Restraining the limbs is not indicated because strong muscle contractions could cause injury. Use and pad side rails with the bed in lowest position, or place the bed up against the wall and pad floor if rails are not available or appropriate.

- **Option A:** The nurse should notify the physician in the event of a seizure so he could prescribe the correct medication. Ascertain knowledge of various stimuli that may precipitate seizure activity. Alcohol, various drugs, and other stimuli (loss of sleep, flashing lights, prolonged television viewing) may increase brain activity, thereby increasing the potential for seizure activity.
- **Option C:** A side-lying position with head flexed forward allows for drainage of secretions and prevents the tongue from falling back, blocking the airway. Turn head to side and suction airway as indicated. Insert plastic bite blocks only if the jaw is relaxed. Helps maintain airway patency and reduces the risk of oral trauma but should not be "forced" or inserted when teeth are clenched because dental and soft-tissue damage may result. Note: Wooden tongue blades should not be used because they may splinter and break in the patient's mouth.
- **Option D:** Rectal diazepam may be a treatment ordered by the physician, who should be notified of the seizure. Diazepam may be used alone (or in combination with phenobarbital) to suppress status seizure activity. Diastat, a gel, may be administered rectally, even in the home setting, to reduce the frequency of seizures and need for additional medical care.

59. A patient is undergoing the induction stage of treatment for leukemia. The nurse teaches family members about infectious precautions. Which of the following statements by family members indicates that the family needs more education?

- A. We will bring in books and magazines for entertainment.
- B. We will bring in personal care items for comfort.
- C. We will bring in fresh flowers to brighten the room.
- D. We will bring in family pictures and get well cards.

Correct Answer: C. We will bring in fresh flowers to brighten the room.

During induction chemotherapy, the leukemia patient is severely immunocompromised and at risk of serious infection. Fresh flowers, fruit, and plants can carry microbes and should be avoided.

- **Options A, B, and D:** Books, pictures, and other personal items can be cleaned with antimicrobials before being brought into the room to minimize the risk of contamination.

60. When administering sucralfate (Carafate) to a patient with a nasogastric tube, it is important to:

- A. Crush the tablet into a fine powder before mixing with water.
- B. Administer with a bolus tube feeding.
- C. Allow the tablet to dissolve in water before administering.
- D. Administer with an antacid for maximum benefit.

Correct Answer: C. Allow the tablet to dissolve in water before administering.

It is important to give sucralfate on an empty stomach so that it may dissolve and form a protective barrier over the gastric mucosa. Sucralfate exhibits its action by forming a protective layer, increasing bicarbonate production, exhibiting anti-peptic effects, promoting tissue growth, regeneration, and repair.

- **Option A:** The tablet form will not dissolve in water when crushed; it must be left whole and allowed to dissolve. Crushing the medication so that it will not dissolve could lead to clogging of the nasogastric tube and decreased effectiveness of the drug.
- **Option B:** Sucralfate is a basic aluminum salt of sucrose octasulfate. When given orally, it disintegrates in the stomach in the presence of acid and binds to normal and damaged mucosa forming a protective layer. It releases aluminum and binds to positively charged compounds like proteins, peptides, glycoproteins, and glyco lipoproteins, forming an adhesive layer, thereby protecting the mucosa.
- **Option D:** It prevents hydrolysis by preventing the formation of the enzyme-substrate complex. It adsorbs to pepsin and decreases its concentration. By forming a polyanion gel, it acts as a physical barrier between luminal contents and mucosa. It increases prostaglandin-dependent and independent production of bicarbonate by stomach and duodenum.

61. A patient is undergoing the induction stage of treatment for leukemia. The nurse teaches family members about infectious precautions. Which of the following statements by family members indicates that the family needs more education?

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- B. We will bring in personal care items for comfort.
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Correct Answer: C. We will bring in fresh flowers to brighten the room.

During induction chemotherapy, the leukemia patient is severely immunocompromised and at risk of serious infection. Fresh flowers, fruit, and plants can carry microbes and should be avoided. Teach

proper hand washing using antibacterial soap before and after each care activity. Hand washing and hand hygiene lessen the risk of cross-contamination. Note: Methicillin-resistant Staphylococcus aureus (MRSA) is most commonly transmitted bacteria via direct contact with health care workers who are unable to wash hands between client contacts.

- **Option A:** Books and magazines can be brought to the patient, but they should be disinfected. Encourage the client to cover their mouth and nose with a tissue when coughing or sneezing. Place in a private room if indicated. Wear a mask when providing direct as appropriate. Appropriate behaviors, personal protective equipment, and isolation prevent the spread of infection via airborne droplets.
- **Option B:** Personal items can be cleaned with antimicrobials before being brought into the room to minimize the risk of contamination. Body substance isolation should be used for all infectious clients. Wound and linen isolation and hand washing may be all that is required for draining wounds. Clients with diseases transmitted through air may also need airborne and droplet precautions.
- **Option D:** The pictures should be disinfected before given to the client. Note temperature trends and observe for shaking chills and profuse diaphoresis. Fever [101°F-105°F (38.5°C-40°C)] is the result of endotoxin effect on the hypothalamus and pyrogen-released endorphins. Hypothermia lower than 96°F (36°C) is a grave sign reflecting advancing shock state, decreased tissue perfusion, and failure of the body's ability to mount a febrile response. Chills often precede temperature spikes in the presence of generalized infection.

62. An adult female patient is using the rhythm (calendar-basal body temperature) method of family planning. In this method, the unsafe period for sexual intercourse is indicated by:

- A. Return preovulatory basal body temperature.
- B. Basal body temperature increase of 0.1 degrees to 0.2 degrees on the 2nd or 3rd day of cycle.
- C. 3 full days of elevated basal body temperature and clear, thin cervical mucus.
- D. Breast tenderness and mittelschmerz.

Correct Answer: C. 3 full days of elevated basal body temperature and clear, thin cervical mucus.

Ovulation (the period when pregnancy can occur) is accompanied by a basal body temperature increase of 0.7 degrees F to 0.8 degrees F and clear, thin cervical mucus.

- **Option A:** A return to the preovulatory body temperature indicates a safe period for sexual intercourse.
- **Option B:** A slight rise in basal temperature early in the cycle is not significant. Ovulation may cause a slight increase in basal body temperature.
- **Option D:** Breast tenderness and mittelschmerz are not reliable indicators of ovulation. Mittelschmerz is one-sided, lower abdominal pain associated with ovulation. It occurs midway through a menstrual cycle.

63. How will the nurse position a client with a burn wound to the posterior neck to prevent contractures?

- A. Have the client turn the head from side to side.
- B. Keep the client in a supine position without the use of pillows.
- C. Keep the client in a semi-Fowler's position with her or his arms elevated.
- D. Place a towel roll under the client's neck or shoulder.

Correct Answer: A. Have the client turn the head from side to side.

Deformities and contractures can often be prevented by proper positioning. Maintaining proper body alignment when the patient is in bed is vital. The function that would be disrupted by a contracture to the posterior neck is flexion. Moving the head from side to side prevents such a loss of flexion. This movement is what would prevent contractures from occurring.

- **Option B:** The client should not only be in a supine position but there should be a movement to avoid contractures. Splinting and proper positioning will also help achieve the prevention of contractures. As a matter of importance, movement should be incorporated into the patient's daily routine from their inception to the hospital.
- **Option C:** The burns are in the client's posterior neck. Performing active or passive range of motion (ROM) exercises, depending on the patient's level of consciousness is crucial in the prevention of these complications.
- **Option D:** Placing a towel roll under the neck might not help prevent contractures. Immobilization is only allowed when a part of the body has just been grafted. Even then, the area must be kept in an antideformity position.

64. A client is admitted to the labor and delivery unit. The nurse performs a vaginal exam and determines that the client's cervix is 5 cm dilated with 75% effacement. Based on the nurse's assessment the client is in which phase of labor?

- A. Active
- B. Latent
- C. Transition
- D. Early

Correct Answer: A. Active

The active phase of labor occurs when the client is dilated 4–7cm. Active labor with more rapid cervical dilation generally starts around 6 centimeters of dilation. During the active phase, the cervix typically dilates at a rate of 1.2 to 1.5 centimeters per hour. Multiparas, or women with a history of prior vaginal delivery, tend to demonstrate more rapid cervical dilation. The absence of cervical change for greater than 4 hours in the presence of adequate contractions or six hours with inadequate contractions is considered the arrest of labor and may warrant clinical intervention.

- **Option B:** The latent phase is commonly defined as the 0 to 6 cm, while the active phase commences from 6 cm to full cervical dilation. The presenting fetal part also begins the process of engagement into the pelvis during the first stage. Throughout the first stage of labor, serial cervical exams are done to determine the position of the fetus, cervical dilation, and cervical effacement.
- **Option C:** The transition phase of labor is 8–10cm in dilation. The second stage of labor commences with complete cervical dilation to 10 centimeters and ends with the delivery of the neonate. This was also defined as the pelvic division phase by Friedman. After cervical dilation is

complete, the fetus descends into the vaginal canal with or without maternal pushing efforts.

- **Option D:** The latent or early phase of labor is from 1cm to 3cm in dilation. During the latent phase, the cervix dilates slowly to approximately 6 centimeters. The latent phase is generally considerably longer and less predictable with regard to the rate of cervical change than is observed in the active phase. A normal latent phase can last up to 20 hours and 14 hours in nulliparous and multiparous women respectively, without being considered prolonged.

65. The nurse in charge must monitor a patient receiving chloramphenicol for adverse drug reaction. What is the most toxic reaction to chloramphenicol?

- A. Lethal arrhythmias
- B. Malignant hypertension
- C. Status epilepticus
- D. Bone marrow suppression

Correct Answer: D. Bone marrow suppression

The most toxic reaction to chloramphenicol is bone marrow suppression. Chloramphenicol is a synthetically manufactured broad-spectrum antibiotic. It was initially isolated from the bacteria *Streptomyces venezuelae* in 1948 and was the first bulk produced synthetic antibiotic. However, chloramphenicol is a rarely used drug in the United States because of its known severe adverse effects, such as bone marrow toxicity and grey baby syndrome. Chloramphenicol is not known to cause lethal arrhythmias, malignant hypertension, or status epilepticus.

- **Option A:** Chloramphenicol is associated with severe hematological side effects when administered systemically. Since 1982, chloramphenicol has reportedly caused fatal aplastic anemia, with possible increased risk when taken together with cimetidine. This adverse side effect can occur even with the topical administration of the drug, which is most likely due to the systemic absorption of the drug after topical application.
- **Option B:** Besides causing fatal aplastic anemia and bone marrow suppression, other side effects of chloramphenicol include ototoxicity with the use of topical ear drops, gastrointestinal reactions such as oesophagitis with oral use, neurotoxicity, and severe metabolic acidosis.
- **Option C:** Optic neuritis is the most commonly associated neurotoxic complication that can arise from chloramphenicol use. This adverse effect usually takes more than six weeks to manifest, presenting with either acute or subacute vision loss, with possible fundal changes. It may also present with peripheral neuropathy, which may present as numbness or tingling. If optic neuropathy occurs, the drug should be withdrawn immediately, which will usually lead to partial or complete recovery of vision.

66. Jun has been hospitalized for major depression and suicidal ideation. Which of the following statements indicates to the nurse that the client is improving?

- A. "I'm of no use to anyone anymore."
- B. "I know my kids don't need me anymore since they're grown."
- C. "I couldn't kill myself because I don't want to go to hell."
- D. "I don't think about killing myself as much as I used to."

Correct Answer: D. “I don’t think about killing myself as much as I used to.”

The statement “I don’t think about killing myself as much as I used to.” indicates a lessening of suicidal ideation and improvement in the client’s condition. Suicidal ideation is highly linked to completed suicide. Some inexperienced clinicians have difficulty asking this question. They fear the inquiry may be too intrusive or that they may provide the person with an idea of suicide. In reality, patients appreciate the question as evidence of the clinician’s concern. A positive response requires further inquiry.

- **Option A:** Determine what the patient believes his or her suicide would achieve. This suggests how seriously the person has been considering suicide and the reason for death. For example, some believe that their suicide would provide a way for family or friends to realize their emotional distress.
- **Option B:** Others see their death as a relief from their own psychic pain. Still others believe that their death would provide a heavenly reunion with a departed loved one. In any scenario, the clinician has another gauge of the seriousness of the planning. A clear and complete evaluation and clinical interview provide the information upon which to base a suicide intervention. Although risk factors offer major indications of the suicide danger, nothing can substitute for a focused patient inquiry.
- **Option C:** A host of thoughts and behaviors are associated with self-destructive acts. Although many assume that people who talk about suicide will not follow through with it, the opposite is true; a threat of suicide can lead to the completed act, and suicidal ideation is highly correlated with suicidal behaviors.

67. A female client complains of periorbital aching, tearing, blurred vision, and photophobia in her right eye. Ophthalmologic examination reveals a small, irregular, nonreactive pupil — a condition resulting from acute iris inflammation (iritis). As part of the client’s therapeutic regimen, the physician prescribes atropine sulfate (Atropisol), two drops of 0.5% solution in the right eye twice daily. Atropine sulfate belongs to which drug classification?

- A. Parasympathomimetic agent
- B. Sympatholytic agent
- C. Adrenergic blocker
- D. Cholinergic blocker

Correct Answer: D. Cholinergic blocker

Atropine sulfate is a cholinergic blocker. It isn’t a parasympathomimetic agent, a sympatholytic agent, or an adrenergic blocker. Atropine is an antimuscarinic that works through competitive inhibition of postganglionic acetylcholine receptors and direct vagolytic action, which leads to parasympathetic inhibition of the acetylcholine receptors in smooth muscle.

- **Option A:** Parasympathomimetics are a class of pharmacological agents that activate the parasympathetic division of the autonomic nervous system. These drugs work by mimicking or modifying the effects of acetylcholine (ACh), the primary neurotransmitter of the parasympathetic nervous system. Parasympathomimetic medications are classified into two main categories based on whether they are direct agonists or indirect agonists of ACh.
- **Option B:** Methyldopa is a centrally acting sympatholytic agent used in the treatment of hypertension. Alpha-methyldopa is converted to methyl norepinephrine centrally to decrease the adrenergic outflow by alpha-2 agonist action from the central nervous system, leading to reduced

total peripheral resistance and decreased systemic blood pressure.

- **Option C:** The effects of the sympathetic nervous system can be blocked either by decreasing sympathetic outflow from the brain, suppressing release of norepinephrine from terminals, or by blocking postsynaptic receptors. Adrenergic antagonists reduce the effectiveness of sympathetic nerve stimulation and the effects of exogenously applied agonists, such as isoproterenol. Most often the receptor antagonists are divided into α -receptor antagonists and β -receptor antagonists.

68. The most reliable index to determine the respiratory status of a client is to:

- A. Observe the chest rising and falling.
- B. Observe the skin and mucous membrane color.
- C. Listen and feel the air movement.
- D. Determine the presence of a femoral pulse.

Correct Answer: C. Listen and feel the air movement.

To check for breathing, the nurse places her ear and cheek next to the client's mouth and nose to listen and feel for air movement. During the inspection, the examiner should pay attention to the pattern of breathing: thoracic breathing, thoracoabdominal breathing, coastal markings, and use of accessory breathing muscles. The use of accessory breathing muscles (i.e., scalenes, sternocleidomastoid muscle, intercostal muscles) could point to excessive breathing effort caused by pathologies.

- **Option A:** The chest rising and falling is not conclusive of a patent airway. The position of the patient should also be noted, patients with extreme pulmonary dysfunction will often sit up-right, and in distress, they assume the tripod position (leaning forward, resting their hands on their knees).
- **Option B:** Observing skin color is not an accurate assessment of respiratory status. The body habitus of the patient could provide information regarding chest compliance, especially in the case of severely obese patients where chest mobility and compliance are reduced due to added weight from adipose tissue.
- **Option D:** Checking the femoral pulse is not an assessment of respiratory status. Palpation should focus on detecting abnormalities like masses or bony crepitus. During palpation the examiner can evaluate tactile fremitus: the examiner will place both of his hands on the patient's back, medial to the shoulder blades, and ask the patient to say "ninety-nine."

69. Which of the following would the nurse assess in a client experiencing abruptio placenta?

- A. Bright red, painless vaginal bleeding
- B. Concealed or external dark red bleeding
- C. Palpable fetal outline
- D. Soft and nontender abdomen

Correct Answer: B. Concealed or external dark red bleeding

A client with abruptio placentae may exhibit concealed or dark red bleeding, possibly reporting sudden intense localized uterine pain. The uterus is typically firm to board-like, and the fetal presenting part may be engaged.

- **Option A:** Painless vaginal bleeding during the second or third trimester of pregnancy is the usual presentation in placenta previa. The bleeding may be provoked from intercourse, vaginal examinations, labor, and at times there may be no identifiable cause. On speculum examination, there may be minimal bleeding to active bleeding.
- **Option C:** On physical examination, the uterus tends to be soft and fetal parts are readily palpable. With placenta previa, the presenting part is unengaged and malpresentation is common, seen in up to 50% of cases.
- **Option D:** Abdominal examination usually finds the uterus non-tender, soft and relaxed. Leopold's Maneuvers may find the fetus in an oblique or breech position or lying transverse as a result of the abnormal position of the placenta. Malpresentation is found in about 35% cases.

70. Which of the following best describes the method of action of medications, such as ranitidine (Zantac), which are used in the treatment of peptic ulcer disease?

- A. Neutralize acid.
- B. Reduce acid secretions.
- C. Stimulate gastrin release.
- D. Protect the mucosal barrier.

Correct Answer: B. Reduce acid secretions.

Ranitidine is a histamine-2 receptor antagonist that reduces acid secretion by inhibiting gastrin secretion. Ranitidine is a competitive inhibitor of histamine H₂-receptors. The reversible inhibition of H₂-receptors in gastric parietal cells results in a reduction in both gastric acid volume and concentration. Ranitidine's acid-lowering effect is more pronounced for basal and nocturnal acid secretion than it is for food-stimulated acid secretion.

- **Option A:** The antacids reduce the acid reaching the duodenum by neutralizing the acid present in the stomach. The salts' mechanism of neutralization of acid varies, and each salt has a different mechanism with the ultimate goal of acid neutralization. The formulation of aluminum hydrochloride and water results in the neutralization of the acid in the stomach. It is also known to inhibit pepsin activity.
- **Option C:** Gastrin release is stimulated by the stretching of the stomach walls during a meal, the presence of certain foods (particularly proteins) within the stomach cavity, and an increase in the pH levels of the stomach (i.e. the stomach becoming less acidic).
- **Option D:** Sucralfate, a polymer of sucrose with aluminum hydroxide, forms a protective coating on the mucosal lining, particularly in ulcerated areas. In the presence of acid, it becomes a gel that adheres to epithelial cells and ulcer craters. Sucralfate is only minimally absorbed and can cause constipation.

71. In which of the following diseases would bone marrow transplantation not be indicated in a newly diagnosed client?

- A. Severe aplastic anemia
- B. Severe combined immunodeficiency
- C. Acute lymphocytic leukemia

D. Chronic myeloid leukemia

Correct Answer: C. Acute lymphocytic leukemia

- **Option C:** For the first episode of acute lymphocytic leukemia, conventional therapy is superior to bone marrow transplantation. Treatment is usually long-term chemotherapy and is composed of 3 phases (induction, consolidation, and maintenance).
- **Options A and B:** In severe combined immunodeficiency and in severe aplastic anemia, bone marrow transplantation has been employed to replace abnormal stem cells with healthy cells from the donor's marrow.
- **Option D:** In myeloid leukemia, bone marrow transplantation is done after chemotherapy to infuse healthy marrow and to replace marrow stem cells ablated during chemotherapy.

72. An acceleration in oxygen dissociation from hemoglobin, and thus oxygen delivery to the tissues, is caused by:

- A. A decreasing oxygen pressure in the blood.
- B. An increasing carbon dioxide pressure in the blood.
- C. A decreasing oxygen pressure and/or an increasing carbon dioxide pressure in the blood.
- D. An increasing oxygen pressure and/or a decreasing carbon dioxide pressure in the blood.

Correct Answer: C. A decreasing oxygen pressure and/or an increasing carbon dioxide pressure in the blood.

The lower the PO₂ and the higher the PCO₂, the more rapidly oxygen dissociated from the oxyhemoglobin molecule. Factors that contribute to a right-shift in the oxygen dissociation curve and favor the unloading of oxygen correlate with exertion. These include increased body temperature, decreased pH (due to increased production of CO₂), and increased 2,3-BPG. (Figure) This right shift of the oxyhemoglobin curve can be viewed as an adaptation for physical exertion.

- **Option A:** In the setting of hypoxia or low blood oxygen levels, irreversible tissue damage can rapidly occur. Hypoxia can be the result of an impaired oxygen-carrying capacity of the blood (e.g., anemia), impaired unloading of oxygen from hemoglobin in target tissues (e.g., carbon monoxide toxicity), or from a restriction of blood supply.
- **Option B:** Hemoglobin (Hgb or Hb) is the primary carrier of oxygen in humans. Approximately 98% of total oxygen transported in the blood is bound to hemoglobin, while only 2% is dissolved directly in plasma. Hemoglobin is a metalloprotein with four subunits, each composed of an iron-containing heme group attached to a globin polypeptide chain. One molecule of oxygen can bind to the iron atom of a heme group, giving each hemoglobin the ability to transport four molecules of oxygen.
- **Option D:** The body maintains adequate oxygenation of tissues in the setting of decreased PO₂ or increased demand for oxygen. These changes often express shifts in the oxygen dissociation curve, which represents the percentage of hemoglobin saturated with oxygen at varying levels of PO₂.

73. Capillary glucose monitoring is being performed every 4 hours for a client diagnosed with diabetic ketoacidosis. Insulin is administered using a scale of regular insulin according to glucose results. At 2 p.m., the client has a capillary glucose level of 250 mg/dl for which he receives 8 U of regular insulin. Nurse

Mariner should expect the dose's:

- A. Onset to be at 2 p.m. and its peak to be at 3 p.m.
- B. Onset to be at 2:15 p.m. and its peak to be at 3 p.m.
- C. Onset to be at 2:30 p.m. and its peak to be at 4 p.m.
- D. Onset to be at 4 p.m. and its peak to be at 6 p.m.

Correct Answer: C. Onset to be at 2:30 p.m. and its peak to be at 4 p.m.

Regular insulin, which is a short-acting insulin, has an onset of 15 to 30 minutes and a peak of 2 to 4 hours. Because the nurse gave the insulin at 2 p.m., the expected onset would be from 2:15 p.m. to 2:30 p.m. and the peak from 4 p.m. to 6 p.m.

- **Option A:** 2 p.m. is when the insulin was given; onset does not occur at the same time as the medication was given
- **Option B:** The peak starts 2 to 4 hours after the insulin was given, which will be at 4 p.m.
- **Option D:** Onset of 4 p.m. is very late; 15 to 30 minutes is the expected onset of insulin. Peak should start at 4 p.m.

74. A female client with dysphagia is being prepared for discharge. Which outcome indicates that the client is ready for discharge?

- A. The client doesn't exhibit rectal tenesmus.
- B. The client is free from esophagitis and achalasia.
- C. The client reports diminished duodenal inflammation.
- D. The client has normal gastric structures.

Correct Answer: B. The client is free from esophagitis and achalasia.

Dysphagia may be the reason why a client with esophagitis or achalasia seeks treatment. Dysphagia is common in patients with erosive esophagitis but is not a reliable clinical predictor of severe erosive esophagitis. Dysphagia resolved with PPI therapy in most cases, but persistent dysphagia may indicate failed healing. Dysphagia isn't associated with rectal tenesmus, duodenal inflammation, or abnormal gastric structures.

- **Option A:** Rectal tenesmus can happen for several reasons. The most common is colon inflammation, either from a noninfectious or infectious cause. Inflammatory bowel disease (IBD) is one cause of colon inflammation. IBD is an umbrella term for several long-term conditions involving chronic inflammation of the gut.
- **Option C:** The most common cause of duodenitis is infection by *Helicobacter pylori* (*H. pylori*) bacteria. Another common cause is the long-term use of NSAIDs (such as aspirin and ibuprofen). Celiac disease, an allergy to gluten, causes a particular type of inflammation in the duodenum along with other changes.
- **Option D:** Dysphagia means difficulty swallowing. For this diagnosis, it is critical that related symptoms be associated with the act of swallowing a liquid or solid bolus. When unassociated with swallowing, the sensation of fullness in the upper esophagus suggests globus hystericus, which is distinct from dysphagia.

75. Rotating injection sites when administering insulin prevents which of the following complications?

- A. Insulin edema
- B. Insulin lipodystrophy
- C. Insulin resistance
- D. Systemic allergic reactions

Correct Answer: B. Insulin lipodystrophy

Insulin lipodystrophy produces fatty masses at the injection sites, causing unpredictable absorption of insulin injected into these sites. Lipodystrophy is associated with increased glycemic variability and unexplained episodes of hypoglycemia further driving up healthcare costs while affecting patient compliance. Studies have shown that the correct rotation technique of insulin sites has the strongest protective value in preventing lipohypertrophy.

- **Option A:** Peripheral or generalized edema is an extremely rare complication of insulin therapy, which mostly occurs after the initiation of intensive insulin therapy. Despite the essential role of insulin therapy in the management of patients with insulin deficiency, insulin itself may lead to adverse effects such as hypoglycemia and weight gain. Additionally, crucial fluid retention can also occur rarely, resulting in an edematous condition.
- **Option C:** Insulin resistance is identified as an impaired biologic response to insulin stimulation of target tissues, primarily the liver, muscle, and adipose tissue. Insulin resistance impairs glucose disposal, resulting in a compensatory increase in beta-cell insulin production and hyperinsulinemia.
- **Option D:** Hypoglycemia is, by far, the most common adverse effect of insulin therapy. The other adverse effects of insulin therapy include weight gain and rarely electrolyte disturbances like hypokalemia, especially when used along with other drugs causing hypokalemia.

76. Olivia is an adolescent who has seizure disorder; which of the following would not be a focus of a teaching program?

- A. Ability to obtain a driver's license
- B. Drug and alcohol abuse
- C. Increased risk of infections
- D. Peer pressure

Correct Answer: C. Increased risk of infections

Adolescents with seizure disorders are at no greater risk for infections than other adolescents. Adolescence is the period during which the child's identity as an individual in his/her own right should be consolidated. Achieving independence from parents, establishing healthy interpersonal relationships outside the family and choosing a vocation are essential developmental tasks of adolescence.

- **Option A:** The ability to get a driver's license may be determined by the adolescent's seizure history. As the age for driving approaches, it is often worthwhile to review the adolescent's medical care. If no seizures have occurred for several years, it may be wise to attempt to lower and eventually stop medications at least 6 months or a year before the driving age is reached.
- **Option B:** Drug and alcohol use may conflict with or cause adverse reactions from anticonvulsants. The rules concerning alcohol use and epilepsy apply to both teens and adults, but greater caution

applies to the younger group. Drinking one or two alcoholic beverages causes no meaningful changes in the blood levels of antiepileptic drugs or in seizure control.

- **Option D:** Peer pressure may put the child at risk for increased risk-taking behaviors that may intensify seizure activity. The developmental tasks of middle childhood include becoming more independent of parents and more attached to peers. During this stage, it is crucial for the child's psychosocial development to be actively involved in peer groups and to achieve success in the school environment.

77. A client who delivered by cesarean section 24 hours ago is using a patient-controlled analgesia (PCA) pump for pain control. Her oral intake has been ice chips only since surgery. She is now complaining of nausea and bloating, and states that because she had nothing to eat, she is too weak to breastfeed her infant. Which nursing diagnosis has the highest priority?

- A. Altered nutrition, less than body requirements for lactation.
- B. Alteration in comfort related to nausea and abdominal distention.
- C. Impaired bowel motility related to pain medication and immobility.
- D. Fatigue related to cesarean delivery and physical care demands of infant.

Correct Answer: C. Impaired bowel motility related to pain medication and immobility

Impaired bowel motility caused by surgical anesthesia, pain medication, and immobility is the priority nursing diagnosis and addresses the potential problem of a paralytic ileus.

- **Option A:** Altered nutrition is also an appropriate diagnosis since the woman was not able to eat adequately since the surgery, hindering her ability to breastfeed. However, it can be managed and is not the priority at the time.
- **Option B:** The woman's comfort is also altered due to nausea and bloating, but it is not considered a priority.
- **Option D:** After cesarean delivery, fatigue may overcome the client's desire to eat and breastfeed her infant. This is a correct diagnosis but it does not take priority over impaired bowel motility.

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

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

Correct Answer: D. Promote parent-newborn interaction.

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

- **Option A:** Collecting a urine specimen and other laboratory tests is done on admission during the first stage of labor.

- **Option B:** Assessing uterine contractions every 30 minutes is performed during the latent phase of the first stage of labor.
- **Option D:** Coaching the client to push effectively is appropriate during the second stage of labor.

79. When the nurse is administering a vesicant chemotherapeutic agent intravenously, an important consideration is to

- A. Stop the infusion if swelling is observed at the site
- B. Infuse the medication over a short period
- C. Administer the chemotherapy through a small-bore catheter
- D. Hold the medication unless a central venous line is available

Correct Answer: A. Stop the infusion if swelling is observed at the site

- **Option A:** Swelling at the site may indicate extravasation, and the IV should be stopped immediately.
- **Option B:** The medication should generally be given slowly to avoid irritation of the vein.
- **Option C:** The size of the catheter is not as important as administration of vesicants into a running IV line to allow dilution of the chemotherapy drug.
- **Option D:** These medications can be given through peripheral lines, although central vascular access devices (CVADs) are preferred.

80. When the nurse palpates the suprapubic area of the mother and found that the presenting part is still movable, the right term for this observation that the fetus is

- A. Engaged
- B. Descended
- C. Floating
- D. Internal Rotation

Correct Answer: C. Floating

The term floating means the fetal presenting part has not entered/descended into the pelvic inlet. If the fetal head has entered the pelvic inlet, it is said to be engaged.

- **Option A:** If the fetal head accommodates two fingerbreadths above pelvic brim, it is said to be engaged.
- **Option B:** Using the rule of fifths, the distance between the base and vertex of the fetal head is divided into five equal parts. Each fifth corresponds to 2 cm or approximately one transverse fingerbreadth.
- **Option D:** As the head descends, the presenting part, usually in the transverse position, is rotated about 45° to anteroposterior (AP) position under the symphysis. Internal rotation brings the AP diameter of the head in line with the AP diameter of the pelvic outlet.

81. Several clients are admitted to an adult medical unit. The nurse would ensure airborne precautions for a client with which of the following medical conditions?

- A. A diagnosis of AIDS and cytomegalovirus
- B. A positive PPD with an abnormal chest x-ray
- C. A tentative diagnosis of viral pneumonia
- D. Mycoplasma pneumonia

Correct Answer: B. A positive PPD with an abnormal chest x-ray

The client who must be placed in airborne precautions is the client with a positive PPD (purified protein derivative) who has a positive x-ray for a suspicious tuberculin lesion. Airborne precautions are required whenever entering a patient's room or environment who has been diagnosed with or is being tested for with high suspicion of anthrax, tuberculosis, measles, chickenpox, or disseminated herpes zoster or other pathogens that can be transmitted through airflow that are 5 micrometers or smaller in size and remain in the environment for long periods of time.

- **Option A:** According to the OSHA database, HIV, hepatitis B and C, tuberculosis, malaria, measles, herpes, chickenpox, and various other bacterial infections are known for being transmitted through blood-containing fluids and products. Blood-borne precautions include wearing gloves, face mask, protective eyewear or goggles, and proper handling of sharp objects with appropriate disposal.
- **Option C:** Prevention, especially in the form of immunization against influenza and measles, can significantly decrease the incidence of viral pneumonia. The traditional role of viral pneumonia was as a disease found predominantly in the very young, the elderly, and those exposed to influenza. In the past, the diagnosis of viral pneumonia was predicated on it being somewhat a diagnosis of exclusion.
- **Option D:** Smoking is the most common cause of lung cancer. It is estimated that 90% of the cases of lung cancer are attributable to smoking. The risk is highest in males who smoke. The risk is further compounded with exposure to other carcinogens, such as asbestos. It is hypothesized that repeated exposure to carcinogens, cigarette smoke, in particular, leads to dysplasia of lung epithelium.

82. Which of the following is an abnormal vital sign in postpartum?

- A. Pulse rate between 50-60/min
- B. BP diastolic increase from 80 to 95mm Hg
- C. BP systolic between 100-120mm Hg
- D. Respiratory rate of 16-20/min

Correct Answer: B. BP diastolic increase from 80 to 95mm Hg

All the vital signs given in the choices are within normal range except an increase of 15mm Hg in the diastolic which is a possible sign of hypertension in pregnancy.

- **Option A:** The pulse rate may be elevated a few hours after the childbirth, due to excitement or pain, and usually normalizes on the second day.

- **Option C:** The blood pressure could be elevated due to pain or excitement but is generally in the normal range. A significant decrease (> 20% below baseline) in blood pressure could be a sign of postpartum hemorrhage or septic shock.[4] Conversely, high blood pressure could be a sign of pain or pre-eclampsia.
- **Option D:** The respiratory rate also begins to fall back to the pre-pregnancy level within 2 to 3 days.

83. Prolonged occlusion of the right coronary artery produces an infarction in which of the following areas of the heart?

- A. Anterior
- B. Apical
- C. Inferior
- D. Lateral

Correct Answer: C. Inferior

The right coronary artery supplies the right ventricle or the inferior portion of the heart. Therefore, prolonged occlusion could produce an infarction in that area. The RCA emerges from the anterior ascending aorta and supplies blood primarily to the right atrium, right ventricle. The sinoatrial nodal artery is a branch of the RCA that supplies the SA node.

- **Option A:** The right coronary artery doesn't supply the anterior portion (left ventricle). The LAD supplies blood to the anterior portion of the left ventricle. Other small branches of the coronary arteries are the obtuse marginal artery (OMA), diagonals, and septal perforator (SP).
- **Option B:** The right coronary artery doesn't supply the apical portion (left ventricle) of the heart. The LAD is one of two major branches of the LMCA, with the other being the left circumflex (LCx) coronary arteries. Combined, these two supply blood to the left atrium and left ventricle.
- **Option D:** The right coronary artery doesn't supply the lateral portion (some of the left ventricle and the left atrium). The circumflex artery is responsible for blood supply to the left atrium and the posterior-lateral aspect of the left ventricle. The left anterior descending artery (LAD) supplies the anterior two-thirds of the septum.

84. A dying male client gradually moves toward resolution of feelings regarding impending death. Basing care on the theory of Kubler-Ross, Nurse Trish plans to use nonverbal interventions when assessment reveals that the client is in the:

- A. Anger stage
- B. Denial stage
- C. Bargaining stage
- D. Acceptance stage

Correct Answer: D. Acceptance stage

Communication and intervention during this stage are mainly nonverbal, as when the client gestures to hold the nurse's hand. Provide time for acceptance, final farewell, and arrangements for memorial or

funeral service according to individual spiritual, cultural, ethnic needs. Accommodation of personal and family wishes helps reduce anxiety and may promote a sense of peace.

- **Option A:** Assess the level of anxiety present in the family and/or SO. Anxiety level needs to be dealt with before problem-solving can begin. Individuals may be so preoccupied with their own reactions to the situation that they are unable to respond to another's needs. Establish rapport and acknowledge the difficulty of the situation for the family. May assist SO to accept what is happening and be willing to share problems with staff.
- **Option B:** Determine the level of impairment of perceptual, cognitive, and/or physical abilities. Evaluate illness and current behaviors that are interfering with the care of the patient. Information about family problems will be helpful in determining options and developing an appropriate plan of care.
- **Option C:** Assist family and patient to understand "who owns the problem" and who is responsible for resolution. Avoid placing blame or guilt. When these boundaries are defined, each individual can begin to take care of their own self and stop taking care of others in inappropriate ways.

85. Which of the following outcomes would be appropriate for a client with COPD who has been discharged to home? The client:

- A. Promises to do pursed lip breathing at home.
- B. States actions to reduce pain.
- C. States that he will use oxygen via a nasal cannula at 5 L/minute.
- D. Agrees to call the physician if dyspnea on exertion increases.

Correct Answer: D. Agrees to call the physician if dyspnea on exertion increases.

Increasing dyspnea on exertion indicates that the client may be experiencing complications of COPD, and therefore the physician should be notified. There are things that everyone with COPD should do to manage their disease; quitting smoking (if they smoke) is the most important. In addition, there are other non-medication treatments that can help relieve symptoms and improve quality of life.

- **Option A:** Extracting promises from clients is not an outcome criterion. Pulmonary rehabilitation programs have been shown to improve a person's ability to exercise, enhance quality of life, and decrease the frequency of COPD exacerbations (when symptoms flare up more than usual). Even people with severe shortness of breath can benefit from a rehabilitation program.
- **Option B:** Pain is not a common symptom of COPD. Although COPD usually worsens over time, it is difficult to predict how quickly it will progress and how long the client will live (the prognosis). A number of factors play a role in the severity of COPD symptoms, including whether the client continues to smoke, are underweight, or have other medical problems, and how the lungs function during exercise. People with COPD who have less severe symptoms, are a healthy weight, and do not smoke tend to live longer.
- **Option C:** Clients with COPD use low-flow oxygen supplementation (1 to 2 L/minute) to avoid suppressing the respiratory drive, which, for these clients, is stimulated by hypoxia. People with severe or advanced COPD can have low oxygen levels in the blood. This condition, known as hypoxemia, can occur even if the client does not feel short of breath or have other symptoms. The oxygen level can be measured with a device placed on the finger (pulse oximeter) or with a blood test (arterial blood gas). People with hypoxemia may be placed on oxygen therapy, which can improve survival and quality of life.

86. During an otoscopic examination, which action should be avoided to prevent the client from discomfort and injury?

- A. Tipping the client's head away from the examiner and pulling the ear up and back.
- B. Inserting the otoscope inferiorly into the distal portion of the external canal.
- C. Inserting the otoscope superiorly into the proximal two-thirds of the external canal.
- D. Bracing the examiner's hand against the client's head.

Correct Answer: C. Inserting the otoscope superiorly into the proximal two-thirds of the external canal.

In the superior position, the speculum of the otoscope is nearest the tympanic membrane, and the most sensitive portion of the external canal is the proximal two-thirds. It is important to avoid these structures during the examination. The provider should then slowly progress the speculum into the canal until the tympanic membrane becomes visible. The provider should evaluate the health of the tympanic membrane and observe factors such as color, presence of perforation, and a bulging appearance.

- **Option A:** With the hand that is not holding the otoscope, the provider should grasp and gently pull the patient's pinna to help straighten the patient's external auditory canal. This step will facilitate visualization of the tympanic membrane. In a child, the examiner should pull the pinna posteriorly and inferiorly. In an adult, the examiner should pull the pinna posteriorly and superiorly.
- **Option B:** During the otoscopic examination, the provider utilizes an otoscope, also known as an auriscope, to visualize the ear anatomy. While performing the otoscopic examination, the provider holds the handle of the otoscope and inserts the cone of the otoscope into the patient's external auditory canal.
- **Option D:** Providers may have their own preferences regarding how to grasp the otoscope. However, it is generally advisable to hold the otoscope like a pen in between the first and second fingers. The otoscope is usually held in the right hand when evaluating the patient's right ear and the left hand when assessing the patient's left ear. The provider should place their free fifth finger of the hand, holding the otoscope against the patient's cheek to support and brace the hand during the examination.

87. Which of the following symptoms best describes Murphy's sign?

- A. Periumbilical ecchymosis exists.
- B. On deep palpation and release, pain elicited.
- C. On deep inspiration, pain is elicited and breathing stops.
- D. Abdominal muscles are tightened in anticipation of palpation.

Correct Answer: C. On deep inspiration, pain is elicited and breathing stops.

Murphy's sign is elicited when the client reacts to pain and stops breathing. It's a common finding in clients with cholecystitis. Murphy's sign is elicited in patients with acute cholecystitis by asking the patient to take in and hold a deep breath while palpating the right subcostal area. If pain occurs on inspiration, when the inflamed gallbladder comes into contact with the examiner's hand, Murphy's sign is positive.

- **Option A:** Periumbilical ecchymosis, Cullen's sign, is present in peritonitis. Cullen sign manifests as superficial edema with bruising in the subcutaneous fatty tissue around the periumbilical region.

Originally described in association with ectopic pregnancy.

- **Option B:** Pain on deep palpation and release is rebound tenderness. Blumberg's sign (also referred to as rebound tenderness or the Shyotkin-Blumberg sign) is a clinical sign in which there is pain upon removal of pressure rather than the application of pressure to the abdomen. (The latter is referred to simply as abdominal tenderness.) It is indicative of peritonitis.
- **Option D:** Tightening up abdominal muscles in anticipation of palpation is guarding. Investigations of relationships of specific pain behaviors with pain intensity and fear of movement are rare. Guarding, defined as "behavior that is aimed at preventing or alleviating pain" and which includes stiffness, hesitation, and bracing, has been shown to predict work loss over 3 months in injured workers.

88. A nurse in the newborn nursery is monitoring a preterm newborn infant for respiratory distress syndrome. Which assessment signs if noted in the newborn infant would alert the nurse to the possibility of this syndrome?

- A. Hypotension and Bradycardia
- B. Tachypnea and retractions
- C. Acrocyanosis and grunting
- D. The presence of a barrel chest with grunting

Correct Answer: B. Tachypnea and retractions

Respiratory distress syndrome (RDS) usually affects premature babies. It is caused by the absence or lack of surfactant, a phospholipid that lines the alveoli and reduces the surface tension to keep the alveoli from collapsing on expiration. Surfactant is not formed until the 34th week of gestation that is why premature infants are vulnerable.

- **Option B:** Infants who develop RDS have periods during the day when they are free of symptoms because of an initial release of surfactant. The initial signs of respiratory distress includes tachypnea (60 breaths per minute), sternal and subcostal retractions, nasal flaring, cyanotic mucous membranes.
- **Options A, C, & D:** These are **late** signs (after a few hours) of respiratory distress as its intensity increases. **Acrocyanosis** is the blue or cyanotic discoloration of the extremities. **Expiratory grunting** is when the infant closes the glottis in an attempt to increase pressure in the alveoli on expiration in order to keep them from collapsing. Additionally, auscultation may reveal fine rales and diminished breath sounds due to poor air entry.

89. When assessing a client for obstructive sleep apnea (OSA), the nurse understands the most common symptom is:

- A. Headache
- B. Early awakening
- C. Impaired reasoning
- D. Excessive daytime sleepiness

Correct Answer: D. Excessive daytime sleepiness

Excessive daytime sleepiness is the most common complaint of people with OSA. Persons with severe OSA may report taking daytime naps and experiencing a disruption in their daily activities because of sleepiness. OSA is associated with daytime somnolence and affects millions of people. The apneic episodes may occur hundreds of times each night and are associated with alterations in heart rate, drop in oxygen saturation, and loud breathing sounds.

- **Option A:** Obstructive sleep apnea (OSA) is characterized by episodes of the complete or partial collapse of the airway with an associated decrease in oxygen saturation or arousal from sleep. This disturbance results in fragmented, nonrestorative sleep. Other symptoms include loud, disruptive snoring, witnessed apneas during sleep, and excessive daytime sleepiness.
- **Option B:** They may also complain of waking to gasp for breath or choking, sleep maintenance insomnia, night sweats, nighttime reflux, and nocturia in the absence of excessive nighttime liquid intake.
- **Option C:** The typical adult obstructive sleep apnea patient is an overweight or obese middle-aged male or postmenopausal female with excessive daytime sleepiness and loud nightly snoring.

90. An 8-year-old is admitted with a sore throat, drooling, muffled phonation, high pitched-sound upon breathing (stridor), and a temperature of 102°F. The nurse should immediately notify the doctor because the child's symptoms are suggestive of:

- A. Primary Ciliary Dyskinesia
- B. Subglottic hemangioma
- C. Sinusitis
- D. Epiglottitis

Correct Answer: D. Epiglottitis

- Option D: The child's symptoms are consistent with those of epiglottitis, an infection of the upper airway that can result in total airway obstruction.
- Option A: Primary ciliary dyskinesia is a rare lung disease that is caused by a defect in cilia (hair-like projections that are responsible for expelling foreign materials such as mucous) resulting in respiratory problems such as excessive mucus, chronic wheezing, cough, and nasal congestion.
- Option B: Subglottic hemangioma is the formation of large masses in the airway causing airway obstructions. Typically symptoms include croup-like cough, difficulty breathing, and stridor.
- Option C: Sinusitis is the inflammation of the tissue that lines the sinuses that cause postnasal drip, runny nose, pain, and tenderness around the face, and nasal congestion.

91. The nurse determines that the wife of an alcoholic client is benefiting from attending Al-Anon group when she hears the wife say:

- A. "My attendance at the meetings has helped me to see that I provoke my husband's violence."
- B. "I no longer feel that I deserve the beatings my husband inflicts on me."
- C. "I can tolerate my husband's destructive behavior now that I know they are common with alcoholics."
- D. "I enjoy attending the meetings because they get me out of the house and away from my husband."

Correct Answer: B. "I no longer feel that I deserve the beatings my husband inflicts on me."

Al-Anon support groups are a protected, supportive opportunity for spouses and significant others to learn what to expect and to obtain excellent pointers about successful behavior changes. Option 2 is the most healthy response because it exemplifies an understanding that the alcoholic partner is responsible for his behavior and cannot be allowed to blame family members for loss of control.

- **Option A:** Early empirical studies of Al-Anon support these findings. Among Al-Anon members who were wives of alcoholic husbands, a longer duration of Al-Anon membership was associated with greater decreases in negative coping (e.g., threaten actions without follow-through; have emotional outbursts); and, in turn, decreases in negative coping were associated with a longer duration of the husband's abstinence. The greatest improvements in coping may occur early in Al-Anon membership, although they may continue for seven years or more.
- **Option C:** Al-Anon members also reported improvements in understanding alcoholism, and in levels of depression, assertiveness, self-acceptance, and relationship satisfaction. Al-Anon Facilitation Therapy (a manual-guided, therapist-delivered counseling method designed to encourage participation in Al-Anon) reduced emotional distress and increased coping behaviors to a larger extent than a wait-list control condition. Facilitation also yielded reductions in depression, anger, and family conflict, and increases in family cohesion and relationship happiness among Concerned Others of treatment-resistant alcoholics
- **Option D:** Ditrich and Trapold found greater reductions in anxiety and depression and increases in self-concept at a 4-month follow-up among wives of treatment-resistant alcoholics randomly assigned to therapy based on Al-Anon concepts than among those assigned to a wait-list control condition. Recent studies support these findings in that stable members in Al-Anon reported a better quality of life, less concern about the drinker's alcohol use, and a better relationship with the drinker than did newcomers to Al-Anon.

92. Marco falls off his bicycle and injures his ankle. Which of the following actions shows the initial response to the injury in the extrinsic pathway?

- A. Release of Calcium
- B. Release of tissue thromboplastin
- C. Conversion of factors XII to factor XIIIa
- D. Conversion of factor VIII to factor VIIIa

Correct Answer: B. Release of tissue thromboplastin

Tissue thromboplastin is released when damaged tissue comes in contact with clotting factors.

- **Option A:** Calcium is released to assist the conversion of factors X to Xa.
- **Option C:** Conversion of factors XII to XIIIa are part of the intrinsic pathway.
- **Option D:** Conversion factors VIII to VIIIa are part of the intrinsic pathway.

93. An external insulin pump is prescribed for a client with DM. The client asks the nurse about the functioning of the pump. The nurse bases the response on the information that the pump:

- A. Gives a small continuous dose of regular insulin subcutaneously, and the client can self-administer a bolus with an additional dosage from the pump before each meal.

B. It is timed to release programmed doses of regular or NPH insulin into the bloodstream at specific intervals.

C. It is surgically attached to the pancreas and infuses regular insulin into the pancreas, which in turn releases the insulin into the bloodstream.

D. It continuously infuses small amounts of NPH insulin into the bloodstream while regularly monitoring blood glucose levels.

Correct Answer: A. Gives a small continuous dose of regular insulin subcutaneously, and the client can self-administer a bolus with an additional dosage from the pump before each meal.

An insulin pump provides a small continuous dose of regular insulin subcutaneously throughout the day and night, and the client can self-administer a bolus with additional dosage from the pump before each meal as needed. Regular insulin is used in an insulin pump.

- **Option B:** Pumps are designed to mimic the natural insulin delivery of the pancreas by continuously delivering short-acting insulin at a basal rate required for maintaining control of blood glucose when fasting. This rate can be set on an hourly basis allowing for tighter control of blood sugars throughout the day.
- **Option C:** An external pump is not attached surgically to the pancreas. The Artificial Pancreas Device System is a system of devices that closely mimics the glucose regulating function of a healthy pancreas. Most Artificial Pancreas Device Systems consist of three types of devices already familiar to many people with diabetes: a continuous glucose monitoring system (CGM) and an insulin infusion pump. A blood glucose device (such as a glucose meter) is used to calibrate the CGM.
- **Option D:** The artificial pancreas, also known as closed-loop control, is an “all-in-one” diabetes management system that tracks blood glucose levels using a continuous glucose monitor (CGM) and automatically delivers the hormone insulin when needed using an insulin pump.

94. Mrs. Baker was instructed by the nurse on foods to encourage her child’s diet concerning the latter’s iron deficiency anemia. which of the following if stated by the mother would indicate the need for further instruction?

A. Fish

B. Lean meats

C. Whole-grain breads

D. Yellow vegetables

Correct Answer: D. Yellow vegetables

If a parent states that she should stress the intake of yellow vegetables, she needs additional teaching because yellow vegetables are not a good source of iron. Leafy greens, especially dark ones, are among the best sources of nonheme iron.

- **Option A:** Some seafood provides heme iron. Shellfish such as oysters, clams, scallops, crabs, and shrimp are good sources. Most fish contain iron. Although canned sardines are good sources of iron, they’re also high in calcium. Calcium may bind with iron and reduce its absorption.
- **Option B:** All meat and poultry contain heme iron. Red meat, lamb, and venison are the best sources. Poultry and chicken have lower amounts. Eating meat or poultry with nonheme iron foods, such as leafy greens, along with vitamin C-rich fruit can increase iron absorption.

- **Option C:** Whole-grain breads are good food source of iron and should be supported and encouraged. It may be a good idea to choose iron-fortified cereals, bread products, orange juice, rice, and pasta. Also, fermented and sprouted grains and legumes are a better choice for people with iron deficiency because sprouting and fermenting break down anti-nutrient compounds that negatively impact iron absorption.

95. What is the most common complication of an MI?

- A. Cardiogenic shock
- B. Heart failure
- C. Arrhythmias
- D. Pericarditis

Correct Answer: C. Arrhythmias

Arrhythmias, caused by oxygen deprivation to the myocardium, are the most common complication of an MI. About 90% of patients who have an acute myocardial infarction (AMI) develop some form of cardiac arrhythmia during or immediately after the event. In 25% of patients, such rhythm abnormalities manifest within the first 24 hours. In this group of patients, the risk of serious arrhythmias, such as ventricular fibrillation, is greatest in the first hour and declines thereafter.

- **Option A:** Cardiogenic shock, another complication of an MI, is defined as the end stage of left ventricular dysfunction. This condition occurs in approximately 15% of clients with MI. Cardiogenic shock is a physiologic state in which inadequate tissue perfusion results from cardiac dysfunction, most often systolic. It is a major, and frequently fatal, complication of a variety of acute and chronic disorders, occurring most commonly following acute myocardial infarction (MI).
- **Option B:** Because the pumping function of the heart is compromised by an MI, heart failure is the second most common complication. Myocardial infarction (MI) remains the most common cause of heart failure (HF) worldwide. For almost 50 years HF has been recognized as a determinant of adverse prognosis after MI, but efforts to promote myocardial repair have failed to translate into clinical therapies.
- **Option D:** Pericarditis most commonly results from a bacterial or viral infection but may occur after the MI. Pericardial inflammation after myocardial infarction can be either acute seen after 3 to 10 days after large transmural myocardial infarction, termed as peri-infarction pericarditis, or immune-mediated inflammation after 1 to 8 weeks termed as post-myocardial infarction syndrome (Dressler syndrome). The pain of pericarditis may be confused as resulting from post-infarction angina or recurrent infarction.

96. A female client with cancer is being evaluated for possible metastasis. Which of the following is one of the most common metastasis sites for cancer cells?

- A. Liver
- B. Colon
- C. Reproductive tract
- D. White blood cells (WBCs)

Correct Answer: A. Liver

The liver is one of the five most common cancer metastasis sites. The others are the lymph nodes, lung, bone, and brain.

- **Option B:** The colon is a rare cancer metastasis site. The most common pathway of metastatic spreading to the bowel is through peritoneal seeding, through hematogenous and lymphatic dissemination to the colon has also been reported.
- **Option C:** Metastasis rarely occurs in the reproductive tract. Ovary and vagina are the most frequent metastatic sites for extragenital and genital primaries.
- **Option D:** The WBCs are occasional metastasis sites. A human metastatic tumor can arise when a leukocyte and a cancer cell fuse to form a genetic hybrid.

97. A client has just returned to a nursing unit following bronchoscopy. A nurse would implement which of the following nursing interventions for this client?

- A. Encouraging additional fluids for the next 24 hours
- B. Ensuring the return of the gag reflex before offering foods or fluids
- C. Administering atropine intravenously
- D. Administering small doses of midazolam (Versed).

Correct Answer: B. Ensuring the return of the gag reflex before offering foods or fluids

After bronchoscopy, the nurse keeps the client on NPO status until the gag reflex returns because the preoperative sedation and the local anesthesia impair swallowing and the protective laryngeal reflexes for a number of hours. Although bronchoscopy can be done without sedation, most procedures are done under moderate conscious sedation with the use of various sedatives based on the clinician's preference (e.g., benzodiazepines, opioids, dexmedetomidine).

- **Option A:** Additional fluids are unnecessary because no contrast dye is used that would need to be flushed from the system. Regardless of the sedation or anesthesia used the physicians should be aware of the potential side effects and how to manage patients receiving these medications.
- **Option C:** Atropine would be administered before the procedure, not after. Atropine premedication is widely used for fiberoptic bronchoscopy and may help by drying secretions, producing bronchodilation, or preventing vasovagal reactions.
- **Option D:** The administration of additional midazolam in small doses, until the target sedation level is achieved, is a safe procedure that is associated with significantly less discomfort and pain during bronchoscopy and a greater consent to re-examination when compared with the administration of a fixed dose of midazolam.

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

- A. 6 months
- B. 12 months
- C. 18 months
- D. 24 months

Correct Answer: B. 12 months

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

- **Option A:** A woman has reached menopause when she has not had a period for one year. Changes and symptoms can start several years earlier. They include changes in periods; hot flashes and/or night sweats; trouble sleeping; vaginal dryness; mood swings; trouble focusing; and less hair on the head, more on the face.
- **Option C:** Skipping periods during perimenopause is common and expected. Often, menstrual periods will skip a month and return, or skip several months and then start monthly cycles again for a few months. Periods also tend to happen on shorter cycles, so they are closer together. Despite irregular periods, pregnancy is possible.
- **Option D:** Menopause is a natural biological process. But the physical symptoms, such as hot flashes, and emotional symptoms of menopause may disrupt sleep, lower energy or affect emotional health. There are many effective treatments available, from lifestyle adjustments to hormone therapy.

99. The nurse is evaluating the medical history of a client who will be receiving Asparaginase (Elspar). The nurse contacts the health care provider if which of the following is noted in the history?

- A. Diabetes Mellitus type II
- B. Pancreatitis
- C. Asthma
- D. Ischemic heart disease

Correct Answer: B. Pancreatitis

One of the major toxicities associated with asparaginase therapy is pancreatitis. Pancreatic function test should be performed before and during the administration of the medication.

- **Options A, C, & D:** These are not contraindicated with this medication.

100. Nurse Perry is aware that language development in autistic child resembles:

- A. Scanning speech
- B. Speech lag
- C. Stuttering
- D. Echolalia

Correct Answer: D. Echolalia

The autistic child repeats sounds or words spoken by others. Echolalia is a unique form of speech, and if the child has autism it may be one of the first ways in which the child uses speech to communicate. Thus, while it can be described as a symptom of autism, it can also be a great place for a parent or speech-language therapist to start working with the child.

- **Option A:** Scanning speech is a type of ataxic dysarthria in which spoken words are broken up into separate syllables, often separated by a noticeable pause, and spoken with varying force. Scanning speech, like other ataxic dysarthrias, is a symptom of lesions in the cerebellum. It is a typical symptom of multiple sclerosis, and it constitutes one of the three symptoms of Charcot's neurologic triad.
- **Option B:** Speech delay, also known as alalia, refers to a delay in the development or use of the mechanisms that produce speech. Speech – as distinct from language – is the actual process of making sounds, using such organs and structures as the lungs, vocal cords, mouth, tongue, teeth, etc. Language delay refers to a delay in the development or use of the knowledge of language.
- **Option C:** People who stutter may have more disfluencies and different types of disfluencies. They may repeat parts of words (repetitions), stretch a sound out for a long time (prolongations), or have a hard time getting a word out (blocks). Stuttering is more than just disfluencies. Stuttering also may include tension and negative feelings about talking. It may get in the way of how you talk to others. You may want to hide your stuttering. So, you may avoid certain words or situations. For example, you may not want to talk on the phone if that makes you stutter more.