Kevin's Review - 35 NCLEX Practice Questions

1. Appropriate intervention is vital for many children with heart disease in order to go on to live active, full lives. Which of the following outlines an effective nursing intervention to decrease cardiac demands and minimize cardiac workload?

A. Feeding the infant over long periods

B. Allowing the infant to have her way to avoid conflict

C. Scheduling care to provide for uninterrupted rest periods

D. Developing and implementing a consistent care plan

Correct Answer: C. Scheduling care to provide for uninterrupted rest periods

Organizing nursing care to provide for uninterrupted periods of sleep reduces cardiac demand. Allow for rest periods between care; disturb only when necessary for care and procedures. This promotes rest and conserves energy.

- **Option A:** Feeding time should be restricted to a maximum of 45 minutes or discontinued sooner if the infant tires. Rest decreases metabolic rate, decreasing myocardial and oxygen demand. Fatigue and exertional dyspnea are common problems with low cardiac output states. Close monitoring of the patient's response serves as a guide for optimal progression of activity.
- **Option B:** In an attempt to get her own way, the child may cry. Excessive crying should be limited; however, an appropriate limit setting should still be observed. Avoid allowing the infant to cry for long periods of time, use soft nipple for feeding; cross-cut nipple; if unable for infant to ingest sufficient calories by mouth,gavage-feed infant.
- **Option D:** Developing and implementing a consistent care plan can be important, but it is not related to decreasing cardiac demands or workload. Assist parents to plan for care and rest schedules. Provides rest and prevents overexertion, minimizes energy expenditure.

2. The family of a 6-year-old with a fractured femur asks the nurse if the child's height will be affected by the injury. Which statement is true concerning long bone fractures in children?

A. Growth problems will occur if the fracture involves the periosteum.

B. Epiphyseal fractures often interrupt a child's normal growth pattern.

C. Children usually heal very quickly, so growth problems are rare.

D. Adequate blood supply to the bone prevents growth delay after fractures.

Correct Answer: B. Epiphyseal fractures often interrupt a child's normal growth pattern.

Epiphyseal fractures often interrupt a child's normal growth pattern. Growth plate fractures are classified based on which parts of the bone are damaged, in addition to the growth plate. Areas of the bone immediately above and below the growth plate may fracture. They are called the epiphysis (the tip of the bone) and metaphysis (the "neck" of the bone).

- **Option A:** The most serious complication is early closure (complete or partial) of the growth plate. Complete closure means the entire growth plate of the affected bone has stopped expanding. This results in the affected bone not growing as long as the opposite side.

- **Option C:** The severity of and need for treatment of growth plate closures depend on the location of the fracture and the age of the patient. Other complications of growth plate fractures include delayed healing of the bone, nonhealing, infection, and loss of blood flow to the area, causing death of part of the bone.
- **Option D:** Growth plate fractures are generally treated with splints or casts. Sometimes, the bone may need to be put back in place to allow it to heal in the correct position. This may be done before or after the cast is placed and is called a closed reduction. The length of time the child needs to be in a cast or splint depends on the location and severity of the fracture. The child's age also matters: younger patients heal faster than older patients.

3. The nurse is caring for a client admitted with epiglottitis. Because of the possibility of complete obstruction of the airway, which of the following should the nurse have available?

A. Intravenous access supplies

B. A tracheostomy set

C. Intravenous fluid administration pump

D. Supplemental oxygen

Correct Answer: B. A tracheostomy set

For a child with epiglottitis and the possibility of complete obstruction of the airway, emergency tracheostomy equipment should always be kept at the bedside. Prepare for intubation or tracheostomy; Anticipate the need of an artificial airway. An artificial airway is required to promote oxygenation and ventilation and prevent aspiration.

- **Option A:** Administer IV antibiotics as ordered. After obtaining blood and epiglottic cultures, second-or-third generation cephalosporins and beta-lactamase-resistant antibiotics should be started as soon as possible.
- **Option C:** Discourage examining throat with a tongue blade or taking throat culture unless immediate emergency equipment and personnel at hand. Position the child in a sitting up and leaning forward position with mouth open and tongue out ("tripod" position). Allows maximum entry of air into the lungs for improved oxygenation.
- **Option D:** Oxygen will not treat an obstruction. Endotracheal intubation must be readily available; assist with tracheostomy if needed or prepare for the procedure in surgery. Establishes airway if obstruction present and respiratory failure and asphyxia are imminent.

4. A 34-year-old female client is requesting information about mammograms and breast cancer. She isn't considered at high risk for breast cancer. What should the nurse tell this client?

A. She should have had a baseline mammogram before age 30

B. When she begins having yearly mammograms, breast self-examinations will no longer be necessary

C. She should perform breast self-examination during the first 5 days of each menstrual cycle

D. She should eat a low-fat diet to further decrease her risk of breast cancer

Correct Answer: D. She should eat a low-fat diet to further decrease her risk of breast cancer

- **Option D:** A low-fat diet (one that maintains weight within 20% of recommended body weight) has been found to decrease a woman's risk of breast cancer.
- **Option A:** A baseline mammogram should be done between ages 30 and 40.
- **Option B:** The client should continue to perform monthly breast self-examinations even when receiving yearly mammograms.
- **Option C:** Monthly breast self-examinations should be done between days 7 and 10 of the menstrual cycle.

5. Aldo, with a somatoform pain disorder may obtain secondary gain. Which of the following statements refers to a secondary gain?

A. It brings some stability to the family.

B. It decreases the preoccupation with the physical illness.

C. It enables the client to avoid some unpleasant activity.

D. It promotes emotional support or attention for the client.

Correct Answer: D. It promotes emotional support or attention for the client

Secondary gain refers to the benefits of the illness that allow the client to receive emotional support or attention. Secondary gain refers to the external benefits that may be derived as a result of having symptoms. For example, the patient whose sudden onset of paresis (primary gain) causes his or her spouse to stay in an otherwise failing relationship (secondary gain).

- **Option A:** A dysfunctional family may disregard the real issue, although some conflict is relieved. Patients who experience unexplained physical symptoms often strongly maintain the belief that their symptoms have a physical cause despite evidence to the contrary. These beliefs are based on false interpretation of symptoms. Additionally, patients may minimize the involvement of psychiatric factors in the initiation, maintenance, or exacerbation of their physical symptoms.
- **Option B:** Somatoform pain disorder is a preoccupation with pain in the absence of physical disease. Pain disorder is fairly common. Although the pain is associated with psychological factors at its onset (e.g., unexplained chronic headache that began after a significant stressful life event), its onset, severity, exacerbation, or maintenance may also be associated with a general medical condition. Pain is the focus of the disorder, but psychological factors are believed to play the primary role in the perception of pain.
- **Option C:** Primary gain enables the client to avoid some unpleasant activity. A decrease in anxiety (gain) from an unconscious defensive operation, which then causes a physical or conversion symptom, e.g. an arm is voluntarily paralyzed because it was used to hurt somebody, thereby allaying guilt and anxiety.

6. Vasopressin is which of the following pituitary hormones?

A. Antidiuretic hormone

B. Desmopressin acetate

C. Oxytocin

D. ACTH

Correct Answer: A. Antidiuretic hormone

Vasopressin is an antidiuretic hormone. Vasopressin or antidiuretic hormone (ADH) or arginine vasopressin (AVP) is a nonapeptide synthesized in the hypothalamus. Science has known it to play essential roles in the control of the body's osmotic balance, blood pressure regulation, sodium homeostasis, and kidney functioning. ADH primarily affects the ability of the kidney to reabsorb water; when present, ADH induces expression of water transport proteins in the late distal tubule and collecting duct to increase water reabsorption.

- **Option B:** Desmopressin (1-deamino-8-D-arginine vasopressin) is a synthetic analog of vasopressin aka antidiuretic hormone created in 1977 used in the treatment in a wide variety of medical conditions to include nocturnal polyuria, hemophilia A, diabetes insipidus, on Willebrand disease, uremic bleeding, as well as many off label uses such as an adjunct with hypertonic saline to prevent rapid sodium correction, intracranial hemorrhage associated with varying antiplatelet agents, and trauma resuscitation with active hemorrhage.
- **Option C:** Oxytocin is indicated and approved by the FDA for two specific time frames in the obstetric world: antepartum and postpartum. In the antepartum period, exogenous oxytocin is FDA-approved for strengthening uterine contractions with the aim of successful vaginal delivery of the fetus. In regards to the postpartum period, oxytocin is FDA-approved when it is time to deliver the placenta during the third stage of labor and also to control postpartum hemorrhage.
- **Option D:** Adrenocorticotropic hormone (ACTH) is a tropic hormone produced by the anterior pituitary. The hypothalamic-pituitary axis controls it. ACTH regulates cortisol and androgen production. Diseases associated with ACTH include Addison disease, Cushing syndrome, and Cushing disease.

7. A client who has been receiving heparin therapy also is started on warfarin. The client asks a nurse why both medications are being administered. In formulating a response, the nurse incorporates the understanding that warfarin:

A. Stimulates the breakdown of specific clotting factors by the liver, and it takes two (2)- three (3) days for this to exert an anticoagulant effect.

B Inhibits synthesis of specific clotting factors in the liver, and it takes 3-4 days for this medication to exert an anticoagulant effect.

C. Stimulates production of the body's own thrombolytic substances, but it takes 2-4 days for this to begin.

D. Has the same mechanism of action as Heparin, and the crossover time is needed for the serum level of warfarin to be therapeutic.

Correct Answer: B. Inhibits synthesis of specific clotting factors in the liver, and it takes 3-4 days for this medication to exert an anticoagulant effect.

Warfarin works in the liver and inhibits synthesis of four vitamin K-dependent clotting factors (X, IX, VII, and II), but it takes 3 to 4 days before the therapeutic effect of warfarin is exhibited. Because of the delay in factor II (prothrombin) suppression, heparin is administered concurrently for four to five days to prevent thrombus propagation. Loading doses of warfarin are not warranted and may result in bleeding complications.

- **Option A:** Warfarin is the oral anticoagulant most frequently used to control and prevent thromboembolic disorders. Prescribing the dose that both avoids hemorrhagic complications and achieves sufficient suppression of thrombosis requires a thorough understanding of the drug's unique pharmacology.

- **Option C:** The earliest changes in the International Normalized Ratio (INR) are typically noted 24 to 36 hours after a dose of warfarin is administered. These changes are due to the clearance of functional factor VII, which is the vitamin K–dependent clotting factor with the shortest half-life (six hours).
- **Option D:** Loading doses theoretically may cause clot formation and/or expansion by limiting the production of proteins C and S, which have shorter half-lives than prothrombin. Consequently, the concurrent use of heparin is extremely important.

8. The nurse assesses a male client's respiratory status. Which observation indicates that the client is experiencing difficulty breathing?

A. Diaphragmatic breathing

B. Use of accessory muscles

C. Pursed-lip breathing

D. Controlled breathing

Correct Answer: B. Use of accessory muscles

The use of accessory muscles for respiration indicates the client is having difficulty breathing. Accessory muscles of respiration are muscles other than the diaphragm and intercostal muscles that may be used for labored breathing. The sternocleidomastoid, spinal, and neck muscles may be used as accessory muscles of respiration; their use is a sign of an abnormal or labored breathing pattern. Diaphragmatic and pursed-lip breathing are two controlled breathing techniques that help the client conserve energy.

- **Option A:** Diaphragmatic breathing is a type of breathing exercise that helps strengthen the diaphragm, an important muscle that helps breathe as it represents 80% of breathing. This breathing exercise is also sometimes called(belly breathing or abdominal breathing).
- **Option C:** Pursed lip breathing is a technique that helps people living with asthma or COPD when they experience shortness of breath. Pursed lip breathing helps control shortness of breath, and provides a quick and easy way to slow the pace of breathing, making each breath more effective.
- **Option D:** Controlled breathing' (sometimes called 'pursed lips breathing') will help the client to get as much air as possible into the lungs. This may help to ease shortness of breath. It is one way to slow down breathing and to make each breath as effective as possible.

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

A. Background, recognizing biases and prejudices.

B. Social, cultural, and biophysical factors.

C. Engagement in cross-cultural interactions.

D. Motivation and commitment to caring.

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

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

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

10. To determine if the cause of infertility is a blockage of the fallopian tubes, the test to be done is

A. Huhner's test

B. Postcoital test

C. Rubin's test

D. None of the above

Correct Answer: C. Rubin's test

Rubin's test is a test to determine patency of fallopian tubes. Huhner's test is also known as post-coital test to determine the compatibility of the cervical mucus with sperms of the sexual partner.

- **Options A and B:** The postcoital test or Huhner's test determines the adequacy of sperm and the receptivity of cervical mucus. It is the only test which evaluates the interaction between sperm and the female genital tract fluids. The Sims-Huhner test should be an integral part of an infertility investigation, but it must not be used as a substitute for semen analysis. Since cervical mucus accurately reflects the ovarian cycle, the PC test is a useful indicator of the endocrine preparation of the female reproductive system. It is also an important method for the evaluation of a variety of contraceptive steroids which may act directly or indirectly upon cervical secretion.

11. The clinical instructor asks her students the rationale for handwashing. The students are correct if they answered that handwashing is expected to remove:

A. Transient flora from the skin

B. Resident flora from the skin

C. All microorganisms from the skin

D. Media for bacterial growth

Correct Answer: A. Transient flora from the skin

There are two types of normal flora: transient and resident. Transient flora are normal flora that a person picks up by coming in contact with objects or another person (e.g., when you touch a soiled dressing). You can remove these with hand washing. Hand washing can prevent about 30% of diarrhea-related illnesses and about 20% of respiratory infections (e.g., colds). Antibiotics often are prescribed unnecessarily for these health issues

- **Option B:** Resident flora live deep in skin layers where they live and multiply harmlessly. They are permanent inhabitants of the skin and cannot usually be removed with routine hand washing.
- **Option C:** Removing all microorganisms from the skin (sterilization) is not possible without damaging the skin tissues. To live and thrive in humans, microbes must be able to use the body's precise balance of food, moisture, nutrients, electrolytes, pH, temperature, and light.
- **Option D:** Food, water, and soil that provide these conditions may serve as nonliving reservoirs. Hand washing does little to make the skin uninhabitable for microorganisms, except perhaps briefly when an antiseptic agent is used for cleansing. Handwashing with soap could protect about 1 out of every 3 young children who get sick with diarrhea and almost 1 out of 5 young children with respiratory infections like pneumonia.

12. During a conversation with Nurse John with a client, he observes that the client shifts from one topic to the next on a regular basis. Which of the following terms describes this disorder?

A. Flight of ideas

B. Concrete thinking

C. Ideas of reference

D. Loose association

Correct Answer: D. Loose association

Loose associations are conversations that constantly shift in topic. Loose associations don't necessarily start in a cogently, then become loose. A manifestation of a thought disorder whereby the patient's responses do not relate to the interviewer's questions, or one paragraph, sentence, or phrase is not logically connected to those that occur before or after.

- **Option A:** Flight of ideas is characterized by a conversation that's disorganized from the onset. A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When severe, speech may be disorganized and incoherent. It is part of the DSM -5 criteria for Manic episodes.
- **Option B:** Concrete thinking implies highly definitive thought processes. Concrete thinking is reasoning that's based on what you can see, hear, feel, and experience in the here and now. It's sometimes called literal thinking, because it's reasoning that focuses on physical objects, immediate experiences, and exact interpretations.
- **Option C:** Ideas of reference or delusions of reference involve a person having a belief or perception that irrelevant, unrelated or innocuous things in the world are referring to them directly or have special personal significance. The two are clearly distinguished in psychological literature.

13. After routine patient contact, handwashing should last at least:

A. 30 seconds

B. 1 minute

C. 2 minutes

D. 3 minutes

Correct Answer: A. 30 seconds

Depending on the degree of exposure to pathogens, hand washing may last from 10 seconds to 4 minutes. After routine patient contact, hand washing for 30 seconds effectively minimizes the risk of pathogen transmission. According to the Centers for Disease Control and Prevention (CDC), hand hygiene is the single most important practice in the reduction of the transmission of infection in the healthcare setting.

- **Option B:** According to the CDC, hand hygiene encompasses the cleansing of your hands with soap and water, antiseptic hand washes, antiseptic hand rubs such as alcohol-based hand sanitizers, foams or gels, or surgical hand antisepsis. Indications for handwashing include when hands are visibly soiled, contaminated with blood or other bodily fluids, before eating, and after restroom use.
- **Option C:** Handwashing is the act of washing hands with soap, either antimicrobial or non-antimicrobial, and water for at least 15 to 20 seconds with a vigorous motion to cause friction making sure to include all surfaces of the hands and fingers. Hand rubbing with an alcohol-based rub should not be performed when the hands are visibly soiled. In this case, the CDC and WHO guidelines recommend that handwashing with soap and water
- **Option D:** Alcohol-based hand sanitizers are the recommended product for hand hygiene when hands are not visibly soiled. Apply alcohol-based products per manufacturer guidelines on dispensing of the product. Typically, 3 mL to 5 mL in the palm, rubbing vigorously, ensuring all surfaces on both hands get covered, about 20 seconds is required for all surfaces to dry completely.

14. An elderly man is admitted to the hospital. He was alert and oriented during the admission interview. However, his family states that he becomes disruptive and disoriented around dinnertime. One night he was shouting furiously and didn't know where he was. He was sedated and the next morning he was fine. At dinnertime, the disruptive behavior returned. The client is diagnosed as having sundown syndrome. The client's son asks the nurse what causes sundown syndrome. The nurse's best response is that it is attributed to

A. An underlying depression

B. Inadequate cerebral flow

C. Changes in the sensory environment

D. Fluctuating levels of oxygen exchange

Correct Answer: C. Changes in the sensory environment

Because the confusion occurs at sundown, the cause probably changes in the sensory environment. Sundown syndrome is related to environmental and sensory abnormalities that lead to acute confusion. The evaluation and management of altered mental status are broad and require careful history and physical examination to eliminate life-threatening situations. Changes in consciousness can be categorized into changes of arousal, the content of consciousness, or a combination of both. Arousal includes wakefulness and/or alertness and can be described as hypoactivity or hyperactivity, while changes in the content of consciousness can lead to changes in self-awareness, expression, language, and emotions

- **Option A:** An underlying depression does not cause sundown syndrome. Depression is characterized by personal withdrawal, slowed speech, or poor results of a cognitive test. Patients rarely have a rapid fluctuation of symptoms and are usually oriented and able to follow commands. When eliciting a history from a patient who presents for altered mental status, it is important to

obtain information both from the patient and from collateral sources (e.g., parents, children, friends, emergency management services, bystanders, the patient's primary physician). This information can provide more insight regarding the chronicity of the change, precipitating factors, exacerbating or relieving factors, and recent as well as chronic medical history.

- **Option B:** There is not sufficient evidence to suggest he has inadequate cerebral blood flow. Delirium is typically an acute confusional state, defined by impairment of attention or cognition that usually develops over hours to days. Some patients may experience rapid fluctuations between hypoactive and hyperactive states, that may be interjected with periods of intermittent lucidity. A nearly pathognomonic characteristic of delirium is sleep-wake cycle disruption, which leads to "sundowning," a phenomenon in which delirium becomes worse or more persistent at night
- **Option D:** Fluctuating levels of oxygen exchange do not cause sundown syndrome. The ascending reticular activating system is the anatomic structure that mediates arousal. Neurons of the ascending reticular activating system are located in the midbrain, pons, and medulla, and control arousal from sleep. Metabolic conditions, likely hypoglycemia or hypoxia, can decrease acetylcholine synthesis in the central nervous system, which correlates with the severity of delirium.

15. A nurse reviews the arterial blood gas results of a patient and notes the following: pH 7.45; PCO2 30 mm Hg; and bicarbonate concentration of 22 mEq/L. The nurse analyzes these results as indicating:

A. Metabolic acidosis, compensated.

B. Metabolic alkalosis, uncompensated.

C. Respiratory alkalosis, compensated.

D. Respiratory acidosis, compensated.

Correct Answer: C. Respiratory alkalosis, compensated.

The normal pH is 7.35 to 7.45. In a respiratory condition, an opposite (see-saw) will be seen between the pH and the PCO2. In this situation, the pH is at the high end of the normal value and the PCO2 is low. In an alkalotic condition, the pH is up. Therefore, the values identified in the question indicate a respiratory alkalosis. Compensation occurs when the pH returns to a normal value. Because the pH is in the normal range at the high end, compensation has occurred.

- **Option A:** The pCO2 determines whether an acidosis is respiratory or metabolic in origin. Metabolic acidosis is due to alterations in bicarbonate, so the pCO2 is less than 40 since it is not the cause of the primary acid-base disturbance. In metabolic acidosis, the distinguishing lab value is a decreased bicarbonate (normal range 21 to 28 mEq/L). Respiratory compensation is the physiologic mechanism to help normalize a metabolic acidosis, however, compensation never completely corrects acidemia.
- **Option B:** HCO3 functions as an alkalotic substance. CO2 functions as an acidic substance. Therefore, increases in HCO3 or decreases in CO2 will make blood more alkalotic. The opposite is also true where decreases in HCO3 or an increase in CO2 will make blood more acidic. CO2 levels are physiologically regulated by the pulmonary system through respiration, whereas the HCO3 levels are regulated through the renal system with reabsorption rates. Therefore, metabolic alkalosis is an increase in serum HCO3.
- **Option D:** Respiratory acidosis typically occurs due to failure of ventilation and accumulation of carbon dioxide. The primary disturbance is an elevated arterial partial pressure of carbon dioxide (pCO2) and a decreased ratio of arterial bicarbonate to arterial pCO2, which results in a decrease in the pH of the blood. To compensate for the disturbance in the balance between carbon dioxide

and bicarbonate (HCO3-), the kidneys begin to excrete more acid in the forms of hydrogen and ammonium and reabsorb more base in the form of bicarbonate. This compensation helps to normalize the pH.

16. A client with acute asthma is prescribed short-term corticosteroid therapy. What is the rationale for the use of steroids in clients with asthma?

A. Corticosteroids promote bronchodilation.

B. Corticosteroids act as an expectorant.

C. Corticosteroids have an anti-inflammatory effect.

D. Corticosteroids prevent development of respiratory infections.

Correct Answer: C. Corticosteroids have an anti-inflammatory effect.

Corticosteroids have an anti-inflammatory effect and act to decrease edema in the bronchial airways and decrease mucus secretion. At a physiologic level, steroids reduce airway inflammation and mucus production and potentiate beta-agonist activity in smooth muscles and reduce beta-agonists tachyphylaxis in patients with severe asthma. Corticosteroids do not have a bronchodilator effect, act as expectorants, or prevent respiratory infections.

- **Option A:** Short-acting inhaled beta-agonists are the drug of the first choice in acute asthma. Albuterol is preferred over metaproterenol in that class because of its higher beta 2 selectivities and longer duration of action. The dose-response curve and duration of action of these medications are adversely affected by a combination of patient factors, including pre existing bronchoconstriction, airway inflammation, mucus plugging, poor patient effort, and coordination.
- **Option B:** Anticholinergics have a variable response in acute exacerbation with a somewhat underwhelming bronchodilatory role. However, they can be useful in patients with bronchospasm induced by beta-blockade or severe underlying obstructive disease with FEV1 less than 25% of predicted.
- **Option D:** Graham et al. conducted a randomized double-blinded trial and demonstrated no difference in improvement in symptom score, spirometry, or length of hospitalization with routine use of antibiotics in status asthmaticus. That does not mean that patients with clinical signs of infection should not be treated with antimicrobials, or due diligence should not be pursued in obtaining respiratory culture specimens early on.

17. The newly hired nurse at Nurseslabs Medical Center is assessing a client who abuses barbiturates and benzodiazepine. The nurse would observe for evidence of which withdrawal symptoms?

A. Respiratory depression, stupor, and bradycardia

B. Anxiety, tremors, and tachycardia

C. Muscle aches, cramps, and lacrimation

D. Paranoia, depression, and agitation

Correct Answer: B. Anxiety, tremors, and tachycardia

Barbiturates and benzodiazepine are CNS depressants; therefore, withdrawal symptoms are related to CNS stimulation caused by the rebounding of neurotransmitters (norepinephrine). Symptoms include

increased anxiety, tremors, and vital sign changes (such as tachycardia and hypertension). Chronic abusers can develop severe withdrawal symptoms within 8 to 15 hours of cessation. Symptoms include restlessness, tremors, hyperthermia, sweating, insomnia, anxiety, seizures, circulatory failure, and potentially death.

- **Option A:** Respiratory depression, stupor, and bradycardia are typically associated with an overdose—not withdrawal—of barbiturates or benzodiazepine. Symptoms of barbiturate toxicity vary from case to case, but commonly include difficulty thinking, decreased level of consciousness, bradycardia or rapid and weak pulse, poor coordination, vertigo, nausea, muscle weakness, thirst, oliguria, decreased temperature, and dilated or contracted pupils. Fatal cases are marked by coma, hypotension (low blood pressure), and respiratory depression (decreased efforts to breathe) evidenced by cyanosis and hypotension
- **Option C:** Muscle aches, cramps, and lacrimation are most commonly associated with withdrawal from opiates. According to Diagnostic and Statistical Manual of Mental Disorders (DSM–5) criteria, signs and symptoms of opioid withdrawal include lacrimation or rhinorrhea, piloerection “goose flesh,” myalgia, diarrhea, nausea/vomiting, pupillary dilation and photophobia, insomnia, autonomic hyperactivity (tachypnea, hyperreflexia, tachycardia, sweating, hypertension, hyperthermia), and yawning.
- **Option D:** Paranoia, depression, and agitation are usually associated with withdrawal from CNS stimulants, such as amphetamines or cocaine. Central nervous system (CNS) stimulants like cocaine and amphetamine can also produce withdrawal symptoms. Like opioids, the withdrawal symptoms are mild and not life-threatening. Often the individual will develop marked depression, excessive sleep, hunger, dysphoria, and severe psychomotor retardation but all vital functions are well preserved. Recovery is usually slow, and depression can last for several weeks.

18. A gravida 3 para 2 is admitted to the labor unit. Vaginal exam reveals that the client’s cervix is 8 cm dilated, with complete effacement. The priority nursing diagnosis at this time is:

A. Alteration in coping related to pain

B. Potential for injury related to precipitate delivery

C. Alteration in elimination related to anesthesia

D. Potential for fluid volume deficit related to NPO status

Correct Answer: A. Alteration in coping related to pain

Transition is the time during labor when the client loses concentration due to intense contractions. Assess nature and amount of vaginal show, cervical dilation, effacement, fetal station, and fetal descent. Cervical dilation should be approximately 1.2 cm/hr in the nullipara and 1.5 cm/hr in the multipara; vaginal show increases with a fetal descent. Choice and timing of medication is affected by the degree of dilation and contractile pattern.

- **Option B:** Potential for injury related to precipitate delivery has nothing to do with the dilation of the cervix, so answer B is incorrect. Monitor uterine activity manually and/or electronically, noting frequency, duration, and intensity of contraction. The uterus is susceptible to possible rupture if a hypertonic contractile pattern develops spontaneously or in response to oxytocin administration. Placental separation and hemorrhage can also occur if contraction persists.
- **Option C:** Encourage periodic attempts to void, at least every 1–2 hr. Pressure of the presenting part on the bladder often reduces sensation and interferes with complete emptying. Regional anesthesia (especially in conjunction with IV fluid infusion and use of Stadol) also may contribute to

voiding difficulties/bladder distension.

- **Option D:** Monitor for signs and symptoms of excess fluid loss or shock (i.e., check BP, pulse, sensorium, skin color, and temperature). Hemorrhage associated with fluid loss greater than 500 ml may be manifested by increased pulse, decreased BP, cyanosis, disorientation, irritability, and loss of consciousness.

19. When a pregnant woman goes into a convulsive seizure, the MOST immediate action of the nurse to ensure the safety of the patient is:

A. Apply restraint so that the patient will not fall out of bed.

B. Put a mouth gag so that the patient will not bite her tongue and the tongue will not fall back.

C. Position the mother on her side to allow the secretions to drain from her mouth and prevent aspiration.

D. Check if the woman is also having precipitate labor.

Correct Answer: C. Position the mother on her side to allow the secretions to drain from her mouth and prevent aspiration.

Positioning the mother on her side will allow the secretions that may accumulate in her mouth to drain by gravity thus preventing aspiration pneumonia.

- **Option A:** Placing a patient who is in seizure in restraints would further injure him or her. Place the patient on a flat, firm surface during seizure.
- **Option B:** Putting a mouth gag is not safe since during the convulsive seizure the jaw will immediately lock.
- **Option D:** The mother may go into labor also during the seizure, but the immediate concern of the nurse is the safety of the baby. After the seizure, check the perineum for signs of precipitate labor.

20. Which measure would be least effective in preventing postpartum hemorrhage?

A. Administer Methergine 0.2 mg every 6 hours for 4 doses as ordered.

B. Encourage the woman to void every 2 hours.

C. Massage the fundus every hour for the first 24 hours following birth.

D. Teach the woman the importance of rest and nutrition to enhance healing.

Correct Answer: C. Massage the fundus every hour for the first 24 hours following birth.

The fundus should be massaged only when boggy or soft. Massaging a firm fundus could cause it to relax. Uterine atony is the most common cause of postpartum hemorrhage. Brisk blood flow after delivery of the placenta unresponsive to transabdominal massage should prompt immediate action including bimanual compression of the uterus and use of uterotonic medications. Massage is performed by placing one hand in the vagina and pushing against the body of the uterus while the other hand compresses the fundus from above through the abdominal wall.

- **Option A:** The choice of a second-line uterotonic should be based on patient-specific factors such as hypertension, asthma, or use of protease inhibitors. Although it is not a uterotonic, tranexamic acid (Cyklokapron) may reduce mortality due to bleeding from postpartum hemorrhage (but not

overall mortality) when given within the first three hours and may be considered as adjuvant therapy.

- **Option B:** Draining the bladder with a Foley catheter may improve uterine atony and will allow monitoring of urine output.
- **Option D:** Follow-up of postpartum hemorrhage includes monitoring for ongoing blood loss and vital signs, assessing for signs of anemia (fatigue, shortness of breath, chest pain, or lactation problems), and debriefing with patients and staff.

21. Mrs. Parker, a 70-year-old woman with severe macular degeneration, was admitted to the hospital the day before a scheduled surgery. The nurse's preoperative goals for Mrs. M. would include:

A. Independently ambulating around the unit

B. Reading the routine preoperative education materials

C. Maneuvering safely after orientation to the room

D. Using a bedpan for elimination needs

Correct Answer: C. Maneuvering safely after orientation to the room.

Maneuvering safely after orientation to the room is a realistic goal for a person with impaired vision. Orienting the client to the room should help the client to move safely. The client should be familiarized with the bed, location of the bathroom, furniture, and other environmental hazards that can cause older patients to trip or fall.

- **Option A:** Independently ambulating around the unit is not appropriate because the unit environment can change and injury could result. Place assistive devices and commonly use items within reach. This provides easy access to assistive devices and personal care items. Items such as call bell, telephone, and water should be kept close to avoid frequent reaching.
- **Option B:** Assistance is necessary because of the client's visual deficit. It is unlikely the client can see well enough to read the materials. Ensure the client's eyesight is regularly checked and explain the importance of wearing eyeglasses if needed. Make sure glasses and hearing aids are always worn.
- **Option D:** Using the bedpan is an unnecessary restriction on the client as she can be oriented to the bathroom or to call for assistance. Instruct the client how to ambulate at home, including using safety measures such as handrails in the bathroom.

22. A 25-year-old athlete is recovering from a rib injury sustained during a sporting event. The rehabilitation therapist has been focusing on exercises to improve chest wall movement and ensure optimal respiratory function. During a therapy session, the nursing instructor and her student observe the session, noting the emphasis on proper breathing techniques. The therapist discusses the significance of various respiratory muscles in aiding the athlete's recovery. Later, in a bid to gauge the student's grasp on respiratory muscle anatomy and its relation to the observed therapy, the instructor poses the question: "The muscles of inspiration include the diaphragm and internal intercostal muscles. Is this statement accurate?"

A. True

B. False

C. Partially true

D. Partially false

Correct Answer: B. False
The diaphragm and internal intercostal muscles are vital components of the muscles of inspiration. During inhalation, the diaphragm contracts, moving downward and increasing the volume of the thoracic cavity, while the internal intercostal muscles assist by elevating the ribs and expanding the chest cavity, collectively aiding in the intake of air into the lungs.

- **Option A:** This is incorrect. The diaphragm is a primary muscle of inspiration, but the internal intercostal muscles are primarily involved in expiration.
- **Option C:** This is misleading. Although the statement about the diaphragm being an inspiratory muscle is accurate, the inclusion of internal intercostal muscles makes the statement as a whole incorrect.
- **Option D:** While this is technically a correct description of the statement, option B (False) is a more direct and clear answer to the question.

23. In preparation for the discharge of a client with arterial insufficiency and Raynaud's disease, client teaching instructions should include:

A. Walking several times each day as an exercise program.

B. Keeping the heat up so that the environment is warm.

C. Wearing a TED hose during the day.

D. Using hydrotherapy for increasing oxygenation.

Correct Answer: B. Keeping the heat up so that the environment is warm.

The client's instructions should include keeping the environment warm to prevent vasoconstriction. In response to cold temperatures, the body adapts by restricting blood flow to the skin. This is done as a thermoregulatory mechanism to prevent further loss of body heat and to sustain the core body temperature. In Raynaud's phenomenon, blood-flow restriction occurs during cold temperatures and emotional stress.

- **Option A:** Walking would most likely increase pain. Conservative medical management to prevent Raynaud phenomenon attacks is a lifestyle change. This includes avoiding exposure to cold, staying warm, avoiding stimulants, avoiding anxiety or emotional stress, and smoking cessation.
- **Option C:** Wearing gloves, warm clothes, and socks will also be useful when preventing vasoconstriction, but TED hose would not be therapeutic. Severe Raynaud phenomenon may result in tissue ischemia, leading to necrosis followed by amputation of the affected area.
- **Option D:** With the primary Raynaud phenomenon, spontaneous remission, whereby the patient has been free of Raynaud phenomenon attacks, may occur. Spontaneous remission is not seen with secondary Raynaud phenomenon. Pregnancy has been shown to improve Raynaud's phenomenon since there is an improvement in peripheral blood flow and oxygenation due to an increase in red blood cell mass and plasma volume.

24. A client is hospitalized with hepatitis A. Which of the client's regular medications is contraindicated due to the current illness?

A. Premarin (conjugated estrogens)

B. Lipitor (atorvastatin)

C. Prilosec (omeprazole)

D. Synthroid (levothyroxine)

Correct Answer: B. Lipitor (atorvastatin)

- Option B: Lipid-lowering agents are contraindicated in the client with active liver disease due to risk for hepatotoxicity.
- Options A, C, and D: These are not contraindicated in the client with active liver disease.

25. A female client with hypothyroidism (myxedema) is receiving levothyroxine (Synthroid), 25 mcg P.O. daily. Which finding should nurse Hans recognize as an adverse drug effect?

A. Dysuria

B. Leg cramps

C. Tachycardia

D. Blurred vision

Correct Answer: C. Tachycardia

Levothyroxine, a synthetic thyroid hormone, is given to a client with hypothyroidism to simulate the effects of thyroxine. Adverse effects of this agent include tachycardia. Generally, adverse events resulting from incorrect dosing (excessive dosing) often form a hyperthyroid-like picture or due to an allergic reaction to the excipient of the levothyroxine tablets. The other options aren't associated with levothyroxine.

- **Option A:** Adverse effects (frequency undefined) include: angina pectoris, tachycardia, palpitations, arrhythmias, myocardial infarction, dyspnea, anxiety, fatigue, headache, heat intolerance, insomnia, irritability, diaphoresis, skin rash, alopecia, goiter, weight loss, menstrual irregularities, abdominal cramps, diarrhea, emesis, reduced fertility, and decreased bone mineral density (a result of TSH suppression).
- **Option B:** In the initial stage of overdose (6 to 12 hours post-ingestion), the common signs of toxicity would be tremulousness, tachycardia, hypertension, anxiety, and diarrhea. Rarely, convulsions, thyroid storm, acute psychosis, arrhythmias, and acute myocardial infarction may occur.
- **Option D:** In adults, monitor TSH levels approximately 6 to 8 weeks after initiating treatment with levothyroxine. Upon achieving the correct dosing of levothyroxine, monitor TSH levels 4 to 6 months after, and then every 12 months after that.

26. In caring for a young child with pain, which assessment tool is the most useful?

A. Simple descriptive pain intensity scale

B. 0-10 numeric pain scale

C. Faces pain-rating scale

D. McGill-Melzack pain questionnaire

Correct Answer: C. Faces pain-rating scale

The Faces pain rating scale (depicting smiling, neutral, frowning, crying, etc.) is appropriate for young children who may have difficulty describing pain or understanding the correlation of pain to numerical or verbal descriptors. The Faces Pain Scale-Revised (FPS-R) is a self-report measure of pain intensity developed for children. It was adapted from the Faces Pain Scale to make it possible to score the sensation of pain on the widely accepted 0-to-10 metric. The scale shows a close linear relationship with visual analog pain scales across the age range of 4-16 years. It is easy to administer and requires no equipment except for the photocopied faces. The other tools require abstract reasoning abilities to make analogies and use of advanced vocabulary.

- **Option A:** The Simple Descriptive Scale exhibits degrees of pain intensity (no pain, mild pain, moderate pain, and severe pain). Risk factors for the development of chronic pain have been a major topic in pain research in the past two decades. Now, it has been realized that psychological and psychosocial factors may substantially influence pain perception in patients with chronic pain and thus may influence the surgical outcome.
- **Option B:** This pain scale is most commonly used. A person rates their pain on a scale of 0 to 10 or 0 to 5. Zero means “no pain,” and 5 or 10 means “the worst possible pain.” These pain intensity levels may be assessed upon initial treatment, or periodically after treatment.
- **Option D:** The McGill pain questionnaire, or MPQ, is one of the most widely used multidimensional pain scales in the world. In the MPQ, the evaluation of pain is divided into three categories: sensory, affective, and evaluative. The questionnaire is self-reported and allows individuals to describe the quality and intensity of their pain by using 78 adjectives in 20 different sections.

27. 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.

28. When delivering the baby's head the nurse supports the mother's perineum to prevent a tear. This technique is called

A. Marmet's technique

B. Ritgen's technique

C. Duncan maneuver

D. Schultze maneuver

Correct Answer: B. Ritgen's technique

Ritgen's technique is done to prevent the perineal tear. This is done by the nurse by supporting the perineum with a sterile towel and pushing the perineum downward with one hand while the other hand is supporting the baby's head as it goes out of the vaginal opening.

- **Option A:** Developed by a mother who needed to express her milk over a long period of time for medical reasons, the Marmet technique mimics the actions of a breastfeeding baby and is the most recommended method of expressing breastmilk by hand.
- **Option C:** Duncan's mechanism is the expulsion of the placenta with the presentation of the maternal rough side first, rather than the usual fetal side of the placenta.
- **Option D:** There are 2 mechanisms possible during the delivery of the placenta. If the shiny portion comes out first, it is called the Schultze mechanism; while if the meaty portion comes out first, it is called the Duncan mechanism.

29. A nurse prepares to administer a 3ml injection via intramuscular injection to a 5-year-old child. The nurse selects which site to administer the medication?

A. Rectus femoris

B. Deltoid

C. Ventrogluteal

D. Vastus lateralis

Correct Answer: C. Ventrogluteal

Intramuscular injection sites are chosen based on the child's age and muscle development. The ventrogluteal muscle is the ideal choice to administer 0.5ml-3ml amount of injection on a 3-12-year-old child. A study found that the muscle in the ventrogluteal site is adequately developed, even in infants between the ages of 1-12 months and that in particular, in children 12-36 months old, the ventrogluteal site is even thicker than the anterolateral.

- **Option A:** This site only allows 2ml of injection. Do not use the inner thigh or back of the thigh. Divide the thigh into thirds; the injection site is in the middle third section. To inject into the thigh,

the needle size must be at least 16 mm long but may need to be longer depending on the child's size.

- **Option B:** This allows 0.5-1ml amount of injection. This is the top, upper part of the arm. Only inject on this site if the health-care provider instructs that this is an appropriate injection site for the child. To inject into the deltoid, the needle size must be 16 mm.
- **Option D:** For most infants, the vastus lateralis muscle in the anterolateral thigh is the recommended site for injection because it provides a large muscle mass. The deltoid muscle is preferred for children aged 3 through 18 years. The vastus lateralis muscle in the anterolateral thigh is an alternative site if the deltoid sites cannot be used.

30. Which statement made by the client with facial burns who has been prescribed to wear a facial mask pressure garment indicates a correct understanding of the purpose of this treatment?

A. "After this treatment, my ears will not stick out."

B. "The mask will help protect my skin from sun damage."

C. "Using this mask will prevent scars from being permanent."

D. "My facial scars should be less severe with the use of this mask."

Correct Answer: D. "My facial scars should be less severe with the use of this mask."

The purpose of wearing the pressure garment over burn injuries for up to 1 year is to prevent hypertrophic scarring and contractures from forming. Hypertrophic burn scars pose a challenge for burn survivors and providers. In many cases, they can severely limit a burn survivor's level of function, including work and recreational activities.

- **Option A:** The pressure garment will not change the angle of the ear attachment to the head. By applying pressure to the burn or scar, the face mask keeps the skin soft and flat during the scar-forming phase of healing. It helps the face heal with the least amount of scarring. The transparent face mask is worn 18-20 hours every day for 8 months to 2 years until the skin graft is mature.
- **Option B:** Although the mask does provide protection of sensitive newly healed skin and grafts from sun exposure, this is not the purpose of wearing the mask. A widespread modality of prevention and treatment of hypertrophic scarring is the utilization of pressure garment therapy (PGT).
- **Option C:** Scars will still be present. This treatment modality continues to be a clinically accepted practice. It is the most common therapy used for the treatment and prevention of abnormal scars after burn injury particularly in North America, Europe, and Scandinavia where it is considered routine practice and regarded as the preferred conservative management with reported thinning and better pliability ranging from 60% to 85%.

31. You are caring for four clients who are receiving IV infusions of normal saline. Which client is at the highest risk for bloodstream infections?

A. A client who has nontunneled central line in the left internal jugular vein.

B. A client with an implanted port in the right subclavian vein.

C. A client with a peripherally inserted central catheter (PICC) line in the right upper arm.

D. A client who has a midline IV catheter in the left antecubital fossa.

Correct Answer: A. A client who has a non-tunneled central line in the left internal jugular vein.

Several factors increase the risk for infection for this client: central lines are associated with a higher infection risk, the skin of the neck and chest having a high number of microorganisms, and the line is tunneled. The concern that physicians have with non-tunneled catheters is that they have a short duration of use. Because of this, they should be removed as soon as possible in order to prevent complications like infections or thrombosis.

- **Option B:** Implanted ports are placed under the skin and so are less likely to be associated with catheter infection than a non-tunneled central IV line. For long-term use, implanted ports are preferred as they have better cosmetic results and less infection as compared to non-tunneled catheters and tunneled catheters.
- **Option C:** PICC lines can remain inserted for weeks to months. They are indicated in situations where the patient needs an intravenous delivery of antibiotics or chemotherapy drugs while preserving the integrity of the peripheral vascular system.
- **Option D:** Peripherally inserted IV lines such as midline catheters and PICC lines are associated with a lower incidence of infection. A peripherally inserted central catheter or a PICC line is a thin, flexible tube that is inserted into an upper arm vein and then guided into the superior vena cava on the right side of the heart.

32. During a visit to a community, the nurse will recommend routine screening for diabetes when the person has one or more of seven risk criteria. Which of the following persons that the nurse comes in contact with most needs to be screened for diabetes based on the seven risk criteria?

A. A client with an HDL cholesterol level of 40 mg/dl and a triglyceride level of 300 mg/dl

B. A woman who is at 90% of standard body weight after delivering an eight-pound baby

C. A middle-aged Caucasian male

D. An older client who is hypotensive

Correct Answer: A. A client with an HDL cholesterol level of 40 mg/dl and a triglyceride level of 300 mg/dl

The seven risk criteria include: greater than 120% of standard bodyweight, certain races but not including Caucasian, delivery of a baby weighing more than 9 pounds or a diagnosis of gestational diabetes, hypertensive, HDL greater than 35 mg/dl or triglyceride level greater than 250 or a triglyceride level of greater than 250 mg/dl, and, lastly, impaired glucose tolerance or impaired fasting glucose on prior testing.

- **Option B:** The American Diabetes Association (ADA) recommends opportunistic screening of adults of any age with a body mass index ?25 kg/m2 and additional risk factors, which include physical inactivity, a first-degree relative with diabetes, high-risk race/ethnicity, etc.
- **Option C:** Prevalence of diagnosed diabetes was highest among American Indians/Alaska Natives (14.7%), people of Hispanic origin (12.5%), and non-Hispanic blacks (11.7%), followed by non-Hispanic Asians (9.2%) and non-Hispanic whites (7.5%).
- **Option D:** Postural hypotension occurs when something interrupts this natural response, such as dehydration, which is a common problem for people with less well-controlled diabetes as a result of frequent urination.

33. Your patient has complaints of severe right-sided flank pain, nausea, vomiting, and restlessness. He appears slightly pale and is diaphoretic. Vital signs are BP 140/90 mmHg, Pulse 118 beats/min., respirations 33 breaths/minute, and temperature, 98.0F. Which subjective data supports a diagnosis of renal calculi?

A. Pain radiating to the right upper quadrant.

B. History of mild flu symptoms last week.

C. Dark-colored coffee-ground emesis.

D. Dark, scanty urine output.

Correct Answer: A. Pain radiating to the right upper quadrant.

Patients with renal calculi will most likely report acute, severe flank pain that will often radiate to the abdomen and especially to the groin, testicle, and labia. It is often sharp and severe in nature. It may also be colicky. The pain is often associated with nausea and vomiting which is due to the embryological origins of the urogenital tract.

- **Option B:** If infected, patients may also present with fever, chills, or other systemic signs of infection. This condition, called pyonephrosis or obstructive pyelonephritis, is potentially severe and life-threatening, requiring emergency decompression surgery.
- **Option C:** Patients often present with hematuria as 85% of patients demonstrate at least microscopic hematuria on urinalysis. The physical exam may reveal costovertebral tenderness and hypoactive bowel sounds. The testis and pubic area may also be tender to touch. Fever is rarely seen in renal colic but the presence of fever, pyuria, and leukocytosis may be indicative of pyelonephritis.
- **Option D:** Patients with renal calculi commonly have blood in the urine caused by the stone's passage through the urinary tract. The urine appears dark, tests positive for blood, and is typically scant. Renal calculi are a common cause of blood in the urine (hematuria) and pain in the abdomen, flank, or groin. They occur in one in 11 people at some time in their lifetimes with men affected 2 to 1 over women.

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

A. The space remains filled with air only.

B. The surgeon fills the space with a gel.

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

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

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

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

- **Option A:** Air can't be left in space. Air in the chest cavity is called a pneumothorax, and it may cause the lungs to collapse.

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

35. The client arrives in the emergency department after a motor vehicle accident. Nursing assessment findings include BP 80/34, pulse rate 120, and respirations 20. Which is the client's most appropriate priority nursing diagnosis?

A. Alteration in cerebral tissue perfusion

B. Fluid volume deficit

C. Ineffective airway clearance

D. Alteration in sensory perception

Correct Answer: B. Fluid volume deficit

The vital signs indicate hypovolemic shock. Monitor and document vital signs especially BP and HR. Decrease in circulating blood volume can cause hypotension and tachycardia. Alteration in HR is a compensatory mechanism to maintain cardiac output. Usually, the pulse is weak and may be irregular if electrolyte imbalance also occurs. Hypotension is evident in hypovolemia.

- **Option A:** The oxygen and nutrients subsequently diffuse from the blood into the interstitial fluid and then into the body cells. Insufficient arterial blood flow causes decreased nutrition and oxygenation at the cellular level. Decreased tissue perfusion can be temporary, with few or minimal consequences to the health of the patient, or it can be more acute or protracted, with potentially destructive effects on the patient.
- **Option C:** Ineffective airway clearance is the inability to clear secretions or obstructions from the respiratory tract to maintain a clear airway. Appropriate management is vital to prevent potentially life-threatening hypovolemic shock. Older patients are more likely to develop fluid imbalances. The goals of management are to treat the underlying disorder and return the extracellular fluid compartment to normal, to restore fluid volume, and to correct any electrolyte imbalances.
- **Option D:** Alterations sensory / perceptual (visual, auditory, kinesthetic, gustatory, tactile, olfactory) State in which an individual experiences a change in the amount or type of stimuli received, accompanied decrease towards exaggeration or disorder of the response to such stimuli.