

Kevin's Review - 100 NCLEX Practice Questions

1. Before Jacob undergoes arthroscopy, the nurse reviews the assessment findings for contraindications for this procedure. Which finding is a contraindication?

- A. Joint pain
- B. Joint deformity
- C. Joint flexion of less than 50%
- D. Joint stiffness

Correct Answer: C. Joint flexion of less than 50%

Arthroscopy is contraindicated in clients with joint flexion of less than 50% because of technical problems in inserting the instrument into the joint to see it clearly. Other contraindications for this procedure include skin and wound infections.

- **Option A:** Joint pain may be an indication, not a contraindication, for arthroscopy.
- **Option B:** Joint deformity is not a contraindication for the procedure. Joint surgery can improve the appearance of deformed joints, especially in the hands.
- **Option D:** Joint stiffness is not a contraindication for this procedure. Arthroscopic surgery usually results in less joint pain and stiffness.

2. A camp nurse is applying sunscreen to a group of children enrolled in swim classes. Chemical sunscreens are most effective when applied:

- A. Just before sun exposure
- B. 5 minutes before sun exposure
- C. 15 minutes before sun exposure
- D. 30 minutes before sun exposure

Correct Answer: D. 30 minutes before sun exposure

- **Option D:** Sunscreens of at least an SPF of 15 should be applied 20–30 minutes before going into the sun to allow the product to bind into the skin.
- **Options A, B, and C:** These do not allow sufficient time for sun protection.

3. The nurse is providing dietary teaching for a client with elevated cholesterol levels. Which cooking oil is not suggested for the client on a low-cholesterol diet?

- A. Canola oil
- B. Coconut oil
- C. Safflower oil
- D. Sunflower oil

Correct Answer: B. Coconut oil

- Option B: Coconut oil is high in saturated fat and is not appropriate for the client on a low-cholesterol diet.
- Options A, C, and D: The following oils are good for the client with elevated cholesterol levels.

4. Which of the following complications of an abdominal aortic repair is indicated by detection of a hematoma in the perineal area?

- A. Hernia
- B. Stage 1 pressure ulcer
- C. Retroperitoneal rupture at the repair site
- D. Rapid expansion of the aneurysm

Correct Answer: C. Retroperitoneal rupture at the repair site

Blood collects in the retroperitoneal space and is exhibited as a hematoma in the perineal area. This rupture is most commonly caused by leakage at the repair site.

- **Option A:** A hernia doesn't cause vascular disturbances. A hernia is the abnormal exit of tissue or an organ, such as the bowel, through the wall of the cavity in which it normally resides. Hernias come in a number of types. Most commonly they involve the abdomen, specifically the groin. Groin hernias are most commonly of the inguinal type but may also be femoral.
- **Option B:** A pressure ulcer does not cause significant bleeding, and does not cause a hematoma. Bedsores — also called pressure ulcers and decubitus ulcers — are injuries to the skin and underlying tissue resulting from prolonged pressure on the skin. Bedsores most often develop on skin that covers bony areas of the body, such as the heels, ankles, hips, and tailbone.
- **Option D:** Because no bleeding occurs with the rapid expansion of the aneurysm, a hematoma won't form. The fast growth of abdominal aortic aneurysm (AAA) diameter is claimed to be an indication for aneurysm repair. If fast growth is a valid indication for operative repair then an episode of measured fast growth should be followed by sustained rapid expansion and a high risk of rupture.

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

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

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

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

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

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

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

Correct Answer: C. Promote carbon dioxide elimination.

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

- **Option A:** Cushing triad is a clinical syndrome consisting of hypertension, bradycardia and irregular respiration and is a sign of impending brain herniation. This occurs when the ICP is too high the elevation of blood pressure is a reflex mechanism to maintain CPP. High blood pressure causes reflex bradycardia and brain stem compromise affecting respiration.
- **Option B:** Preventing respiratory alkalosis and lowering arterial pH may bring about acidosis, an undesirable condition in this case. Clinical suspicion for intracranial hypertension should be raised if a patient presents with the following signs and symptoms: headaches, vomiting, and altered mental status varying from drowsiness to coma.
- **Option D:** It isn't necessary to maintain a PaO₂ as high as 80 mm Hg; 60 mm Hg will adequately oxygenate most clients. Cerebral autoregulation is the process by which cerebral blood flow varies to maintain adequate cerebral perfusion. When the MAP is elevated, vasoconstriction occurs to limit blood flow and maintain cerebral perfusion. However, if a patient is hypotensive, cerebral vasculature can dilate to increase blood flow and maintain CPP.

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

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

F. Pressing on the nasal-lacrimal canal.

Correct Answers: A, E, F

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

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

8. A nurse notes that a client with sinus rhythm has a premature ventricular contraction that falls on the T wave of the preceding beat. The client's rhythm suddenly changes to one with no P waves or definable QRS complexes. Instead, there are coarse wavy lines of varying amplitude. The nurse assesses this rhythm to be:

- A. Ventricular tachycardia
- B. Ventricular fibrillation
- C. Atrial fibrillation
- D. Asystole

Correct Answer: B. Ventricular fibrillation

Ventricular fibrillation is characterized by irregular, chaotic undulations of varying amplitudes. Ventricular fibrillation has no measurable rate and no visible P waves or QRS complexes and results from electrical chaos in the ventricles. VF is a WCT caused by irregular electrical activity and characterized by a ventricular rate of usually greater than 300 with discrete QRS complexes on the electrocardiogram (ECG). QRS morphology in VF varies in shape, amplitude, and duration with a prominent irregular rhythm.

- **Option A:** Ventricular tachycardia is characterized by the absence of P waves, wide QRS complexes (usually greater than 0.14 second), and a rate between 100 and 250 impulses per minute. The rhythm is usually regular. Ventricular tachycardia is characterized as a wide complex (QRS duration greater than 120 milliseconds) tachyarrhythmia at a heart rate greater than 100 beats per minute. It is classified by duration as non-sustained or sustained. Non-sustained ventricular tachycardia is defined as more than 3 beats of ventricular origin at a rate greater than 100 beats per minute that lasts less than 30 seconds in duration.
- **Option C:** Atrial fibrillation is characterized by a loss of P waves; an undulating, wavy baseline; QRS duration that is often within normal limits; and an irregular ventricular rate, which can range from 60 to 100 beats per minute (when controlled with medications) to 100 to 160 beats per minute (when uncontrolled). Atrial fibrillation is the most common type of cardiac arrhythmia. It is the leading cardiac cause of stroke. Risk factors for atrial fibrillation include advanced age, high blood pressure, underlying heart and lung disease, congenital heart disease, and increased alcohol consumption.
- **Option D:** Asystole, colloquially referred to as flatline, represents the cessation of electrical and mechanical activity of the heart. Asystole typically occurs as a deterioration of the initial non-perfusing ventricular rhythms: ventricular fibrillation (V-fib) or pulseless ventricular tachycardia (V-tach). Additionally, pulseless electrical activity (PEA) can cease and become asystole.

9. During a prenatal examination, the nurse draws blood from a young Rh-negative client and explain that an indirect Coombs test will be performed to predict whether the fetus is at risk for:

- A. Acute hemolytic disease
- B. Respiratory distress syndrome
- C. Protein metabolic deficiency
- D. Physiologic hyperbilirubinemia

Correct Answer: A. Acute hemolytic disease.

When an Rh-negative mother carries an Rh-positive fetus there is a risk for maternal antibodies against Rh-positive blood; antibodies cross the placenta and destroy the fetal RBCs.

- **Option B:** Respiratory distress syndrome, also known as hyaline membrane disease, occurs almost exclusively in premature infants. In premature infants, respiratory distress syndrome develops because of impaired surfactant synthesis and secretion leading to atelectasis, ventilation-perfusion (V/Q) inequality, and hypoventilation with resultant hypoxemia and hypercarbia.
- **Option C:** Infants with protein metabolism disorders are unable to metabolize certain amino acids and require specialized formulas without the offending amino acid, allowing the baby to receive essential nutrients for growth.
- **Option D:** Physiologic jaundice is also referred to as non-pathologic jaundice, and it is mild and transient. This occurs because of differences in the metabolism of bilirubin in the neonatal period leading to an increased bilirubin load.

10. Amikacin (Amikin) is given to a client with E-coli infection. The nurse advises the client to report which of the following symptoms immediately?

- A. Muscle pain
- B. Constipation
- C. Fatigue
- D. Hearing loss

Correct Answer: D. Hearing loss

- **Option D:** Amikacin is an aminoglycoside. Side effects of this medication include ototoxicity (Hearing loss), confusion, disorientation, gastrointestinal irritation, palpitations, blood pressure changes, and nephrotoxicity.
- **Options A, B, and C:** Muscle pain, constipation, and fatigue are not related to the medication.

11. A 28-year-old male patient presents to the emergency department with a sudden onset of severe headache, neck stiffness, and confusion. His roommate mentions that the patient had been complaining of flu-like symptoms for the past few days. Given the patient's presentation and the information provided, the nurse suspects acute meningitis. As the nurse continues the assessment, the patient, though disoriented, tries to describe some of the symptoms he has been experiencing. Based on the suspicion of acute meningitis, which of the following symptoms reported by the patient would the nurse consider not expected for this condition?

- A. A sudden increase in appetite over the past 24 hours
- B. Episodes of vomiting, especially in the morning
- C. High fever and chills
- D. Sensitivity to light, preferring to stay in a dark room
- E. Muscle aches and joint pain
- F. Ringing in the ears

Correct Answer: A. A sudden increase in appetite over the past 24 hours

Loss of appetite would be expected, not increase in appetite. Most cases of meningitis are caused by an infectious agent that has colonized or established a localized infection elsewhere in the host. Potential sites of colonization or infection include the skin, the nasopharynx, the respiratory tract, the gastrointestinal (GI) tract, and the genitourinary tract. The organism invades the submucosa at these sites by circumventing host defenses (eg, physical barriers, local immunity, and phagocytes or macrophages).

Vomiting occurs in 35% of patients with meningitis. The brain is naturally protected from the body's immune system by the barrier that the meninges create between the bloodstream and the brain. Normally, this protection is an advantage because the barrier prevents the immune system from attacking the brain. However, in meningitis, the blood-brain barrier can become disrupted; once bacteria or other organisms have found their way to the brain, they are somewhat isolated from the immune system and can spread.

The classic triad of meningitis consists of fever, nuchal rigidity, and altered mental status. When the body tries to fight the infection, the problem can worsen; blood vessels become leaky and allow fluid, WBCs, and other infection-fighting particles to enter the meninges and brain. This process, in turn,

causes brain swelling and can eventually result in decreasing blood flow to parts of the brain, worsening the symptoms of infection.

Other symptoms include photalgia (photophobia): discomfort when the patient looks into bright lights. Depending on the severity of bacterial meningitis, the inflammatory process may remain confined to the subarachnoid space. In less severe forms, the pial barrier is not penetrated, and the underlying parenchyma remains intact. However, in more severe forms of bacterial meningitis, the pial barrier is breached, and the underlying parenchyma is invaded by the inflammatory process. Thus, bacterial meningitis may lead to widespread cortical destruction, particularly when left untreated.

12. Which intervention do you plan to include with a patient who has renal calculi?

- A. Maintain bed rest
- B. Increase dietary purines
- C. Restrict fluids
- D. Strain all urine

Correct Answer: D. Strain all urine

All urine should be strained through gauze or a urine strainer to catch stones that are passed. The stones are then analyzed for composition. Strain all urine. Document any stones expelled and sent to the laboratory for analysis. Retrieval of calculi allows identification of the type of stone and influences choice of therapy.

- **Option A:** Ambulation may help the movement of the stone down the urinary tract. Encourage the patient to walk if possible to facilitate spontaneous passage. Determine patient's normal voiding pattern and note variations. Calculi may cause nerve excitability, which causes sensations of an urgent need to void. Usually, frequency and urgency increase as calculus nears ureterovesical junctions.
- **Option B:** Offer fruit juices, particularly cranberry juice to help acidify urine. Irrigate with acid or alkaline solutions as indicated. Changing urine pH may help dissolve stones and prevent further stone formation.
- **Option C:** Encourage fluid to help flush the stones out. Increased hydration flushes bacteria, blood, and debris and may facilitate stone passage. Investigate reports of bladder fullness; palpate for suprapubic distention. Note decreased urine output, presence of periorbital and dependent edema. Urinary retention may develop, causing tissue distension (bladder, kidney), and potentiates the risk of infection, renal failure.

13. When giving narcotic analgesics to a mother in labor, the special consideration to follow is:

- A. The progress of labor is well established reaching the transitional stage.
- B. Uterine contraction is progressing well, and delivery of the baby is imminent.
- C. Cervical dilatation has already reached at least 8 cm. and the station is at least (+)2.
- D. Uterine contractions are strong and the baby will not be delivered yet within the next 3 hours.

Correct Answer: D. Uterine contractions are strong and the baby will not be delivered yet within the next 3 hours.

Narcotic analgesics must be given when uterine contractions are already well established so that it will not cause stoppage of the contraction thus protracting labor. Also, it should be given when delivery of a fetus is imminent or too close because the fetus may suffer respiratory depression as an effect of the drug that can pass through the placental barrier.

- **Option A:** Opioid analgesia offers a systemic alternative to regional analgesia procedures. Since the early 1940s, the most commonly used systemic analgesic has been meperidine (pethidine). As with all opioids, meperidine crosses the placenta and presents a dose-dependent risk of neonatal respiratory depression and reduction of fetal heart frequency. The mother may suffer from nausea, vomiting, respiratory depression, dysphoria, and delayed gastric emptying.
- **Option B:** The effects of systemic opioids in labor are predominantly sedative rather than analgesic; other opioids, when used in labor, are usually administered as patient-controlled analgesia.
- **Option C:** Visceral labor pain occurs during the early first stage and the second stage of childbirth. With each uterine contraction, pressure is transmitted to the cervix causing stretching and distension and activating excitatory nociceptive afferents. These afferents innervate the endocervix and lower segment from T10 – L1.

14. Which nursing statement is a good example of the therapeutic communication technique of focusing?

- A. "Describe one of the best things that happened to you this week."
- B. "I'm having a difficult time understanding what you mean."
- C. "Your counseling session is in 30 minutes. I'll stay with you until then."
- D. "You mentioned your relationship with your father. Let's discuss that further."

Correct Answer: D. "You mentioned your relationship with your father. Let's discuss that further."

This is an example of the therapeutic communication technique of focusing. Focusing takes notice of a single idea or even a single word and works especially well with a client who is moving rapidly from one thought to another. Sometimes during a conversation, patients mention something particularly important. When this happens, nurses can focus on their statement, prompting patients to discuss it further. Patients don't always have an objective perspective on what is relevant to their case; as impartial observers, nurses can more easily pick out the topics to focus on.

- **Option A:** Therapeutic communication is often most effective when patients direct the flow of conversation and decide what to talk about. To that end, giving patients a broad opening such as "What's on your mind today?" or "What would you like to talk about?" can be a good way to allow patients an opportunity to discuss what's on their mind.
- **Option B:** Similar to active listening, asking patients for clarification when they say something confusing or ambiguous is important. Saying something like "I'm not sure I understand. Can you explain it to me?" helps nurses ensure they understand what's actually being said and can help patients process their ideas more thoroughly.
- **Option C:** Hospital stays can be lonely, stressful times; when nurses offer their time, it shows they value patients and that someone is willing to give them time and attention. Offering to stay for lunch, watch a TV show, or simply sit with patients for a while can help boost their mood.

15. The human cells specifically affected by HIV are:

- A. Gonocytes
- B. CD4+ T lymphocytes
- C. Islet cells
- D. Red blood cells

Correct Answer: B. CD4+ T lymphocytes

HIV directly infects CD4+ T lymphocytes. HIV is a retrovirus that attacks CD4 T lymphocytes eventually leading to the death of these cells and severe immunodeficiency of the individual who has acquired the infection. Once the CD4 count becomes too low, host immune defenses cannot fend off opportunistic infections and malignancies.

- **Option A:** The presence of a CD4 count of less than 200 or an AIDS-defining illness in a patient with HIV is the criteria for a diagnosis of AIDS. Treatment of AIDS is focused on opportunistic illness or condition and decreasing the HIV viral load and monitoring for an increase in CD4 cells through antiretroviral therapy (ART.)
- **Option C:** HIV is a retrovirus, with two subtypes: HIV-1 and HIV-2.[2] The HIV-1 subtype is the most common and responsible for AIDS throughout most of the world. HIV-2 is found primarily in Western Africa and is much less common.
- **Option D:** The number of CD4 cells within the affected individual will fall by approximately 50-80 cells/uL per year without the initiation of ART, and the decline may be even faster once the count falls below 200 cells/uL.

16. When assessing the newborn's heart rate, which of the following ranges would be considered normal if the newborn were sleeping?

- A. 80 beats per minute
- B. 100 beats per minute
- C. 120 beats per minute
- D. 140 beats per minute

Correct Answer: B. 100 beats per minute

The normal heart rate for a newborn that is sleeping is approximately 100 beats per minute. If the newborn was awake, the normal heart rate would range from 120 to 160 beats per minute.

- **Option A:** 80 beats per minute is below the normal range of a newborn's heart rate. Neonatal bradycardia is defined as a decrease in heart by 30 bpm from baseline. Regarding neonatal resuscitation, bradycardia is concerning when the heart rate is less than 100 bpm. The primary cause of neonatal bradycardia is hypoxia. Other causes of bradycardia in this age group include hypothermia, hypovolemia, and pneumothorax, head injury, and medications.
- **Option C:** Newborns 0 to 1 month old has a normal range of 70 to 190 beats per minute
- **Option D:** 140 beats per minute is still within the normal range of a newborn's heart rate.

17. Clients should be taught that repeatedly ignoring the sensation of needing to defecate could result in which of the following?

- A. Constipation
- B. Diarrhea
- C. Incontinence
- D. Hemorrhoids

Correct Answer: A. Constipation

Habitually ignoring the urge to defecate can lead to constipation through loss of the natural urge and the accumulation of feces. Functional constipation is a prevalent condition in childhood, about 29.6% worldwide. In the United States, it represents 3% to 5% of pediatric visits and a considerable annual health care cost. Most children do not have an etiological factor, and one third continue to have problems beyond adolescence.

- **Option B:** Diarrhea will not result-if anything, there is increased opportunity for water reabsorption because the stool remains in the colon, leading to firmer stool. Diarrhea is described as three or more loose or watery stools a day. Infection commonly causes acute diarrhea. Noninfectious etiologies are more common as the duration of diarrhea becomes chronic. Treatment and management are based on the duration and specific etiology.
- **Option C:** Ignoring the urge shows a strong voluntary sphincter, not a weak one that could result in incontinence. Fecal incontinence (FI) is the involuntary passage of fecal matter through anus or inability to control the discharge of bowel contents. Its severity can range from an involuntary passage of flatus to complete evacuation of fecal matter. Depending on the severity of the disease, it has a significant impact on a patient's quality of life
- **Option D:** Hemorrhoids would only occur only if severe drying out of the stool occurs, and thus repeated need to strain to pass stool. Hemorrhoids are rich in vascular supply and have a tendency to engorge and prolapse. Symptoms can vary from mild itching, bleeding to severe pain. Unfortunately, because of the location, many patients never seek treatment for fear of embarrassment.

18. Which of the following statements best describes hyperemesis gravidarum?

- A. Severe anemia leading to an electrolyte, metabolic, and nutritional imbalances in the absence of other medical problems.
- B. Severe nausea and vomiting leading to an electrolyte, metabolic, and nutritional imbalances in the absence of other medical problems
- C. Loss of appetite and continuous vomiting that commonly results in dehydration and ultimately decreasing maternal nutrients.
- D. Severe nausea and diarrhea that can cause gastrointestinal irritation and possibly internal bleeding.

Correct Answer: B. Severe nausea and vomiting leading to the electrolyte, metabolic, and nutritional imbalances in the absence of other medical problems.

The description of hyperemesis gravidarum includes severe nausea and vomiting, leading to the electrolyte, metabolic, and nutritional imbalances in the absence of other medical problems.

- **Option A:** Hyperemesis is not a form of anemia. The exact cause of nausea and vomiting during pregnancy is not known. However, it is believed to be caused by a rapidly rising blood level of a hormone called human chorionic gonadotropin (HCG). HCG is released by the placenta. Mild morning sickness is common. Hyperemesis gravidarum is less common and more severe.
- **Option C:** Loss of appetite may occur secondary to nausea and vomiting of hyperemesis, which, if it continues, can deplete the nutrients transported to the fetus. Women with hyperemesis gravidarum have extreme nausea and vomiting during pregnancy. It can cause a weight loss of more than 5% of body weight. The condition can happen in any pregnancy, but is a little more likely if the woman is pregnant with twins (or more babies), or if she has a hydatidiform mole. Women are at higher risk for hyperemesis if they have had the problem in previous pregnancies or are prone to motion sickness.
- **Option D:** Diarrhea does not occur with hyperemesis. Constipation is one of the symptoms. Increase fluids during times of the day when there is a feeling of nausea. Seltzer, ginger ale, or other sparkling drinks may help. The woman can also try using low-dose ginger supplements or acupressure wrist bands to ease symptoms.

19. What is the primary function of ligaments in the musculoskeletal system?

- A. Connecting muscles to bones
 - B. Connecting bones to bones
 - C. Facilitating muscle contractions
 - D. Providing cushioning between bones
- **Option A:** Connecting muscles to bones is the function of tendons.
 - **Option C:** Facilitating muscle contractions is the function of muscle fibers.
 - **Option D:** Providing cushioning between bones is the function of cartilage.

20. A nurse is administering IV furosemide to a patient admitted with congestive heart failure. After the infusion, which of the following symptoms is not expected?

- A. Increased urinary output
- B. Decreased edema
- C. Decreased pain
- D. Decreased blood pressure

Correct Answer: C. Decreased pain

Furosemide, a loop diuretic, does not alter pain.

- **Option A:** Furosemide acts on the kidneys to increase urinary output.
- **Option B:** Fluid may move from the periphery, decreasing edema.
- **Option D:** Fluid load is reduced, lowering blood pressure.

21. A nurse discusses job possibilities with a client with schizoid personality disorder. Which suggestion by the nurse would be helpful?

- A. "You can work in a family restaurant part-time on the weekend and holidays."
- B. "Maybe your friend could get you that customer service job where you work only on the weekends."
- C. "Your idea of applying for the position of filing and organizing records is worth pursuing."
- D. "Being an introvert limits the employment opportunities you can pursue."

Correct Answer: C. "Your idea of applying for the position of filing and organizing records is worth pursuing."

Clients with schizoid personality disorder prefer solitary activities, such as filing, to working with others. Working as a cashier or in customer service would involve interacting with many people. They're often described as eccentric or bizarre. They may be suspicious and paranoid of others. They come across as "stiff" and don't seem to fit in anywhere they go.

- **Option A:** Individuals with schizotypal personality disorders experience extreme discomfort during interpersonal interactions. Unlike in social anxiety disorder, where an individual is likely to grow more comfortable with time, individuals with schizotypal personality disorder remain uncomfortable even when they're interacting with the same people in the same environment over and over again.
- **Option B:** The disorder also involves distorted thinking and eccentric behavior—which tends to push people away and create even more isolation. Sometimes, individuals with schizotypal personality disorder are superstitious or preoccupied with paranormal phenomena that are outside what would be expected in their culture.
- **Option D:** They might also appear constricted and show little emotion during their interactions. They may have unusual mannerisms, such as an unkempt manner of dress. They may occasionally express sadness over their lack of close relationships but their behavior suggests they have little desire for close connections. They often interact with people when they have to but prefer to keep to themselves.

22. The rationale for inserting a French catheter every hour for the client with epidural anesthesia is:

- A. The bladder fills more rapidly because of the medication used for the epidural.
- B. Her level of consciousness is such that she is in a trancelike state.
- C. The sensation of the bladder filling is diminished or lost.
- D. She is embarrassed to ask for the bedpan that frequently.

Correct Answer: C. The sensation of the bladder filling is diminished or lost.

Epidural anesthesia decreases the urge to void and sensation of a full bladder. A full bladder will decrease the progression of labor. Under the influence of epidural analgesia, patients may not feel the urge to urinate, which can result in urinary retention and bladder overdistension. Overfilling of the bladder can stretch and damage the detrusor muscle. For example, the use of lumbar epidural analgesia for labor and delivery has frequently been implicated as a causative factor for postpartum urinary retention. This is supported by the fact that these patients demonstrate a difficulty voiding.

- **Option A:** The medication used for the epidural does not have a diuretic effect. Spinal and epidural opioid administration influence the function of the lower urinary tract by direct spinal action on the

sacral nociceptive neurons and autonomic fibres. Long-acting local anesthetics administered intrathecally rapidly block the micturition reflex. Detrusor contraction is restored approximately 7-8 hours after spinal injection of bupivacaine. For this reason, bladder catheterization is a common practice in patients with spinal or epidural anesthesia.

- **Option B:** An epidural does not create a trancelike state for the client. Acute urinary retention is one of the most common complications after surgery and anesthesia. It can occur in patients of both sexes and all age groups and after all types of surgical procedures. It is linked to several factors including increased intravenous fluids, postoperative pain, and type of anesthesia. Micturition depends on coordinated actions between the detrusor muscle and the external urethral sphincter.
- **Option D:** Embarrassed or not, the client would still need to have a French catheter inserted to manage her voiding. The risk of infection with a single catheterization is 1-2% and can rise by 3 to 7 % for every additional day with an indwelling catheter. Traumatic or prolonged catheterization may lead to urethritis and to urethral strictures. There has yet been no consensus for appropriate catheterization strategy during regional anesthesia.

23. The nurse is caring for a client with a T5 complete spinal cord injury. Upon assessment, the nurse notes flushed skin, diaphoresis above the T5, and blood pressure of 162/96. The client reports a severe, pounding headache. Which of the following nursing interventions would be appropriate for this client? Select all that apply.

- A. Elevate the HOB to 90 degrees
- B. Loosen constrictive clothing
- C. Use a fan to reduce diaphoresis
- D. Assess for bladder distention and bowel impaction
- E. Administer antihypertensive medication
- F. Place the client in a supine position with legs elevated

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

The client has signs and symptoms of autonomic dysreflexia. The potentially life-threatening condition is caused by an uninhibited response from the sympathetic nervous system resulting from a lack of control over the autonomic nervous system.

- **Option A:** The nurse should immediately elevate the HOB to 90 degrees and place extremities dependently to decrease venous return to the heart and increase venous return from the brain.
- **Option B:** Because tactile stimuli can trigger autonomic dysreflexia, any constrictive clothing should be loosened. Removal of constrictive clothing and vascular support also promotes venous pooling to help lower BP.
- **Option C:** A fan shouldn't be used because cold drafts may trigger autonomic dysreflexia. Identify and monitor precipitating risk factors like temperature extremes or drafts.
- **Option D:** The nurse should also assess for distended bladder and bowel impaction, which may trigger autonomic dysreflexia, and correct any problems. Removing noxious stimuli usually terminates episodes and may prevent more serious autonomic dysreflexia.
- **Option E:** Elevated blood pressure is the most life-threatening complication of autonomic dysreflexia because it can cause stroke, MI, or seizures. If removing the triggering event doesn't

reduce the client's blood pressure, IV antihypertensives should be administered.

- **Option F:** Elevate head of bed to a 45-degree angle or place patient in sitting position. This lowers BP to prevent intracranial hemorrhage, seizures, or even death. Placing tetraplegic in a sitting position automatically lowers BP.

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

- A. Complaints of numbness and tingling.
- B. Facial weakness and difficulty speaking.
- C. Rapid heart rate of 102 beats per minute.
- D. Shallow respirations and decreased breath sounds.

Correct Answer: D. Shallow respirations and decreased breath sounds

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

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

25. The fetal heartbeat should be monitored every 15 minutes during the 2nd stage of labor. The characteristic of a normal fetal heart rate is:

- A. The heart rate will decelerate during a contraction and then go back to its pre-contraction rate after the contraction.
- B. The heart rate will accelerate during a contraction and remain slightly above the pre-contraction rate at the end of the contraction.
- C. The rate should not be affected by the uterine contraction.
- D. The heart rate will decelerate at the middle of a contraction and remain so for about a minute after the contraction.

Correct Answer: A. The heart rate will decelerate during a contraction and then go back to its pre-contraction rate after the contraction.

The normal fetal heart rate will decelerate (go down) slightly during a contraction because of the compression on the fetal head. However, the heart rate should go back to the pre-contraction rate as soon as the contraction is over since the compression on the head has also ended.

- **Option B:** The presence of accelerations is considered a reassuring sign of fetal well-being. An acceleration pattern preceding or following a variable deceleration (the “shoulders” of the deceleration) is seen only when the fetus is not hypoxic.
- **Option C:** Uterine contractions can compress the blood vessels in the uterus, potentially interfering in the transfer of oxygen to the placenta and the baby. Contractions can also compress the umbilical cord, which may affect the flow of oxygenated blood to the baby.
- **Option D:** Early decelerations are caused by fetal head compression during uterine contraction, resulting in vagal stimulation and slowing of the heart rate. This type of deceleration has a uniform shape, with a slow onset that coincides with the start of the contraction and a slow return to the baseline that coincides with the end of the contraction.

26. Which of the following signs and symptoms will most likely make the nurse suspect that the patient has hydatidiform mole?

- A. Slight bleeding
- B. Passage of clear vesicular mass per vagina
- C. Absence of fetal heartbeat
- D. Enlargement of the uterus

Correct Answer: B. Passage of clear vesicular mass per vagina

Hydatidiform mole (H-mole) is characterized by the degeneration of the chorionic villi wherein the villi becomes vesicle-like. These vesicle-like substances when expelled per vagina and is a definite sign that the woman has H-mole.

- **Option A:** Implantation bleeding is a common cause of spotting early on in pregnancy. Implantation bleeding happens when the fertilized egg attaches to the uterine lining. This can trigger a few days of light bleeding or spotting.
- **Option C:** If the crown-rump length (CRL) is > 7 mm and there is no embryonic cardiac activity, this is defined as a missed miscarriage, or. If the mean gestational sac diameter is > 25 mm and there is no yolk sac or embryonic pole, this is defined as an empty sac miscarriage.
- **Option D:** Two of the most common causes of an enlarged uterus are uterine fibroids and adenomyosis. Uterine fibroids are commonly noncancerous tumors of the muscular wall of the uterus, affecting as many as eight in 10 women by the age of 50. Fibroids more commonly affect women over age 30.

27. An expected cardiopulmonary adaptation experienced by most pregnant women is:

- A. Tachycardia
- B. Dyspnea at rest

- C. Progression of dependent edema
- D. Shortness of breath on exertion

Correct Answer: D. Shortness of breath on exertion.

This is an expected cardiopulmonary adaptation during pregnancy; it is caused by an increased ventricular rate and elevated diaphragm.

- **Option A:** In pregnancy, the cardiac output increases 30 to 60%, with the majority of the increase occurring during the first trimester. The maximum output is reached between 20 and 24 weeks and is maintained until delivery. Initially, the increase in cardiac output is due to an increase in stroke volume. As the stroke volume decreases towards the end of the third trimester, an increase in heart rate acts to maintain the increased cardiac output.
- **Option B:** During pregnancy, the diaphragm elevates, resulting in a 5% decrease in total lung capacity (TLC). However, the tidal volume (TV) increases by 30 to 40%, thereby decreasing the expiratory reserve volume by 20%. Minute ventilation is similarly increased by 30 to 40%, owing to the fact that TV becomes increased while a constant respiratory rate is maintained.
- **Option C:** During pregnancy, the extra fluid in the body and the pressure from the growing uterus can cause swelling (edema) in the ankles and feet. The swelling tends to get worse as a woman's due date nears, particularly near the end of the day and during hotter weather.

28. Which of these statements, when made by the nurse, is most effective when communicating with a 4-year-old?

- A. "Tell me where you hurt."
- B. "Other children like having their blood pressure taken."
- C. "This will be like having a little stick in your arm."
- D. "Anything you tell me is confidential."

Correct Answer: A. "Tell me where you hurt."

Four-year-olds are egocentric and interested in having the focus on themselves. As kids gain language skills, they also develop their conversational abilities. Kids 4 to 5 years old can follow more complex directions and enthusiastically talk about things they do. They can make up stories, listen attentively to stories, and retell stories.

- **Option B:** They will not be interested in what it feels like to other children. By the time your child is in their later years of primary school, their language and ability to convey ideas has improved a lot. They even alter their speech to suit the circumstances. They may speak more formally in front of a teacher than they do with family and friends.
- **Option C:** Preschoolers are concrete thinkers and would literally interpret any analogies so they are not helpful in explaining procedures. Concrete thinking is a kind of reasoning that relies heavily on what we observe in the physical world around us. It's sometimes called literal thinking. Young children think concretely, but as they mature, they usually develop the ability to think more abstractly.
- **Option D:** Assurance of confidential communication is most appropriate for the adolescent. In addition, confidentiality is not maintained if the child plans to harm themselves, harm someone else, or discloses abuse.

29. While caring for a client who has sustained an MI, the nurse notes eight PVCs in one minute on the cardiac monitor. The client is receiving an IV infusion of D5W and oxygen at 2 L/minute. The nurse's first course of action should be to:

- A. Increase the IV infusion rate.
- B. Notify the physician promptly.
- C. Increase the oxygen concentration.
- D. Administer a prescribed analgesic.

Correct Answer: B. Notify the physician promptly.

PVCs are often a precursor of life-threatening dysrhythmias, including ventricular tachycardia and ventricular fibrillation. An occasional PVC is not considered dangerous, but if PVCs occur at a rate greater than 5 or 6 per minute in the post-MI client, the physician should be notified immediately. More than 6 PVCs per minute is considered serious and usually calls for decreasing ventricular irritability by administering medications such as lidocaine.

- **Option A:** Increasing the IV infusion rate would not decrease the number of PVCs. Those experiencing frequent PVCs or symptomatic PVCs should be evaluated to identify the etiology. In many cases, excess intake of stimulants and/or lower levels of potassium and magnesium is the cause of the PVCs. These patients can be easily managed via minimization of stimulants and/or repletion of electrolytes.
- **Option C:** Increasing the oxygen concentration should not be the nurse's first course of action; rather, the nurse should notify the physician promptly. In the emergency room, hypoxic patients need to be provided with oxygen, the electrolyte imbalance should be corrected and drug toxicity should be ruled out. At the same time, an acute MI must be ruled out.
- **Option D:** Administering a prescribed analgesic would not decrease ventricular irritability. The medication classes used to treat frequent and/or symptomatic PVCs include antiarrhythmics, beta-blockers, and calcium channel blockers. Commonly used antiarrhythmics include amiodarone and flecainide.

30. Which of the following blood vessel layers may be damaged in a client with an aneurysm?

- A. Externa
- B. Interna
- C. Media
- D. Interna and Media

Correct Answer: C. Media

The factor common to all types of aneurysms is a damaged media. The media has more smooth muscle and less elastic fibers, so it's more capable of vasoconstriction and vasodilation.

- **Option A:** The tunica externa generally has no damage in an aneurysm. The outermost layer, tunica externa, comprises connective tissue providing protection for the vessel.

- **Option B:** The intima generally not damaged in an aneurysm. The tunica intima (New Latin “inner coat”), or intima for short, is the innermost tunica (layer) of an artery or vein. It is made up of one layer of endothelial cells and is supported by an internal elastic lamina. The endothelial cells are in direct contact with the blood flow.
- **Option D:** The media is the most damaged among the blood vessel la

31. A 23-year-old patient in the 27th week of pregnancy has been hospitalized on complete bed rest for 6 days. She experiences sudden shortness of breath, accompanied by chest pain. Which of the following conditions is the most likely cause of her symptoms?

- A. Myocardial infarction due to a history of atherosclerosis.
- B. Pulmonary embolism due to deep vein thrombosis (DVT).
- C. Anxiety attacks due to worries about her baby's health.
- D. Congestive heart failure due to fluid overload.

Correct Answer: B. Pulmonary embolism due to deep vein thrombosis (DVT).

In a hospitalized patient on prolonged bed rest, the most likely cause of sudden onset shortness of breath and chest pain is pulmonary embolism. Pregnancy and prolonged inactivity both increase the risk of clot formation in the deep veins of the legs. These clots can then break loose and travel to the lungs.

- **Option A:** Atherosclerosis is the disease primarily responsible for most acute coronary syndrome (ACS) cases. Approximately 90% of myocardial infarctions (MIs) result from an acute thrombus that obstructs an atherosclerotic coronary artery. Plaque rupture and erosion are considered to be the major triggers for coronary thrombosis. Following plaque erosion or rupture, platelet activation and aggregation, coagulation pathway activation, and endothelial vasoconstriction occur, leading to coronary thrombosis and occlusion.
- **Option C:** There is no reason to suspect an anxiety disorder in this patient. Though anxiety is a possible cause of her symptoms, the seriousness of pulmonary embolism demands that it be considered first.
- **Option D:** According to 2017 American Heart Association (AHA) data, heart failure affects an estimated 6.5 million Americans aged 20 years and older. [31] With improved survival of patients with acute myocardial infarction and with a population that continues to age, heart failure will continue to increase in prominence as a major health problem in the United States.

32. Patients with esophageal varices would reveal the following assessment:

- A. Increased blood pressure
- B. Increased heart rate
- C. Decreased respiratory rate
- D. Increased urinary output

Correct Answer: B. Increased heart rate

Tachycardia is an early sign of compensation for patients with esophageal varices. Since the portal venous system has no valves, resistance at any level between the splanchnic vessels and the right side of the heart results in retrograde flow and elevated pressure. The collaterals slowly enlarge and connect the systemic circulation to the portal venous system.

- **Option A:** Esophageal varices are a direct result of high blood pressure in the portal vein. This condition is called portal hypertension. It causes blood to build up in nearby blood vessels, including those in your esophagus. Veins begin to dilate and swell as a result of increased blood flow.
- **Option C:** The respiratory rate is not decreased in esophageal varices. Esophageal varices are the major complication of portal hypertension. It is detected in about 50% of cirrhosis patients, and approximately 5–15% of cirrhosis patients show newly formed varices or worsening of varices each year.
- **Option D:** Effective resuscitation, accurate diagnosis, and early treatment are key to reducing mortality in variceal bleeding. The aims are not only to stop bleeding as soon as possible but also to prevent early re-bleeding. Early rebleeding, as with peptic ulcer disease, is significantly associated with worsening mortality.

33. Which of the following symptoms might a client with right-sided heart failure exhibit?

- A. Adequate urine output
- B. Polyuria
- C. Oliguria
- D. Polydipsia

Correct Answer: C. Oliguria

Inadequate deactivation of aldosterone by the liver after right-sided heart failure leads to fluid retention, which causes oliguria. Oliguria is a late finding in heart failure, and it is found in patients with markedly reduced cardiac output from severely reduced LV function. Nocturia may occur relatively early in the course of heart failure. Recumbency reduces the deficit in cardiac output in relation to oxygen demand, renal vasoconstriction diminishes, and urine formation increases.

- **Option A:** When the body thinks it needs more fluid in its blood vessels, it releases specific chemicals (renin, angiotensin, and aldosterone) that cause the blood vessels to constrict. In addition, these hormones cause the body to retain more sodium and water. This adds fluid to the circulatory system. This fluid becomes part of the blood circulating throughout the system.
- **Option B:** With heart failure, the heart doesn't pump as well as it should. So the body doesn't get enough blood and oxygen. When this occurs, the body believes that there isn't enough fluid inside its vessels. The body's hormone and nervous systems try to make up for this by increasing blood pressure, holding on to salt (sodium) and water in the body, and increasing heart rate. These responses are the body's attempt to compensate for the poor blood circulation and backup of blood.
- **Option D:** Primary polydipsia (PP) is a condition where there is excess consumption of fluids leading to polyuria with diluted urine and, ultimately, hyponatremia. Polyuria can be defined as urine production greater than 40-50 ml/kg in a twenty-four-hour period.

34. Amrinone (Inocor) is used for short term therapy for CHF and acts by which of the following mechanisms?

- A. Increasing stroke volume and heart rate.
- B. Slowing ventricular rate and increasing cardiac output.
- C. Vasodilating and increasing peripheral vascular resistance.
- D. Increasing cardiac output and enhancing renal perfusion.

Correct Answer: A. Increasing stroke volume and heart rate.

The action of amrinone (Inocor) is to increase stroke volume, ejection fraction, and heart rate. Inamrinone, also known as amrinone, is a drug that increases cardiac output through its positive inotropic and vasodilatory effects. It is prescribed for the short-term management of congestive heart failure, relieving symptoms of the condition such as fatigue, weakness, edema, dyspnea orthopnea, and paroxysmal nocturnal dyspnea.

- **Option B:** Lanoxin, not amrinone, slows ventricular rate, and increases cardiac output. It increases the force of contraction of the heart by reversibly inhibiting the activity of the myocardial Na-K ATPase pump, an enzyme that controls the movement of ions into the heart. Digoxin induces an increase in intracellular sodium that will drive an influx of calcium in the heart and cause an increase in contractility. Cardiac output increases with a subsequent decrease in ventricular filling pressures.
- **Option C:** The vasodilator effect of amrinone decreases peripheral vascular resistance. Indeed, an increase in cyclic adenosine phosphate within the vascular smooth muscle causes a reduction in the intracellular calcium concentration; subsequently, relaxing the vascular smooth muscle. This systemic vasodilation results in a decrease in total peripheral and pulmonary vascular resistance, reducing both preload and afterload.
- **Option D:** Any increase in cardiac output will enhance renal perfusion; this is not just specific to amrinone. The subsequent relative ease in which blood can flow around the vascular network in combination with a stronger heartbeat increases stroke volume and, potentially, cardiac output. It is these vasodilatory and positive inotropic effects that are central in reversing the potentially deadly symptoms of heart failure.

35. When teaching parents about childhood depression Nurse Victoria should say?

- A. It may appear acting out behavior.
- B. Does not respond to conventional treatment.
- C. Is short on duration & resolves easily.
- D. Looks almost identical to adult depression.

Correct Answer: A. It may appear acting out behavior

Children have difficulty verbally expressing their feelings, acting out behavior, such as temper tantrums, may indicate underlying depression. Early medical studies focused on “masked” depression, where a child’s depressed mood was evidenced by acting out or angry behavior. While this does occur, particularly in younger children, many children display sadness or low mood similar to adults who are depressed. The primary symptoms of depression revolve around sadness, a feeling of hopelessness, and mood changes.

- **Option B:** Treatment options for children with depression are similar to those for adults, including psychotherapy (counseling) and medication. The child's doctor may suggest psychotherapy first, and consider antidepressant medicine as an additional option if there is no significant improvement. The best studies to date indicate that a combination of psychotherapy and medication is most effective at treating depression.
- **Option C:** If the symptoms of depression in a child have lasted for at least two weeks, they should schedule a visit with their doctor to make sure there are no physical reasons for the symptoms and to make sure that the child receives proper treatment. A consultation with a mental health care professional who specializes in children is also recommended. Keep in mind that the pediatrician may ask to speak with the child alone.
- **Option D:** Although some children may continue to function reasonably well in structured environments, most kids with significant depression will suffer a noticeable change in social activities, loss of interest in school and poor academic performance, or a change in appearance. Children may also begin using drugs or alcohol, especially if they are over age 12.

36. Which of the following nursing interventions are written correctly?

- A. Apply continuous passive motion machines during the day.
- B. Perform neurovascular checks.
- C. Elevate head of bed 30 degrees before meals.
- D. Change dressing once a shift.

Correct Answer: C. Elevate head of bed 30 degrees before meals.

It is specific in what to do and when. Nursing interventions should be specific and clearly stated, beginning with an action verb indicating what the nurse is expected to do. Action verb starts the intervention and must be precise.

- **Option A:** This intervention does not specify the location of the application. Nursing interventions are the actual treatments and actions that are performed to help the patient to reach the goals that are set for them. The nurse uses his or her knowledge, experience, and critical-thinking skills to decide which interventions will help the patient the most.
- **Option B:** It was not stated in this intervention when the neurovascular check should be performed. Nurses must use their knowledge, experience, resources, research of evidence-based practice, the counsel of others, and critical-thinking skills to decide which nursing interventions would best benefit a specific patient.
- **Option D:** Qualifiers of how, when, where, time, frequency, and amount provide the content of the planned activity. For example: "Educate parents on how to take temperature and notify of any changes," or "Assess urine for color, amount, odor, and turbidity."

37. 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.

38. A male client is recovering from an ileostomy that was performed to treat inflammatory bowel disease. During discharge teaching, the nurse should stress the importance of:

- A. Increasing fluid intake to prevent dehydration.
- B. Wearing an appliance pouch only at bedtime.
- C. Consuming a low-protein, high-fiber diet.
- D. Taking only enteric-coated medications.

Correct Answer: A. Increasing fluid intake to prevent dehydration.

Because stool forms in the large intestine, an ileostomy typically drain liquid waste. To avoid fluid loss through ileostomy drainage, the nurse should instruct the client to increase fluid intake. Monitor I&O.; Note number, character, and amount of stools; estimate insensible fluid losses (diaphoresis). Measure urine specific gravity; observe for oliguria. Provides information about overall fluid balance, renal function, and bowel disease control, as well as guidelines for fluid replacement.

- **Option B:** The nurse should teach the client to wear a collection appliance at all times because ileostomy drainage is incontinent. Resume or advance diet as indicated (clear liquids progressing to bland, low residue; then high-protein, high-calorie, caffeine-free, non-spicy, and low-fiber as indicated).
- **Option C:** The nurse should teach the client to avoid high-fiber foods because they may irritate the intestines. Avoid or limit foods that might cause or exacerbate abdominal cramping, flatulence (milk products, foods high in fiber or fat, alcohol, caffeinated beverages, chocolate, peppermint, tomatoes, orange juice).
- **Option D:** The nurse should teach the client to avoid enteric-coated medications because the body can't absorb them after an ileostomy. Allows the intestinal tract to readjust to the digestive process. Protein is necessary for tissue healing integrity. Low bulk decreases peristaltic response to meals.

39. At the time Cherrie Ann found out that the symptoms of diabetes were caused by high levels of blood glucose, she decided to break the habit of eating carbohydrates. With this, the nurse would be aware that the client might develop which of the following complications?

- A. Retinopathy
- B. Atherosclerosis
- C. Glycosuria
- D. Acidosis

Correct Answer: D. Acidosis

When a client's carbohydrate consumption is inadequate, ketones are produced from the breakdown of fat. These ketones lower the pH of the blood, potentially causing acidosis that can lead to a diabetic coma. Diabetic ketoacidosis (DKA) is characterized by hyperglycemia, acidosis, and ketonemia. It is a life-threatening complication of diabetes and typically seen in patients with type-1 diabetes mellitus, though it may also occur in patients with type-2 diabetes mellitus.

- **Option A:** Diabetic retinopathy affects people with diagnosed or undiagnosed diabetes mellitus. The propensity of developing diabetic retinopathy is directly proportional to the age of the patient and duration of diabetes as well as with poor glycemic control and fluctuating blood pressure level.
- **Option B:** Atherosclerosis mainly develops through the continuous process of arterial wall lesions due to lipid retention by trapping in the intima by a matrix such as proteoglycans resulting in a modification which, in turn, aggravates chronic inflammation at vulnerable sites in the arteries and plays an important role at all phases of the atherogenic progression.
- **Option C:** Glycosuria is a term that defines the presence of reducing sugars in the urine, such as glucose, galactose, lactose, fructose, etc. It can happen due to elevated plasma glucose as in diabetes mellitus or when the ability of the tubule to absorb glucose is impaired, e.g. Fanconi syndrome with impairment in the absorption of phosphate, amino acids, or isolated glycosuria as an inherited disorder termed Familial Renal glucosuria.

40. Nurse Jeff is performing a skin assessment on a client with a facial lesion. It appears as a well-defined, red, scaling, thickened bump. This type of skin lesion refers to?

- A. Kaposi's Sarcoma
- B. Melanoma
- C. Squamous cell carcinoma
- D. Basal cell carcinoma

Correct Answer: C. Squamous cell carcinoma

A squamous cell carcinoma is characterized by a well-defined, red, scaling, thickened bump on the sun-exposed skin such as the face, ears, neck, lips, and backs of the hands.

- **Option A:** A client with Kaposi's sarcoma has reddish to purplish non-blanching, slightly raised, or nodular lesions of the skin or on the mucosal surfaces.

- **Option B:** A client with melanoma has smooth, dark brown or black colored smooth lesions that become irregular as it grows.
- **Option D:** A client with basal cell carcinoma has red patches, shiny bumps, scars, or growth with slightly raised, rolled edges.

41. Which client is at greater risk for respiratory depression while receiving opioids for analgesia?

- A. An elderly chronic pain client with a hip fracture.
- B. A client with heroin addiction and back pain.
- C. A young female client with advanced multiple myeloma.
- D. A child with an arm fracture and cystic fibrosis.

Correct Answer: D. A child with an arm fracture and cystic fibrosis.

At greatest risk are elderly clients, opiate naïve clients, and those with underlying pulmonary disease. The child has two of the three risk factors. Many complications can occur with multiple different opioids, such as non-cardiogenic pulmonary edema, while many of the complications are unique to the opioid used as well as the route of administration.

- **Option A:** Pain in the elderly population is especially difficult given the myriad of physiological, pharmacological, and psychological aspects of caring for geriatric patient. Opiates are the mainstay of pain treatment throughout all age groups but special attention must be paid to the efficacy and side effects of these powerful drugs when prescribing to a population with impaired metabolism, excretion, and physical reserve.
- **Option B:** Prescription opioids and heroin are chemically similar and can produce a similar high. In some places, heroin is cheaper and easier to get than prescription opioids, so some people switch to using heroin instead. More recent data suggest that heroin is frequently the first opioid people use. In a study of those entering treatment for opioid use disorder, approximately one-third reported heroin as the first opioid they used regularly to get high.
- **Option C:** Bone pain is one of the most common presentations of multiple myeloma and nearly all patients have skeletal involvement in the course of the disease. Consequently, many patients require narcotics for symptom management at the time of diagnosis but the long-term impact of MM treatment on pain control remains uncertain.

42. When preparing a woman who is 2 days postpartum for discharge, recommendations for which of the following contraceptive methods would be avoided?

- A. Diaphragm
- B. Female condom
- C. Oral contraceptives
- D. Rhythm method

Correct Answer: A. Diaphragm

The diaphragm must be fitted individually to ensure effectiveness. Because of the changes to the reproductive structures during pregnancy and following delivery, the diaphragm must be refitted, usually at the 6 weeks' examination following childbirth or after a weight loss of 15 lbs or more. In addition, for maximum effectiveness, the spermicidal jelly should be placed in the dome and around the rim. However, the spermicidal jelly should not be inserted into the vagina until involution is completed at approximately 6 weeks.

- **Option B:** Use of a female condom protects the reproductive system from the introduction of semen or spermicides into the vagina and may be used after childbirth.
- **Option C:** Oral contraceptives may be started within the first postpartum week to ensure suppression of ovulation.
- **Option D:** For the couple who has determined the female's fertile period, using the rhythm method, avoidance of intercourse during this period, is safe and effective.

43. In a pediatric primary care clinic, Nurse Patterson is preparing to conduct a physical examination on a 2-year-old toddler, Amelia. The toddler presents with a mild cough and runny nose for two days, as reported by her mother. Amelia, being at an age characterized by curiosity yet also anxiety towards unfamiliar situations, appears uneasy about the impending examination. Nurse Patterson, having a vast experience in pediatric nursing, recognizes the importance of employing a child-friendly, systematic approach during the examination to ensure accuracy while minimizing distress for both Amelia and her anxious mother. Utilizing her in-depth understanding of child development and behavior, alongside her clinical skills, Nurse Patterson plans the sequence of the examination to foster a cooperative environment and to glean accurate assessment data. Among the following methods, which would be the most appropriate strategy for Nurse Patterson to employ while performing the physical examination on toddler Amelia?

- A. Proceeding from head to toe
- B. Moving distally to proximally
- C. Transitioning from abdomen to toes, then to head
- D. Progressing from least to most intrusive
- E. Utilizing a play-oriented approach throughout the examination
- F. Adhering to a system-specific approach, based on the presenting symptoms
- G. Involving the parent in distracting the toddler during more intrusive examinations

Correct Answer: D. Progressing from least to most intrusive

Progressing from least to most intrusive is a recognized child-friendly approach. Starting with less invasive examination steps like listening to the heart or lungs can help the toddler acclimate to the examination process before moving onto more invasive steps, making the examination less stressful and more efficient.

- **Option A:** A head-to-toe approach is systematic but might not be child-friendly. Toddlers may feel threatened or fearful, especially when starting with the head which can be perceived as a more invasive part of the examination.

- **Option B:** Moving distally to proximally is not a traditional or recognized method of examination and does not specifically cater to the comfort or the anxiety levels of a toddler.
- **Option C:** Transitioning from abdomen to toes, then to head is not a traditional or recognized method of examination and does not specifically cater to the comfort or the anxiety levels of a toddler.
- **Option E:** Utilizing a play-oriented approach can be beneficial but it's not a method of examination. It's more of a technique to keep the child engaged and less anxious during the examination process.
- **Option F:** A system-specific approach, while efficient, does not specifically cater to the comfort or the anxiety levels of a toddler. This approach is more symptom or condition focused and may not be child-friendly.
- **Option G:** Involving the parent can be beneficial for distraction and comfort but again, it's not a method of examination. It's more of a technique to ensure a smoother examination process.

44. The nurse who volunteers at a senior citizens center is planning activities for the members who attend the center. Which activity would best promote health and maintenance for these senior citizens?

- A. Gardening every day for an hour
- B. Aerobics 3 times a week for 30 minutes
- C. Sculpting twice a week for 60 minutes
- D. Walking 3 to 5 times a week for 30 minutes

Correct Answer: D. Walking three (3) to five (5) times a week for 30 minutes.

Exercise and activity are essential for health promotion and maintenance in older adults and to achieve an optimal level of functioning. About half of the physical deterioration of the older client is caused by disuse rather than by the aging process or disease. One of the best exercises for an older adult is walking, progressing to a 30 minutes session three (3) to five (5) times each week. Swimming and dancing are also beneficial.

- **Option A:** Gardening is a muscle-strengthening activity that can be done by an older adult for at least 2 or more days a week. Everyday gardening is not advisable. Some physical, mental, and age-related conditions must be considered when older people work in the garden, but they should not prevent people from enjoying the garden.
- **Option B:** Aerobic activity considered a vigorous-intensity activity should be done for 75 minutes a week in 10 minutes duration. Aerobics or cardio exercises pretty much fit everyone but the frequency and intensity of each exercise should be considered before sticking to a particular regime.
- **Option C:** Body sculpting for 60 minutes is an activity that is too vigorous for an adult. These popular workouts are well-suited for younger adults looking to bulk up or shed weight in a hurry, but they may put an unhealthy strain on older adults with joint pain, atrophied muscles, posture problems, or issues with balance.

45. Following a generalized seizure, the nurse can expect the client to:

- A. Be unable to move the extremities

- B. Be drowsy and prone to sleep
- C. Remember events before the seizure
- D. Have a drop in blood pressure

Correct Answer: B. Be drowsy and prone to sleep

- Option B: When a generalized seizure ends, the client is experiencing the postictal phase, which is the recovery period following the seizure. The client in this phase shows symptoms of drowsiness, confusion, and sleepiness.
- Option A: The client is able to move the extremities.
- Option C: The client cannot remember events before the seizure.
- Option D: Blood pressure is elevated.

46. A client is receiving a first-time blood transfusion of packed RBC. How long should the nurse stay and monitor the client to ensure a transfusion reaction will not happen?

- A. 15 minutes
- B. 30 minutes
- C. 45 minutes
- D. 60 minutes

Correct Answer: A. 15 minutes

Usually, a transfusion reaction occurs within 15 minutes of a transfusion. For each unit of blood transfused, monitor the patient before starting the transfusion (baseline observation); 15 minutes after starting the transfusion; at least every hour during transfusion; and carry out a final set of observations 15 minutes after each unit has been transfused.

- **Option B:** Staying with the patient for 30 minutes might be too long. Acute reactions may occur in 1% to 2% of transfused patients. Rapid recognition and management of the reaction may save the patient's life. Once immediate action has been taken, careful and repeated clinical assessment is essential to identify and treat the patient's problems.
- **Option C:** 45 minutes of staying and monitoring the patient for transfusion reactions is too long. All suspected acute transfusion reactions should be reported immediately to the blood transfusion center and to the doctor responsible for the patient. With the exception of urticarial allergic reactions and febrile non-hemolytic reactions, all are potentially fatal and require urgent treatment.
- **Option D:** Most transfusion reactions occur during the first 15 minutes of transfusion. 60 minutes is too long. However, transfusion-transmitted infections are the serious delayed complications of transfusion. Since a delayed transfusion reaction may occur days, weeks, or months after the transfusion, the association with the transfusion may not be recognized.

47. A nurse would question an order to irrigate the ear canal in which of the following circumstances?

- A. Ear pain

- B. Hearing loss
- C. Otitis externa
- D. Perforated tympanic membrane

Correct Answer: D. Perforated tympanic membrane.

Irrigation of the ear canal is contraindicated with perforation of the tympanic membrane because the solution entering the inner ear may cause dizziness, nausea, vomiting, and infection. Tympanic membrane perforation is when there is a tear in the tympanic membrane leading to a connection between the external auditory canal and the middle ear. This can be caused by infection, trauma, or rapid changes in pressure leading to sudden otalgia, otorrhea, tinnitus, and vertigo.

- **Option A:** Otalgia is ear pain and breaks down into two categories of primary otalgia and secondary otalgia. Primary otalgia is pain coming directly from the ear where secondary otalgia is referred to pain from somewhere outside the ear. Infections cause most primary otalgia and are treated with antibiotics, while mechanical ones receive treatment with decongestants, nasal steroids, or myringotomy.
- **Option B:** Management of conductive hearing loss focuses on the treatment of the underlying disease. Conservative methods such as removal of the foreign body, micro-suction of the cerumen, or discharge in the ear canal are necessary if the ear canal is blocked. Conservative treatment of sensorineural hearing involves the use of assistive listening devices and amplification. Hearing aids are devices designed to improve audition up to 40 to 60 dB with good results.
- **Option C:** The mainstay of uncomplicated otitis externa treatment usually involves topical antibiotic drops and pain control. Pain can be intense and severe; therefore, it should be managed appropriately. Acetaminophen or nonsteroidal anti-inflammatory drugs have been proven to be adequate for mild to moderate pain.

48. Tiffany is diagnosed with increased intracranial pressure (ICP); which of the following if stated by her parents would indicate a need for Nurse Charlie to reexplain the purpose for elevating the head of the bed at a 10 to 20-degree angle?

- A. Help alleviate headache
- B. Increase intrathoracic pressure
- C. Maintain neutral position
- D. Reduce intra-abdominal pressure.

Correct Answer: B. Increase intrathoracic pressure

Head elevation decreases, not increases, intrathoracic pressure. In most patients with intracranial hypertension, head and trunk elevation up to 30 degrees is useful in helping to decrease ICP, providing that a safe CPP of at least 70 mmHg or even 80 mmHg is maintained.

- **Option A:** Elevating the head of the bed in a child with increased ICP helps to alleviate headache which may contribute to increased ICP. Therapeutic positioning of the head (different degrees of head-of-bed elevation (HBE)) has been proposed as a low-cost and simple way of preventing secondary brain injury in these people.
- **Option C:** The position of the backrest of the bed is a simple and cheap intervention. This is important as most brain injury happens in low- and middle-income countries with relatively

undeveloped health systems and few resources to deal with brain injury.

- **Option D:** Elevated intra-abdominal pressure (IAP) occurs in many clinical settings, including sepsis, severe acute pancreatitis, acute decompensated heart failure, hepatorenal syndrome, resuscitation with large volume, mechanical ventilation with high intrathoracic pressure, major burns, and acidosis.

49. Clients with chronic illnesses are more likely to get pneumonia when which of the following situations is present?

- A. Dehydration
- B. Group living
- C. Malnutrition
- D. Severe periodontal disease

Correct Answer: B. Group living

Clients with chronic illnesses generally have poor immune systems. Often, residing in group living situations increases the chance of disease transmission. Pneumonia is a fairly prevalent disease and carries a heavy burden in all populations. A study carried out by the US Centers for Disease Control and Prevention (CDC) aimed at estimating its burden in North America found that CAP accounted for the eighth leading cause of mortality in the United States and the seventh leading cause of mortality in Canada after adjusting for various gender and age differences.

- **Option A:** Pneumonia can also cause dehydration from fever and decreased thirst and appetite, which may require treatment with extra fluids intravenously. Potential benefits of fluids are replacing fluid lost because of fever or rapid breathing, treating dehydration, and reducing the viscosity of mucus.
- **Option C:** Pneumonia is common in malnourished children and is frequently associated with fatal outcomes, especially in children younger than 24 months of age. Studies consistently reported a two- to threefold greater risk of mortality in cases with pneumonia associated with malnutrition. Therefore, pneumonia and malnutrition are two of the biggest killers in childhood diseases.
- **Option D:** Various pathogenic bacteria have been found in patients with deep periodontal pockets. The association between periodontal disease and pneumonia may be due to colonization by pathogenic bacteria in the periodontal pocket, as inhalation of a pathogen is considered a risk factor for pneumonia.

50. A client is admitted with a diagnosis of schizotypal personality disorder. Which signs would this client exhibit during social situations?

- A. Aggressive behavior
- B. Paranoid thoughts
- C. Emotional affect
- D. Independence needs

Correct Answer: B. Paranoid thoughts

Clients with schizotypal personality disorder experience excessive social anxiety that can lead to paranoid thoughts. Isolation is a salient feature in the history of a schizoid patient. Rarely do they have

close relationships, and often they will choose to participate in occupations that are solitary in nature. They infrequently experience strong emotion, express little to no desire for sexual activity with a partner, and tend to be ambivalent to criticism or praise.

- **Option A:** Aggressive behavior is uncommon, although these clients may experience agitation with anxiety. Schizotypal can be differentiated with its more pronounced “magical” and eccentric thought processes. Paranoid, avoidant, and obsessive-compulsive personality disorders are also often on the clinician’s list of differential diagnoses. Unlike the aloofness observed in schizoid, however, patients with paranoid personality disorder are often overly resentful and can demonstrate explosive anger.
- **Option C:** Their behavior is emotionally cold with a flattened affect, regardless of the situation. Individuals afflicted with personality disorders tend to externalize their problems, viewing others as the etiology of any conflict. If, by chance, a person with schizoid personality disorder presents in the clinical setting, DSM V has outlined specific diagnostic criteria for the clinician to use for evaluation. A pronounced blunted affect will immediately be observable on presentation. The patient will be disengaged, aloof, and will most likely diminish symptomatology.
- **Option D:** These clients demonstrate a reduced capacity for close or dependent relationships. It is unlikely that a person with a schizoid personality disorder will present in the clinical setting of his own volition unless prompted by family, or as a result of a co-occurring disorder, such as depression. As with most personality disorders, the behavior is in synchrony with the ego, and thus the patient does not acknowledge the need to adapt his or her behavior.

51. A client with head trauma develops a urine output of 300 ml/hr, dry skin, and dry mucous membranes. Which of the following nursing interventions is the most appropriate to perform initially?

- A. Evaluate urine specific gravity.
- B. Anticipate treatment for renal failure.
- C. Provide emollients to the skin to prevent breakdown.
- D. Slow down the IV fluids and notify the physician.

Correct Answer: A. Evaluate urine specific gravity.

Urine output of 300 ml/hr may indicate diabetes insipidus, which is a failure of the pituitary to produce the antidiuretic hormone. This may occur with increased intracranial pressure and head trauma; the nurse evaluates for low urine specific gravity, increased serum osmolality, and dehydration.

- **Option B:** There’s no evidence that the client is experiencing renal failure. The most common findings in patients with diabetes insipidus are polydipsia, polyuria, and nocturia. Additional symptoms in patients with diabetes insipidus may include weakness, lethargy, fatigue, and myalgias.
- **Option C:** Providing emollients to prevent skin breakdown is important, but doesn’t need to be performed immediately. Central diabetes insipidus is diagnosed when there is evidence of plasma hyperosmolality (greater than 300 mosm/l), urine hyperosmolality (less than 300 mosm/l or urine/plasma osmolality less than 1), with polyuria (urinary volume greater than 4 mL/kg/hr to 5 mL/kg/hr for two consecutive hours after surgery).
- **Option D:** Slowing the rate of IV fluid would contribute to dehydration when polyuria is present. In cases of nephrogenic diabetes insipidus, water deprivation suboptimally increases urine osmolality. DDAVP minimally increases urine osmolality in partial nephrogenic diabetes insipidus, with no

increase in urine osmolality in complete nephrogenic diabetes insipidus.

52. Which of the following assessment findings would help confirm a diagnosis of asthma in a client suspected of having the disorder?

- A. Circumoral cyanosis
- B. Increased forced expiratory volume
- C. Inspiratory and expiratory wheezing
- D. Normal breath sounds

Correct Answer: C. Inspiratory and expiratory wheezing

Inspiratory and expiratory wheezes are typical findings in asthma. Patients will show some respiratory distress, often sitting forward to splint open their airways. On auscultation, a bilateral, expiratory wheeze will be heard. In life-threatening asthma, the chest may be silent, as air cannot enter or leave the lungs, and there may be signs of systemic hypoxia.

- **Option A:** Circumoral cyanosis may be present in extreme cases of respiratory distress. In many cases, circumoral cyanosis is considered a type of acrocyanosis. Acrocyanosis happens when small blood vessels shrink in response to cold. In older children, circumoral cyanosis often appears when they go outside in cold weather or get out of a warm bath. This type of cyanosis should go away once they warm up. If it doesn't, seek emergency medical treatment. Circumoral cyanosis that doesn't go away with heat could be a sign of a serious lung or heart problem, such as cyanotic congenital heart disease.
- **Option B:** The nurse would expect the client to have a decreased forced expiratory volume because asthma is an obstructive pulmonary disease. Peak expiratory flow measurement is common today and allows one to document response to therapy. A limitation of this test is that it is effort-dependent. Spirometry should be done before treatment to determine the severity of the disorder. A reduced ratio of FEV1 to FVC is indicative of airway obstruction, which is reversible with treatment.
- **Option D:** Breath sounds will be "tight" sounding or markedly decreased; they won't be normal. Asthma is a condition mediated by inflammation. The resulting physiologic response in the airways is bronchoconstriction and airway edema. This response is triggered by an irritant, allergen, or infection. As air moves through these narrowed airways, the primary lung sound is high-pitched wheeze.

53. Following a unilateral adrenalectomy, nurse Betty would assess for hyperkalemia shown by which of the following?

- A. Muscle weakness
- B. Tremors
- C. Diaphoresis
- D. Constipation

Correct Answer: A. Muscle weakness

Muscle weakness, bradycardia, nausea, diarrhea, and paresthesia of the hands, feet, tongue, and face are findings associated with hyperkalemia, which is transient and occurs from transient

hypoaldosteronism when the adenoma is removed. Tremors, diaphoresis, and constipation aren't seen in hyperkalemia.

- **Option B:** Medications that may predispose to the development of hyperkalemia include digoxin, potassium-sparing diuretics, non-steroidal anti-inflammatory drugs, ace-inhibitors, or recent intravenous (IV) potassium, total parenteral nutrition, potassium penicillin, or succinylcholine. Patients may complain of weakness, fatigue, palpitations, or syncope.
- **Option C:** Most patients are relatively asymptomatic with mild and even moderate hyperkalemia. Elevated potassium is often discovered in screening labs done in patients with nonspecific complaints or those with suspected electrolyte abnormalities due to infection, dehydration, or hypoperfusion.
- **Option D:** Physical exam findings may include hypertension and edema in the setting of renal disease. There may also be signs of hypoperfusion. Muscle tenderness may be present in patients with rhabdomyolysis. Jaundice may be seen in patients with hemolytic conditions. Patients may have muscle weakness, flaccid paralysis, or depressed deep tendon reflexes.

54. Which of the following may happen if the uterus becomes overstimulated by oxytocin during the induction of labor?

- A. Weak contraction prolonged to more than 70 seconds.
- B. Tetanic contractions prolonged to more than 90 seconds.
- C. Increased pain with bright red vaginal bleeding.
- D. Increased restlessness and anxiety.

Correct Answer: B. Tetanic contractions prolonged to more than 90 seconds

Hyperstimulation of the uterus such as with oxytocin during the induction of labor may result in tetanic contractions prolonged to more than 90seconds, which could lead to such complications as fetal distress, abruptio placentae, amniotic fluid embolism, laceration of the cervix, and uterine rupture.

- **Option A:** With some methods, the uterus can be overstimulated, causing it to contract too frequently. Too many contractions may lead to changes in the fetal heart rate, umbilical cord problems, and other problems.
- **Option C:** 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 D:** Synthetic oxytocin, also known as Pitocin, is frequently administered during delivery for the purpose of inducing labor and preventing excessive post-delivery bleeding. One might hypothesize, based on the role that natural oxytocin plays, that women receiving oxytocin might receive some degree of benefit from the peri-partum use of Pitocin; however, a recent study calls this hypothesis into question. This study used population-based data available through the Massachusetts Integrated Clinical Academic Research Database (MiCARD) in order to retrospectively examine the relationship between peripartum synthetic oxytocin administration and the development of depressive and anxiety disorders within the first year postpartum. While the authors expected to observe that women exposed to synthetic oxytocin in this cohort would have a reduced risk of postpartum depressive and/or anxiety disorders than those without any exposure, they actually found the opposite.

55. A patient is admitted to the oncology unit for diagnosis of suspected Hodgkin's disease. Which of the following symptoms is typical of Hodgkin's disease?

- A. Painful cervical lymph nodes.
- B. Night sweats and fatigue.
- C. Nausea and vomiting.
- D. Weight gain.

Correct Answer: B. Night sweats and fatigue.

Symptoms of Hodgkin's disease include night sweats, fatigue, weakness, and tachycardia. Hodgkin lymphoma (HL), formerly called Hodgkin's disease, is a rare monoclonal lymphoid neoplasm with high cure rates. Biological and clinical studies have divided this disease entity into two distinct categories: classical Hodgkin lymphoma and nodular lymphocyte-predominant Hodgkin lymphoma (NLP-HL).

- **Option A:** The disease is characterized by painless, enlarged cervical lymph nodes. Patients with Hodgkin lymphoma frequently present with painless supra-diaphragmatic lymphadenopathy (one to two lymph node areas), B symptoms including unexplained profound weight loss, high fevers, and drenching night sweats.
- **Option C:** Nausea and vomiting are not typically symptoms of Hodgkin's disease. Chronic pruritus is another disease symptom that may be encountered. If mediastinal nodes enlargement is significant, the mass effect can produce chest pain and shortness of breath. If the patient has an extra-nodal disease, which is less common, related clinical manifestations may occur.
- **Option D:** Weight loss occurs early in the disease. Four features characterize Hodgkin lymphomas. They commonly arise in the cervical lymph nodes; the disease is more common in young adults; there are scattered large mononuclear Hodgkin and multinucleated cells (Reed-Sternberg) intermixed in a background of a mixture of non-neoplastic inflammatory cells; finally, T lymphocytes are often observed surrounding the characteristic neoplastic cells.

56. When caring for a 3-year-old child, the nurse should provide which toys for this child? Select all that apply.

- A. A puzzle
- B. A wagon
- C. A golf set
- D. A farm set
- E. A doll
- F. A lightweight ball

Correct Answer: B, E, & F.

Toys for the toddler must be strong, safe, and too large to swallow or place in the ear or nose. Toddlers need supervision at all times. Push-pull toys, large balls, large crayons, trucks, and dolls are some appropriate toys.

- **Option A:** A puzzle with large pieces only may be appropriate. Wood puzzles with only 4 to 12 large pieces aid in the toddler's development of critical thinking. Other appropriate toys may be

blocks that snap together, objects to sort, and things with hooks, buttons, buckles, and snaps.

- **Options C and D:** A farm set and a golf set may contain items that the child could swallow. These kinds of toys are appropriate for preschoolers who like pretending and building. Preschoolers have a longer attention span than toddlers.
- **Options B and F:** Toys that make the use of large and small muscles are also appropriate for toddlers to develop their gross motor skills. This may include large or small balls for kicking and throwing, ride-on equipment, push and pull toys such as wagons, and low climbers with soft material underneath.
- **Option E:** A doll with accessories will catch the attention of a toddler too, as well as child-sized furniture, dress-up clothes, puppets, and sand and water play toys.

57. Shortly after admission to an acute care facility, a male client with a seizure disorder develops status epilepticus. The physician orders diazepam (Valium) 10 mg I.V. stat. How soon can the nurse administer the second dose of diazepam, if needed and prescribed?

- A. In 30 to 45 seconds
- B. In 10 to 15 minutes
- C. In 30 to 45 minutes
- D. In 1 to 2 hours

Correct Answer: B. In 10 to 15 minutes

When used to treat status epilepticus, diazepam may be given every 10 to 15 minutes, as needed, to a maximum dose of 30 mg. The nurse can repeat the regimen in 2 to 4 hours, if necessary, but the total dose shouldn't exceed 100 mg in 24 hours. It is crucial to monitor respiratory and cardiovascular status, blood pressure, heart rate, and symptoms of anxiety in patients taking diazepam.

- **Option A:** The nurse must not administer I.V. diazepam faster than 5 mg/minute. Therefore, the dose can't be repeated in 30 to 45 seconds because the first dose wouldn't have been administered completely by that time. 0.15 to 0.20 mg/kg IV per dose, and may be repeated once if needed. Do not exceed 10 mg per single dose. Rectal administration of 0.2 to 0.5 mg/kg administered one time. Do not exceed 20 mg per dose.
- **Option C:** Waiting longer than 15 minutes to repeat the dose would increase the client's risk of complications associated with status epilepticus. When administered intravenously, diazepam acts within 1 to 3 minutes, while oral dosing onset ranges between 15 to 60 minutes. Diazepam is long-lasting with a duration of action of more than 12 hours.
- **Option D:** Diazepam is a fast-acting potent anxiolytic popular in use due to its broad therapeutic index, low toxicity, and improved safety profile. Nonetheless, diazepam is still a drug with high potential for use disorder associated with severe adverse/toxic effects.

58. Nurse Liza is assigned to care for a client who has returned to the nursing unit after left nephrectomy. Nurse Liza's highest priority would be...

- A. Hourly urine output
- B. Temperature

- C. Able to turn side to side
- D. Able to sip clear liquid

Correct Answer: A. Hourly urine output

After nephrectomy, it is necessary to measure urine output hourly. This is done to assess the effectiveness of the remaining kidney also to detect renal failure early. Immediately after surgery, the health care team will carefully watch the client's blood pressure, electrolytes and fluid balance. These body functions are controlled in part by the kidneys. The client will most likely have a urinary catheter (tube to drain urine) in the bladder for a short time during the recovery.

- **Option B:** Monitoring temperature regularly is recommended, but not the highest priority. The client may have discomfort and numbness (caused by severed nerves) near the incision area. Pain relievers are given after the surgical procedure and during the recovery period as needed. Although deep breathing and coughing may be painful because the incision is close to the diaphragm, breathing exercises are important to prevent pneumonia.
- **Option C:** The client would be able to turn to his sides with some assistance after surgery. The client will probably remain in the hospital for 1 to 7 days, depending on the method of surgery used. He will be encouraged to return to light activities as soon as he feels up to it. Strenuous activity and heavy lifting should be avoided for 6 weeks following the procedure.
- **Option D:** The client would be allowed to take sips of clear liquid as recommended by the physician. The doctor will give the client more detailed instructions about post-operative activities, restrictions and diet. Tests will be done on a regular basis to check how well the remaining kidney is working. A urinalysis (urine test) and blood pressure check should be done every year, and kidney function tests (creatinine, glomerular filtration rate [GFR]) should be checked every few years (or more often if abnormal results are found). Regular urine tests for protein should be performed as well. The presence of protein in the urine may mean that the kidney has some damage.

59. Which nursing intervention is likely to be most helpful in providing adequate nutrition while the client is recovering from a thermal burn injury?

- A. Allowing the client to eat whenever he or she wants
- B. Beginning parenteral nutrition high in calories
- C. Limiting calories to 3000 kcal/day
- D. Providing a low-protein, high-fat diet

Correct Answer: A. Allowing the client to eat whenever he or she wants.

Clients should request food whenever they think that they can eat, not just according to the hospital's standard meal schedule. Ascertain food likes and dislikes. Encourage SO to bring food from home, as appropriate. This provides the patient or SO a sense of control; enhances participation in care and may improve intake.

- **Option B:** Parenteral nutrition may be given as a last resort because it is invasive and can lead to infectious and metabolic complications. Total parenteral nutrition (TPN) maintains nutritional intake and meets metabolic needs in presence of severe complications or sustained esophageal or gastric injuries that do not permit enteral feedings.
- **Option C:** Clients who can eat solid foods should ingest as many calories as possible. 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.

- **Option D:** The nurse needs to work with a nutritionist to provide a high-calorie, high-protein diet to help with wound healing. Refer to a dietitian or nutrition support team. This may be useful in establishing individual nutritional needs (based on weight and body surface area of injury) and identifying appropriate routes.

60. The nurse wishes to identify nursing diagnoses for a patient. She can best do this by using a data collection form organized according to: Select all that apply.

- A. A body systems model
- B. A head-to-toe framework
- C. Maslow's hierarchy of needs
- D. Gordon's functional health patterns
- E. Adaptation Model of Nursing

Correct Answer: C & D

Nursing models produce a holistic database that is useful in identifying nursing rather than medical diagnoses. Body systems and Maslow's hierarchy is not a nursing model, but it is holistic, so it is acceptable for identifying nursing diagnoses. Gordon's functional health patterns are a nursing model.

- **Option A:** A body system model is not a nursing model. It is a representation of all the systems of the body in a figurine.
- **Option B:** Head-to-toe framework is not a nursing model, and they are not holistic; they focus on identifying physiological needs or disease.
- **Option C:** Maslow's hierarchy of needs is a motivational theory in psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within a pyramid. From the bottom of the hierarchy upwards, the needs are: physiological (food and clothing), safety (job security), love and belonging needs (friendship), esteem, and self-actualization.
- **Option D:** Gordon's functional health patterns is a method devised by Marjory Gordon to be used by nurses in the nursing process to provide a more comprehensive nursing assessment of the patient.
- **Option E:** The Adaptation Model of Nursing is a prominent nursing theory aiming to explain or define the provision of nursing science. In her theory, Sister Callista Roy's model sees the individual as a set of interrelated systems that strives to maintain a balance between various stimuli.

61. 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.

62. Vitamin K is prescribed for a neonate. A nurse prepares to administer the medication in which muscle site?

- A. Deltoid
- B. Triceps
- C. Vastus lateralis
- D. Biceps

Correct Answer: C. Vastus lateralis.

- **Option C:** Vitamin K is given as a prophylaxis for hemorrhagic disease. It is administered intramuscular (IM) in the vastus lateralis muscle. The vastus lateralis muscle lies lateral to the midline of the thigh and wraps about 1/4 the distance around the thigh.

63. The physician has discussed the need for medication with the parents of an infant with congenital hypothyroidism. The nurse can reinforce the physician's teaching by telling the parents that:

- A. The medication is given one time daily every other day
- B. The medication schedule can be arranged to allow for drug holidays
- C. The medication will be needed throughout the child's lifetime
- D. The medication will be needed only during times of rapid growth

Correct Answer: C. The medication will be needed throughout the child's lifetime

- **Option C:** In congenital hypothyroidism, the thyroid did not form properly during pregnancy resulting in the inability to make normal amounts of thyroid hormone. It is treated by giving thyroid hormone medication (levothyroxine) that will be taken for life.
- **Options A, B, and D:** The infant will take the medication every day to ensure that there will be normal growth and brain development.

64. Progestins have been known to cause which of the following:

- A. Decrease HDL level
- B. Increase aspartate transaminase
- C. Increase HDL levels
- D. Decrease aspartate transaminase

Correct Answer: A. Decrease HDL level

Progestins decrease HDL levels, which may predispose the client to increased cardiac risk. Progestins are synthetic progestogens. Progestin drugs can be subclassified in two ways: (1) generationally or (2) based upon structural properties.

- **Option B:** Progesterone enters the cell by passive diffusion through the plasma membrane and binds to the progesterone receptor in the nucleus. When unbound, the progesterone receptor exists as a monomer. After binding progesterone, the receptor undergoes a conformational change and becomes a dimer, which increases receptor binding to DNA.
- **Option C:** Most progestins exert their contraceptive effects by suppressing the secretion of gonadotropin-releasing hormone (GnRH) by the hypothalamus and luteinizing hormone (LH) and follicle-stimulating hormone (FSH) by the pituitary gland. This adventitiously alters the menstrual cycle to suppress ovulation.
- **Option D:** Progestins also provide other benefits by secondary mechanisms such as thickening cervical mucus to prevent penetration by sperm, slowing tubal motility by impairing fallopian tube motility, and inducing endometrial atrophy.

65. Which of the following best describes preterm labor?

- A. Labor that begins after 20 weeks gestation and before 37 weeks gestation.
- B. Labor that begins after 15 weeks gestation and before 37 weeks gestation
- C. Labor that begins after 24 weeks gestation and before 28 weeks gestation.
- D. Labor that begins after 28 weeks gestation and before 40 weeks gestation.

Correct Answer: A. Labor that begins after 20 weeks gestation and before 37 weeks gestation

Preterm labor is best described as labor that begins after 20 weeks' gestation and before 37 weeks' gestation. The other time periods are inaccurate.

- **Option B:** At 15 weeks gestation, the fetus weighs around 4 ounces (oz) and its facial features will be starting to take shape. The bones in its ears will be developing for the first time, and the fetus will be able to hear the sounds of the mother's heart, digestive system, and voice. Even though the eyes of the fetus will remain closed, it will be able to sense and respond to light.
- **Option C:** At 24 weeks gestation, the branches of the baby's lungs are forming, as well as the cells that make surfactant, a natural substance that lines the tiny air sacs (called alveoli) in the lungs to make breathing possible. While a small amount of surfactant is now present, the lungs are still immature. Babies born this early have a hard time breathing.
- **Option D:** Babies begin having eye movements as early as 14 weeks, but these movements increase around 28 weeks. The higher frequency of eye movements is associated with REM sleep and healthy brain development.

66. A client has frequent bursts of ventricular tachycardia on the cardiac monitor. A nurse is most concerned with this dysrhythmia because:

- A. It is uncomfortable for the client, giving a sense of impending doom.
- B. It produces a high cardiac output that quickly leads to cerebral and myocardial ischemia.
- C. It is almost impossible to convert to a normal sinus rhythm.
- D. It can develop into ventricular fibrillation at any time.

Correct Answer: D. It can develop into ventricular fibrillation at any time.

Ventricular tachycardia is a life-threatening dysrhythmia that results from an irritable ectopic focus that takes over as the pacemaker for the heart. Ventricular tachycardia is characterized as a wide complex (QRS duration greater than 120 milliseconds) tachyarrhythmia at a heart rate greater than 100 beats per minute. The physical examination findings of cannon A waves and variable intensity of the S1 heart sound suggest AV dissociation, a criterion favoring the diagnosis of ventricular tachycardia.

- **Option A:** The client has frequently experienced a feeling of impending death. Ventricular tachycardia is treated with antiarrhythmic medications or magnesium sulfate, cardioversion (client awake), or defibrillation (loss of consciousness). The prognosis of VT depends on the cause and cardiac status. Patients who develop VT can suffer from hemodynamic failure and the mortality can exceed 30% if no treatment is provided.
- **Option B:** The low cardiac output that results can lead quickly to cerebral and myocardial ischemia. Patients who undergo an episode of unexplained sudden cardiac arrest secondary to a ventricular tachyarrhythmia, CT, or coronary angiography can be used to confirm the presence or absence of ischemic heart disease.
- **Option C:** Ventricular tachycardia can deteriorate into ventricular fibrillation at any time. In-hospital cardiac arrest shares the similarity with out-of-hospital cardiac arrest in that early cardiopulmonary resuscitation (CPR), and defibrillation are important factors in survival. (Level I) Every minute that treatment is delayed reduces survival by approximately 10%.

67. Jen, a nursing student is anxious about the upcoming board examination but is able to study intently and does not become distracted by a roommate's talking and loud music. The student's ability to ignore distractions and to focus on studying demonstrates:

- A. Mild-level anxiety
- B. Panic-level anxiety
- C. Severe-level anxiety
- D. Moderate-level anxiety

Correct Answer: D. Moderate-level anxiety

A moderately anxious person can ignore peripheral events and focuses on central concerns. People with moderate levels of anxiety have more frequent or persistent symptoms than those with mild anxiety, but still have better daily functioning than someone with severe anxiety or panic disorder. For example, people with moderate anxiety may report experiencing symptoms such as feeling on edge, being unable to control their worrying or being unable to relax several days or the majority of days in a week, but not every day. Although moderate anxiety symptoms are disruptive, people with moderate

anxiety may have success in managing their anxiety with the help of a doctor or self-help strategies.

- **Option A:** Although often described as sub-clinical or clinically non-significant, mild anxiety can impact emotional, social, and professional functioning. Mild anxiety symptoms may present as social anxiety or shyness and can be experienced in early childhood through to adulthood. If left unaddressed, mild anxiety can lead to maladaptive coping strategies or more severe mental conditions.
- **Option B:** Panic level anxiety, or panic disorder, is characterized by frequent, recurring, and unexpected panic attacks. Panic attacks usually last around 10 minutes. The triggers for panic attacks vary from person to person, and the cause of an attack may be familiar to a person or unknown.
- **Option C:** Severe anxiety is intensely debilitating, and symptoms of severe anxiety meet key diagnostic criteria for clinically-significant anxiety disorder. People with severe anxiety typically score higher on scales of distress and lower on functioning. Severe anxiety symptoms also frequently co-occur with major depression, which can contribute to greater disability. Symptoms of severe anxiety are frequent and persistent and may include increased heart rate, feelings of panic and social withdrawal. These symptoms can result in loss of work and increased health care costs. In addition, individuals with severe anxiety may turn to alcohol and drugs as a means to cope with their symptoms.

68. Tina with a histrionic personality disorder is melodramatic and responds to others and situations in an exaggerated manner. Nurse Trish would recommend which of the following activities for Tina?

- A. Baking class
- B. Role-playing
- C. Scrapbook making
- D. Music group

Correct Answer: B. Role-playing

The nurse would use role-playing to teach the client appropriate responses to others and in various situations. This client dramatizes events, drawn attention to self, and is unaware of and does not deal with feelings. The nurse works to help the client clarify true feelings & learn to express them appropriately.

- **Option A:** A baking class would not work well with a histrionic client. Histrionic personality disorder, or dramatic personality disorder, is a psychiatric disorder distinguished by a pattern of exaggerated emotionality and attention-seeking behaviors. Histrionic personality disorder falls within the "Cluster B" of personality disorders. Cluster B personality disorders include conditions such as narcissistic personality disorder, borderline personality disorder, and antisocial personality disorder. These personality disorders are commonly described as dramatic, excitable, erratic, or volatile. Specifically, people with histrionic personality disorder typically present as flirtatious, seductive, charming, manipulative, impulsive, and lively.
- **Option C:** People with histrionic personality disorder may feel underappreciated or disregarded when they are not the center of attention. These people are typically the life of the party and have a "larger than life" presence. They may be vibrant, enchanting, overly seductive, or inappropriately sexual with most of the people they meet, even when they are not sexually attracted to them.

- **Option D:** People presenting with histrionic personality disorder may demonstrate rapidly shifting and shallow emotions that others may perceive as insincere. Physical appearance may be used to draw attention to oneself by wearing bright-colored clothing or revealing garments. Those with histrionic personality disorder may speak in a vague style that lacks in detail. Furthermore, they may be dramatic and extremely emotionally expressive, even embarrassing friends and family with public displays of emotions.

69. In a complex pediatric oncology unit, a seasoned nurse is faced with the challenge of assessing and managing pain in a non-verbal 3-year-old child undergoing treatment for acute lymphoblastic leukemia. The child's limited communicative ability due to developmental age and the distressing nature of the current clinical situation necessitate a highly nuanced approach to pain assessment. Given these parameters, which pain assessment tool would be most useful for the nurse to accurately gauge the young patient's pain levels?

- A. McGill-Melzack Pain Questionnaire
- B. Simple Description Pain Intensity Scale
- C. 0-10 Numeric Pain Scale
- D. Faces Pain-Rating Scale
- E. FLACC (Face, Legs, Activity, Cry, Consolability) Behavioral Pain Assessment Scale
- F. Oucher Pain Scale

Correct Answer: E. FLACC (Face, Legs, Activity, Cry, Consolability) Behavioral Pain Assessment Scale

The FLACC Behavioral Pain Assessment Scale is a tool specifically designed for assessing pain in infants and young children who are unable to communicate their pain verbally. It evaluates five categories: Face, Legs, Activity, Cry, and Consolability, each scored from 0 to 2, providing a comprehensive and objective measure of pain based on observable behaviors. This tool is particularly suited for the clinical scenario described.

- **Option A:** The McGill-Melzack Pain Questionnaire is a comprehensive tool that requires verbal communication and abstract thinking abilities to describe pain in various dimensions. It is unsuitable for a young, non-verbal child.
- **Option B:** The Simple Description Pain Intensity Scale, while less complex than the McGill questionnaire, still relies on the child's ability to verbally describe pain, which is not feasible in this clinical scenario.
- **Option C:** The 0-10 Numeric Pain Scale requires the child to understand and quantify their pain on a scale, a task that is developmentally inappropriate for a 3-year-old child.
- **Option D:** The Faces Pain-Rating Scale uses facial expressions to depict varying levels of pain intensity. Although more child-friendly, it still necessitates a degree of abstract reasoning and the ability to match one's own pain with facial expressions, which might be challenging for a non-verbal 3-year-old.
- **Option F:** The Oucher Pain Scale uses photographs of children's faces showing different levels of distress and pain, combined with a numerical scale. While this is more suitable for children who can point to indicate their pain level, it might still be challenging for a non-verbal 3-year-old to use effectively compared to the FLACC Scale.

70. A woman who is six months pregnant is seen in antepartal clinic. She states she is having trouble with constipation. To minimize this condition, the nurse should instruct her to

- A. Increase her fluid intake to three liters/day
- B. Request a prescription for a laxative from her physician
- C. Stop taking iron supplements
- D. Take two tablespoons of mineral oil daily

Correct Answer: A. Increase her fluid intake to three liters/day.

During pregnancy, constipation results from decreased gastric motility and increased water reabsorption in the colon caused by increased levels of progesterone. Increasing fluid intake to three liters a day will help prevent constipation. The client should increase fluid intake, increase roughage in the diet, and increase exercise as tolerated.

- **Option B:** Laxatives are not recommended because of the possible development of laxative dependence or abdominal cramping. Laxatives are medicines used to treat constipation and are generally poorly absorbed from the mother's gut into her bloodstream. They are not associated with problems for the unborn or breastfed baby.
- **Option C:** Iron supplements are necessary during pregnancy, as ordered, and should not be discontinued. Daily oral iron and folic acid supplementation with 30 mg to 60 mg of elemental iron and 400 µg (0.4 mg) folic acid is recommended for pregnant women to prevent maternal anemia, puerperal sepsis, low birth weight, and preterm birth.
- **Option D:** Mineral oil is especially bad to use as a laxative because it decreases the absorption of fat-soluble vitamins (A, D, E, K) if taken near mealtimes. Mineral oil should always be prohibited during pregnancy, as its use can cause hemorrhagic disease of the newborn due to impaired absorption of vitamin K. Similarly, castor oil is absolutely prohibited during pregnancy.

71. The client is seen in the clinic for treatment of migraine headaches. The drug Imitrex (sumatriptan succinate) is prescribed for the client. Which of the following in the client's history should be reported to the doctor?

- A. Diabetes
- B. Prinzmetal's angina
- C. Cancer
- D. Cluster headaches

Correct Answer: B. Prinzmetal's angina

If the client has a history of Prinzmetal's angina, he should not be prescribed triptan preparations because they cause vasoconstriction and coronary spasms. Tell the doctor if there is or have ever had heart disease; a heart attack; angina (chest pain); irregular heartbeats; stroke or 'mini-stroke'; or circulation problems such as varicose veins, blood clots in the legs, Raynaud's disease (problems with blood flow to the fingers, toes, ears, and nose), or ischemic bowel disease (bloody diarrhea and stomach pain caused by decreased blood flow to the intestines). The doctor may advise not to take sumatriptan.

- **Option A:** Sumatriptan is used to treat the symptoms of migraine headaches (severe, throbbing headaches that sometimes are accompanied by nausea or sensitivity to sound and light). Sumatriptan is in a class of medications called selective serotonin receptor agonists. It works by narrowing blood vessels in the head, stopping pain signals from being sent to the brain, and blocking the release of certain natural substances that cause pain, nausea, and other symptoms of migraine. Sumatriptan does not prevent migraine attacks or reduce the number of headaches.
- **Option C:** Sumatriptan comes as a tablet to take by mouth. It is usually taken at the first sign of a migraine headache. If symptoms improve after taking sumatriptan but return after 2 hours or longer, the client may take a second tablet. However, if symptoms do not improve after taking sumatriptan, do not take a second tablet without calling the doctor. The doctor will advise the maximum number of tablets to be taken in a 24-hour period.
- **Option D:** There is no contraindication for taking triptan drugs in clients with diabetes, cancer, or cluster headaches. If the client takes sumatriptan more often or for longer than the recommended period of time, the headaches may get worse or may occur more frequently. The client should not take sumatriptan or any other headache medication for more than 10 days per month. Call a doctor if there is a need to take sumatriptan to treat more than four headaches in a 1-month period.

72. 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.

73. The client with non-Hodgkin's lymphoma is receiving Idarubicin (Idamycin). Which of the following would indicate to the nurse that the client is experiencing an adverse effect related to the medication?

- A. Dysrhythmia
- B. Weight loss
- C. Nausea and vomiting
- D. Peripheral neuropathy

Correct Answer: A. Dysrhythmia

Idarubicin (Idamycin) and Daunorubicin (Daunoxome) may cause cardiotoxicity (such as dysrhythmia, fatigue, shortness of breath), cardiomyopathy, and ECG changes.

- **Option B:** Weight gain, not weight loss is a side effect.
- **Option C:** This is a usual side effect that can last for 2-3 days.
- **Option D:** This is not a side effect related to this medication.

74. JT being the charge nurse for today is providing orientation to Nurse Brad, a newly hired employee. Which of the following action by Nurse Brad requires the most immediate action?

- A. Educating a newly admitted burn client regarding the use of pressure garments.
- B. Obtaining an anaerobic culture specimen from a superficial burn wound.
- C. Administering tetracycline with a glass of milk to a client with cellulitis.
- D. Discussing the use of herpes zoster vaccine with a 20-year-old client.

Correct Answer: C. Administering tetracycline with a glass of milk to a client with cellulitis.

Tetracyclines should never be taken with milk or milk products since dairy products prevent the absorption of tetracycline.

- **Option A:** Pressure garments may be used after graft wounds heal and during the rehabilitation period after a burn injury, but this should be discussed when the client is ready for rehabilitation, now when the client is admitted.
- **Option B:** Anaerobic bacteria would not be likely to grow in a superficial wound.
- **Option D:** The herpes zoster vaccine is recommended for clients who are 60 years or older.

75. The student nurse is preparing a teaching care plan to help improve nutrition in a patient with achalasia. You include which of the following:

- A. Swallow foods while leaning forward.
- B. Omit fluids at mealtimes.
- C. Eat meals sitting upright.
- D. Avoid soft and semi soft foods.

Correct Answer: C. Eat meals sitting upright.

Eating in the upright position aids in emptying the esophagus. Doing the opposite of the other three also may be helpful. Achalasia is an esophageal smooth muscle motility disorder that occurs due to a failure of relaxation of the lower esophageal sphincter. This condition causes a functional obstruction at the gastroesophageal junction.

- **Option A:** The majority of patients with achalasia typically present with dysphagia, initially with solids than to liquids though 70-97% of patients will have dysphagia to both solids and liquids at presentation. Dysphagia and regurgitation are the most common presenting symptoms in achalasia.

- **Option B:** Instruct patient regarding eating small amounts of bland food followed by a small amount of water. Instruct to remain in an upright position at least 1–2 hours after meals, and to avoid eating within 2–4 hours of bedtime. Gravity helps control reflux and causes less irritation from reflux action into the esophagus.
- **Option D:** Patients need to understand necessary lifestyle changes following myotomy, such as the need to eat small food boluses in an upright position, which allows gravity to assist with food transit and never to lay flat but rather at 30 to 45 degrees due to increased risk for aspiration.

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

- A. Keep the bed flat, with a small pillow beneath the cast
- B. Provide crayons and a coloring book for play activity
- C. Increase her intake of high-calorie foods for healing
- D. Tuck a disposable diaper beneath the cast at the perineal opening

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

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

77. Which of the following values is considered normal for ICP?

- A. 0 to 15 mm Hg
- B. 25 mm Hg
- C. 35 to 45 mm Hg
- D. 120/80 mm Hg

Correct Answer: A. 0 to 15 mm Hg

Normal ICP is 0-15 mm Hg. Intracranial hypertension (IH) is a clinical condition that is associated with an elevation of the pressures within the cranium. The pressure in the cranial vault is measured in millimeters of mercury (mm Hg) and is normally less than 20 mm Hg.

- **Option B:** An increase in the volume of one component will result in a decrease of volume in one or two of the other components. The clinical implication of the change in volume of the component is a decrease in cerebral blood flow or herniation of the brain.
- **Option C:** Cerebral perfusion pressure (CPP) is the pressure gradient between mean arterial pressure (MAP) and intracranial pressure (CPP = MAP – ICP). CPP = MAP – CVP if central venous pressure is higher than intracranial pressure. CPP target for adults following severe traumatic brain injury is recommended at greater than 60 to 70 mm Hg, and a minimum CPP greater than 40 mm Hg is recommended for infants, with very limited data on normal CPP targets for children in between.

- **Option D:** This is a normal blood pressure level. Cushing triad is a clinical syndrome consisting of hypertension, bradycardia and irregular respiration and is a sign of impending brain herniation. This occurs when the ICP is too high the elevation of blood pressure is a reflex mechanism to maintain CPP. High blood pressure causes reflex bradycardia and brain stem compromise affecting respiration.

78. You are admitting a patient for whom a diagnosis of pulmonary embolism must be ruled out. The patient's history and assessment reveal all of these findings. Which finding supports the diagnosis of pulmonary embolism?

- A. The patient was recently in a motor vehicle accident
- B. The patient participated in an aerobic exercise program for 6 months
- C. The patient gave birth to her youngest child 1 year ago
- D. The patient was on bed rest for 6 hours after a diagnostic procedure

Correct Answer: A. The patient was recently in a motor vehicle accident

Patients who have recently experienced trauma are at risk for deep vein thrombosis and pulmonary embolism. PE remains relatively common after trauma and occurs in the absence of lower extremity or spinal fractures. Although PE is usually thought to occur between days 5 and 7 after injury, data suggest that as many as 37% of pulmonary emboli occur early.

- **Option B:** The better the circulation is, the lower the chance of blood pooling up and clotting. Clotting is often caused by long periods of inactivity, so practicing a regular exercise routine can help reduce the risk of clots and other conditions related to blood clots, such as diabetes and obesity.
- **Option C:** Pulmonary embolisms (PE) typically occur during or shortly after the labor and delivery, and may be fatal for the mother if not treated immediately. The client gave birth a year ago, therefore eliminating the risk for pulmonary embolism.
- **Option D:** None of the other findings are risk factors for pulmonary embolism. Prolonged immobilization is also a risk factor for DVT and pulmonary embolism, but this period of bed rest was very short.

79. A patient in the cardiac unit is concerned about the risk factors associated with atherosclerosis. Which of the following are hereditary risk factors for developing atherosclerosis?

- A. Family history of heart disease
- B. Overweight
- C. Smoking
- D. Age

Correct Answer: A. Family history of heart disease

Family history of heart disease is an inherited risk factor that is not subject to a lifestyle change. Having a first-degree relative with heart disease has been shown to significantly increase risk. ASCVD is multifactorial etiology. The most common risk factors include hypercholesterolemia (LDL-cholesterol), hypertension, diabetes mellitus, cigarette smoking, age (male older than 45 years and female older

than 55 years), male gender, and strong family history (male relative younger than 55 years and female relative younger than 65 years).

- **Option B:** Also, a sedentary lifestyle, obesity, diets high in saturated and trans-fatty acids, and certain genetic mutations contribute to risk. While a low level of high-density lipoprotein (HDL)-cholesterol is considered a risk factor, pharmacological therapy increasing HDL-cholesterol has yielded negative results raising concerns about the role of HDL in ASCVD.
- **Option C:** Smoking is a risk factor that is subject to lifestyle change and can reduce risk significantly. For the most part atherosclerosis and its pathology can be prevented. All healthcare workers who look after patients should educate patients on the need to exercise regularly, discontinue smoking, maintain healthy body weight, eat a healthy diet, and remain compliant with the medications used to lower lipids.
- **Option D:** Advancing age increases the risk of atherosclerosis but is not a hereditary factor. It has been reported that 75% of acute myocardial infarctions occur from plaque rupture and the highest incidence of plaque rupture was observed in men over 45 years; whereas, in women, the incidence increases beyond age 50 years.

80. The nurse is assisting a client on a low-potassium diet to select food items from the menu. Which of the following food items, if selected by the client, would indicate an understanding of this dietary restriction?

- A. Cantaloupe
- B. Spinach
- C. Lima beans
- D. Strawberries

Correct Answer: C. Lima beans

Lima beans (1/3 c) averages three (3) mEq per serving. Each serving of lima beans provides nearly 11 grams of protein—slightly more than other types of beans. Lima beans have a glycemic index (GI) of about 46. (Foods with a GI of 55 or below are considered low glycemic foods.) The glycemic load of a 100-gram serving of lima beans is about 7.

- **Option A:** Cantaloupe (1/4 small). Consuming foods rich in potassium can help decrease blood pressure. The American Heart Association (AHA) recommends that an average adult consume 4,700 mg of potassium a day to keep the cardiovascular system healthy. A cup of cantaloupe provides 473 mg of potassium, or 10% of a person's recommended daily intake.
- **Option B:** Spinach (1/2 cooked). Spinach provides more potassium per serving than a banana — about 12% of the AI per one cup (156 grams) frozen or three cups (100 grams) fresh. This vegetable also packs vitamins A and K, as well as folate and magnesium.
- **Option D:** Strawberries (1 ¼ cups) are high potassium foods and average 7 mEq per serving. Strawberries are rich in vitamin C, potassium, folic acid, and fiber. Due to their high potassium content, strawberries might provide benefits for people who have a raised risk of high blood pressure by helping to offset the effects of sodium in the body.

81. A nurse observes the client receiving fat emulsions is having hives. A nurse reviews the client's history and notes which of the following may be caused by the complaint of the client?

- A. Allergy to an egg.
- B. Allergy to peanuts.
- C. Allergy to shellfish.
- D. Allergy to corn.

Correct Answer: A. Allergy to an egg.

Fat emulsions (lipids) contain egg yolk phospholipids and should not be given to clients with egg allergies. Intravenous fat emulsions (IFE) are a vital component of total parenteral nutrition, because they provide essential fatty acids. IFE is a sterile fat emulsion that contains egg-yolk phospholipids. Although egg allergy is listed as a contraindication, adverse reactions are uncommon.

- **Option B:** Hypersensitivity reactions to TPN can be managed by withholding the TPN and treating with antihistamines if needed until the reaction resolves. Identification, possibly by epicutaneous allergy testing, and removal of the offending agent(s) from the TPN is necessary if TPN therapy must be restarted.
- **Option C:** Although ingestion of egg lecithin in cooked food is generally tolerated by egg-allergic people, administration of intravenous egg-containing lipid emulsions may cause significant adverse reactions.
- **Option D:** If the patient has an allergy to amino acids, dextrose, fat emulsion, or any other part of total parenteral nutrition, he should be referred to a doctor first. If the patient has an allergy to corn, corn products, eggs, peanuts, or soybeans, he should talk with a doctor.

82. The male client is receiving external radiation to the neck for cancer of the larynx. The most likely side effect to be expected is:

- A. Diarrhea
- B. Dyspnea
- C. Constipation
- D. Sore throat

Correct Answer: D. Sore throat

83. Auranofin (Ridaura) is prescribed for a client with rheumatoid arthritis, and the nurse monitors the client for signs of an adverse effect related to the medication. Which of the following indicates an adverse effect?

- A. Nausea
- B. Diarrhea
- C. Anorexia
- D. Proteinuria

Correct Answer: D. Proteinuria

Auranofin (Ridaura) is a gold preparation that is used as an antirheumatic. Gold toxicity is an adverse effect and is evidenced by decreased hemoglobin, leukopenia, reduced granulocyte counts, proteinuria,

hematuria, stomatitis, glomerulonephritis, nephrotic syndrome, or cholestatic jaundice. Anorexia, nausea, and diarrhea are frequent side effects of the medication.

- **Option A:** Auranofin is used, with rest and nondrug therapy, to treat rheumatoid arthritis. It improves arthritis symptoms including painful or tender and swollen joints and morning stiffness. Auranofin comes as a capsule to take by mouth. It usually is taken once or twice a day. It must be taken on a regular schedule, as prescribed by the doctor, to be effective. The full effect of this drug usually is not felt for 3-4 months; in some people, it may take up to 6 months.
- **Option B:** Auranofin may cause an upset stomach. Take auranofin after meals or a light snack. It may act as an inhibitor of kappa B kinase and thioredoxin reductase which would lead to a decreased immune response and decreased free radical production, respectively. In patients with inflammatory arthritis, such as adult and juvenile rheumatoid arthritis, gold salts can decrease the inflammation of the joint lining. This effect can prevent the destruction of bone and cartilage.
- **Option C:** Plan to avoid unnecessary or prolonged exposure to sunlight and to wear protective clothing and sunscreen. Auranofin may make your skin more sensitive to sunlight. The main mechanism of action of auranofin is through the inhibition of reduction/oxidation (redox) enzymes such as thioredoxin reductase (TrxR). The thiol ligand contained in auranofin has a high affinity for thiol and selenol groups, to which it forms stable, and irreversible, adducts. Redox enzymes such as TrxR are essential to many cellular processes, particularly in maintaining the intracellular levels of reactive oxygen species (ROS).

84. Mr. and Mrs. Andrews' child was diagnosed with Duchenne's muscular dystrophy; which of the following usually is the first indication of the condition?

- A. Inability to suck in the newborn
- B. Lateness in walking in the toddler
- C. Difficulty running in the preschooler
- D. Decreasing coordination in the school-age child

Correct Answer: C. Difficulty running in the preschooler

Usually, signs and symptoms of Duchenne's muscular dystrophy are not noticed until ages 3 to 5 years. Typically weakness starts with the pelvic girdle, evidenced as difficulty running in the preschooler. Duchenne's muscular dystrophy usually is not diagnosed in the infant or toddler period.

- **Option A:** Sucking is not the first sign of Duchenne's muscular dystrophy. In ambulatory patients, an increased incidence of fractures is noted as a consequence of the frequent falls. Enlargement of the calves with wasting of the thigh muscles results in pseudohypertrophy of the calves, which is a classical feature. Aside from the calves, hypertrophy of the tongue and muscles of the forearm may be seen but are less classical.
- **Option B:** Signs and symptoms of muscular dystrophy are not noticed until ages 3 to 5 years. Weakness and difficulty in ambulation is typically first noted between 2 and three years of life. This manifests as toe walking, difficulty running, climbing up stairs, and frequently falling.
- **Option D:** Mild hypotonia in an infant may be present, and poor head control in an infant may be an initial sign. Patients do not have atypical facies, but with the onset of facial muscle weakness, a transverse or horizontal sign may be seen in later childhood. Weakness is more pronounced in proximal than distal muscles and the lower limb more than the upper limb.

85. After open-heart surgery, a client develops a temperature of 102°F. The nurse notifies the physician because elevated temperatures:

- A. Increase the cardiac output.
- B. May indicate cerebral edema.
- C. May be a forerunner of hemorrhage.
- D. Are related to diaphoresis and possible chilling.

Correct Answer: A. Increase the cardiac output.

Temperatures of 102°F or greater lead to an increased metabolism and cardiac workload. Myocardial infarction following cardiac surgery is classified as type 5 myocardial infarction according to the universal classification of myocardial infarction. The incidence is between 5% to 10%. Diagnosing postoperative myocardial infarction is challenging since cardiac enzymes are routinely elevated due to manipulation during operation and symptoms are influenced by postoperative status.

- **Option B:** Fever, edema, and increased inflammatory markers can be routinely observed in patients in the postoperative ward. Thus, it might be challenging to differentiate patients with true infection and evolving sepsis. The time course can give additional information. Signs and symptoms of infection after the second to the third day of operation should prompt investigation for infection.
- **Option C:** Postoperative bleeding, hemorrhagic shock coagulation disorders such as heparin-induced thrombocytopenia are reasons why 10% to 20% of national blood products are consumed in cardiac surgery.
- **Option D:** Perioperative antibiotic prophylaxis is used to reduce postoperative infections. Guidelines recommend cephalosporin prophylaxis during the 24 to 48-hour perioperative period. Deep sternal wound infection (DSWI) is a unique postoperative complication of cardiac surgery occurring with a frequency of 0.4% to 4%.

86. You are developing a care plan for Sally, a 67 y.o. patient with hepatic encephalopathy. Which of the following do you include?

- A. Administering a lactulose enema as ordered.
- B. Encouraging a protein-rich diet.
- C. Administering sedatives, as necessary.
- D. Encouraging ambulation at least four times a day.

Correct Answer: A. Administering a lactulose enema as ordered.

You may administer the laxative lactulose to reduce ammonia levels in the colon. Elevated ammonia levels disrupt the balance of excitatory and inhibitory neurotransmitters, further exacerbating neurological and motor function decline (Felipo, 2013). Patients who have high ammonia levels can experience HE, but in chronic liver failure, a higher ammonia level does not predict a more severe degree of HE.

- **Option B:** Protein restriction is reserved for patients who are severely protein-intolerant or for very short periods for patients with GI bleeding until symptoms resolve (Amodio et al., 2013). Dairy and vegetable proteins are preferred but are usually much less palatable. A fiber-rich diet is recommended to encourage fecal ammonia excretion while avoiding diarrhea that could potentially

induce HE in patients already taking lactulose.

- **Option C:** It is suggested to proceed with caution when prescribing and administering any opioids for pain management because of their high-risk effects on the patient with chronic liver disease like sedation, constipation, and confusion, which are precipitating factors to induce HE. Doses may need to be lower with longer intervals between these doses for patient safety.
- **Option D:** Asterixis (flapping tremor), muscle twitching, and hyperreflexia may be observed in patients with OHE. These can be accompanied by other neuromuscular impairments such as bradykinesia and hyperactive deep tendon reflexes. Bradykinesia means “slow movement” and can present as decreased facial expressions, increased stillness, or difficulty with performing repetitive tasks such as finger tapping.

87. The nurse is teaching basic infant care to a group of first-time parents. The nurse should explain that a sponge bath is recommended for the first 2 weeks of life because:

- A. New parents need time to learn how to hold the baby.
- B. The umbilical cord needs time to separate.
- C. Newborn skin is easily traumatized by washing.
- D. The chance of chilling the baby outweighs the benefits of bathing.

Correct Answer: B. The umbilical cord needs time to separate.

The umbilical cord needs time to dry and fall off before putting the infant in the tub. The first bath will be a sponge bath. Pick a warm room with a flat surface, like a bathroom or kitchen counter, a changing table, or a bed. Cover the surface with a thick towel. Make sure the room temperature is at least 75 degrees Fahrenheit, because babies chill easily.

- **Option A:** Taking the baby away for a bath too soon can interrupt skin-to-skin care, mother-child bonding, and early breastfeeding success. One study showed a 166% increase in hospital breastfeeding success after implementing a 12-hour delay in the baby’s first bath compared to those bathed within the first couple hours.
- **Option C:** Gentle sponge baths are perfect for the first few weeks until the umbilical cord falls off, the circumcision heals, and the navel heals completely. Once the umbilical cord falls off, and the circumcision and the navel are completely healed, it’s time to try a tub bath.
- **Option D:** Although these statements might be important, they are not the primary answer to the question. The World Health Organization (WHO) recommends delaying baby’s first bath until 24 hours after birth—or waiting at least 6 hours if a full day isn’t possible for cultural reasons. Babies who get baths right away may be more likely to become cold and develop hypothermia. The minor stress of an early bath can also make some babies more likely to have a drop in blood sugar (hypoglycemia).

88. A female client is admitted with a diagnosis of delusions of grandeur. This diagnosis reflects a belief that one is:

- A. Being Killed.
- B. Highly famous and important.
- C. Responsible for an evil world.

D. Connected to the client unrelated to oneself.

Correct Answer: B. Highly famous and important

Delusion of grandeur is a false belief that one is highly famous and important. A delusion of grandeur is the false belief in one's own superiority, greatness, or intelligence. People experiencing delusions of grandeur do not just have high self-esteem; instead, they believe in their own greatness and importance even in the face of overwhelming evidence to the contrary. Someone might, for example, believe they are destined to be the leader of the world, despite having no leadership experience and difficulties in interpersonal relationships. Delusions of grandeur are characterized by their persistence. They are not just moments of fantasy or hopes for the future.

- **Option A:** Cotard delusion is a rare condition marked by the false belief that you or your body parts are dead, dying, or don't exist. It usually occurs with severe depression and some psychotic disorders. It can accompany other mental illnesses and neurological conditions. One of the main symptoms of Cotard delusion is nihilism. Nihilism is the belief that nothing has any value or meaning. It can also include the belief that nothing really exists. People with Cotard delusion feel as if they're dead or rotting away. In some cases, they might feel like they've never existed.
- **Option C:** A delusion is a belief that is clearly false and that indicates an abnormality in the affected person's content of thought. The false belief is not accounted for by the person's cultural or religious background or his or her level of intelligence. The key feature of a delusion is the degree to which the person is convinced that the belief is true. A person with a delusion will hold firmly to the belief regardless of evidence to the contrary. Delusions can be difficult to distinguish from overvalued ideas, which are unreasonable ideas that a person holds, but the affected person has at least some level of doubt as to its truthfulness.
- **Option D:** A person with a delusion is absolutely convinced that the delusion is real. Delusions are a symptom of either a medical, neurological, or mental disorder. Delusions may be present in any of the following mental disorders: (1) Psychotic disorders, or disorders in which the affected person has a diminished or distorted sense of reality and cannot distinguish the real from the unreal, including schizophrenia, schizoaffective disorder, delusional disorder, schizophreniform disorder, shared psychotic disorder, brief psychotic disorder, and substance-induced psychotic disorder, (2) Bipolar disorder, (3) Major depressive disorder with psychotic features (4) Delirium, and (5) Dementia.

89. Cole is an emergency nurse who encountered a patient who is a suspected carrier of a biologic agent. Which of these if found in the patient is not classified as a Category A biologic agent?

- A. Bacillus anthracis (anthrax)
- B. Francisella tularensis (tularemia)
- C. Clostridium botulinum toxin (botulism)
- D. Burkholderia pseudomallei (Melioidosis)
- E. Yersinia petis (plague)

Correct Answer: D. Burkholderia pseudomallei (Melioidosis)

Burkholderia pseudomallei (Melioidosis) belongs to the category B priority pathogen. These agents are moderately easy to be transmitted and can result in moderate morbidity rates. Melioidosis is endemic to southeast Asia and northern Australia but has also occurred in South America, Central America, Africa, and the Middle East. Melioidosis may present in an acute form with an incubation period of one day to

three weeks. However, latent melioidosis may not present for decades. Melioidosis often infects those with underlying risk factors such as diabetes, kidney disease, alcohol abuse, and thalassemia, although healthy patients may also contract the disease.

- **Option A:** Although *B. anthracis* is generally an environmentally stable and ubiquitous organism in nature, it has also been recognized as a potential pathogen that could be used as a biological weapon. Anthrax is categorized as a category A priority pathogen by the Centers for Disease Control and Prevention because it is potentially capable of being disseminated as a bioweapon.
- **Option B:** *Francisella tularensis* organism is considered a category A biowarfare agent because of its high rate of infectivity, stability in a liquid environment, relative ease of growth, easy spread, and ability to cause significant illness and morbidity. Because of its ability to remain viable in the environment, this can also lead to repeat outbreaks and relapses that can last many months. The infection must be reported to the local authorities ASAP.
- **Option C:** The Centre for Disease Control and Prevention (CDC) has been monitoring cases of botulism in the United States since 1973. From years 2011 through 2015, an average of 162 annual cases were reported. These primarily included infant botulism at 71% to 88%, followed by foodborne botulism, wound botulism, and botulism of unknown origin.
- **Option E:** This biological agent belongs to Category A. This agent poses the highest risk to national security because they can easily transfer from one person to the other, which can lead to high mortality rates, and necessitate special measures for immediate preparation. Any patient suspected of plague should undergo until cleared. For pneumonic plague, the Centers for Disease Control recommend standard and droplet precautions for 48 hours after the initiation of appropriate antibiotic therapy.

90. The nurse is preparing to teach a client about the prescribed spironolactone (Aldactone) to monitor for adverse effects of the drug. The nurse should instruct the client about which adverse effects? Select all that apply.

- A. Confusion.
- B. Fatigue.
- C. Hypertension.
- D. Leg cramps.
- E. Weakness.
- F. Urinary retention.

Correct Answer: A, B, & E.

Spironolactone (Aldactone) is used to treat hypertension and edema by removing excess fluid. Aldactone is known as a potassium-sparing diuretic. Confusion, fatigue, and weakness are signs of hyperkalemia, an adverse effect of spironolactone.

- **Option A:** One study mentions the following additional adverse effects in order from more to less common: dehydration, hyponatremia, gastrointestinal problems (nausea, vomiting, diarrhea or anorexia), neurological abnormalities (headache, drowsiness, asterixis, confusion, or coma), and skin rashes.
- **Option B:** Spironolactone blocks the hormone aldosterone, which can lead to fatigue. In addition, it can lower the blood pressure, and if this drop is sudden, the client may feel tired.

- **Option C:** Spironolactone is used to treat hypertension, so it would not produce this effect. Spironolactone is recommended in patients with resistant hypertension which is defined as uncontrolled blood pressure despite three antihypertensive drug combinations including a diuretic. Spironolactone is a mineralocorticoid receptor antagonist and causes anti-androgenic side effects.
- **Option D:** Leg cramps are an adverse effect of hypokalemia. Hyperkalemia is an adverse effect of spironolactone. This drug is contraindicated in patients with hyperkalemia and in those at increased risk of developing hyperkalemia.
- **Option E:** Symptoms of hypokalemia may include attacks of severe muscle weakness, eventually leading to paralysis and possibly respiratory failure. Muscular malfunction may result in paralysis of the bowel, low blood pressure, muscle twitches and mineral deficiencies (tetany).
- **Option F:** Urinary retention is a side effect of anticholinergics. Medications with anticholinergic properties, such as tricyclic antidepressants, cause urinary retention by decreasing bladder detrusor muscle contraction.

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

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

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

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

92. After an abdominal resection for colon cancer, Madeline returns to her room with a Jackson-Pratt drain in place. The purpose of the drain is to:

- A. Irrigate the incision with a saline solution.
- B. Prevent bacterial infection of the incision.
- C. Measure the amount of fluid lost after surgery.
- D. Prevent accumulation of drainage in the wound.

Correct Answer: D. Prevent accumulation of drainage in the wound.

A Jackson-Pratt drain promotes wound healing by allowing fluid to escape from the wound. JP drains are often placed in wounds during surgery to prevent the collection of fluid underneath the incision site. This is a closed, air-tight drainage system which operates by self-suction. The drain(s) promote healing

by keeping excess pressure off the incision and decreasing the risk of infection.

- **Option A:** JP drains do not irrigate the incision with saline solution. The drain is sutured (stitched) in place at the skin at the site of insertion to promote stability. Clots in the tubing are expected as long as they do not interfere with the drainage collection. The drain(s) is left in place until the drainage is approximately 30 cc's or less (or 30 ml's, or 1 ounce) per drain for each of 2 consecutive days.
- **Option B:** It does not prevent bacterial infection. After surgery, there is continued oozing and shedding of cells and bodily fluids at the surgical site. The Jackson Pratt drain removes fluid and this removal of fluid speeds healing.
- **Option C:** The drain will automatically suction fluid out when the bulb is compressed. The bulb has to be compressed very well and the drain tab has to be closed in order for the suction to work. When the bulb can maintain its compressed shape, it is a sign that suction is in effect.

93. A police officer brings in a homeless client to the ER. A chest x-ray suggests he has TB. The physician orders an intradermal injection of 5 tuberculin units/0.1 ml of tuberculin purified derivative. Which needle is appropriate for this injection?

- A. 5/8" to 1/2" 25G to 27G needle.
- B. 1" to 3" 20G to 25G needle.
- C. 1/2" to 3/8" 26 or 27G needle.
- D. 1" 20G needle.

Correct Answer: C. 1/2" to 3/8" 26 or 27G needle.

Intradermal injections like those used in TN skin tests are administered in small volumes (usually 0.5 ml or less) into the outer skin layers to produce a local effect. A TB syringe with a 1/2" to 3/8" 26G or 27G needle should be inserted about 1/8" below the epidermis.

- **Option A:** For neonates (first 28 days of life) and preterm infants, a 5/8" needle is recommended if the skin is stretched flat between the thumb and forefinger and the needle is inserted at a 90-degree angle to the skin.
- **Option B:** The deltoid muscle is most often used as the site for IM injections in adults. Needle length is usually 1"-1 1/2", 22-25 gauge, but a longer or shorter needle may be needed depending on the patient's weight. An alternate site for IM injection in adults is the anterolateral thigh muscle. The needle length and gauge are the same as when the deltoid muscle is used, i.e., 1"-1 1/2" length, 22-25 gauge.
- **Option D:** For adults weighing less than 130 lbs (60 kg), use of a 1" needle is recommended. However, a 5/8" needle may be used for IM injection in the deltoid muscle if the fatty tissue overlying the deltoid muscle is flattened (i.e., not bunched between thumb and fingers during the injection) and the needle is inserted at a 90-degree angle to the skin.

94. A nurse is preparing to care for a five (5)-year-old who has been placed in traction following a fracture of the femur. The nurse plans care, knowing that, which of the following is the most appropriate activity for this child?

- A. Large picture books

- B. A radio
- C. Crayons and coloring book
- D. A sports video

Correct Answer: C. Crayons and coloring book

In the preschooler, play is simple and imaginative and includes activities such as crayons and coloring books, puppets, felt and magnetic boards, and Play-Doh. They spend much of their playtime in fantasy activity, which tends to be more cooperative than play that's focused on toys or games.

- **Option A:** Large picture books are most appropriate for the infant where they start to show interest in seeing books with pictures. Regularly read books to the baby, pointing to the pictures when reading and engaging her by changing voices for different characters. Invite the little one to participate by encouraging her to laugh or act surprised by the story, touch the pictures, and turn the pages.
- **Option B:** A radio is most appropriate for the adolescent. Analysis of teenage behavior during play shows that their behavior mimics and practices being an adult, which is a positive for their development. However, it is still important as a parent to hold a discussion with your child to set clear boundaries e.g. controls on the internet and phones, so that they can grow and explore their identity but still within a safe environment.
- **Option D:** Sport is a great way of keeping an element of play in the life of a young adult, and if they keep engaging in sport through their adolescence they will be more likely to be active throughout the rest of adulthood.

95. An elderly client with Alzheimer's disease becomes agitated and combative when a nurse approaches to help with morning care. The most appropriate nursing intervention in this situation would be to:

- A. Tell the client family that it is time to get dressed.
- B. Obtain assistance to restrain the client for safety.
- C. Remain calm and talk quietly to the client.
- D. Call the doctor and request an order for sedation.

Correct Answer: C. Remain calm and talk quietly to the client.

Maintaining a calm approach when intervening with an agitated client is extremely important. Divert attention to a client when agitated or dangerous behaviors like getting out of bed by climbing the fence bed. Eliminate or minimize sources of hazards in the environment. Maintain security by avoiding a confrontation that could improve the behavior or increase the risk for injury.

- **Option A:** Telling the client firmly that it is time to get dressed may increase his agitation, especially if the nurse touches him. Assess the degree of impaired ability of competence, emergence of impulsive behavior, and a decrease in visual perception. Impairment of visual perception increases the risk of falling. Identify potential risks in the environment and heighten awareness so that caregivers are more aware of the danger.
- **Option B:** Restraints are a last resort to ensure client safety and are inappropriate in this situation. Assess the patient's surroundings for hazards and remove them. AD decreases awareness of potential dangers, and disease progression coupled with a hazardous environments that could lead to accidents. Help the people closest to identify the risk of hazards that may arise. An impaired cognitive and perceptual disorder are beginning to experience the trauma as a result of the inability

to take responsibility for basic security capabilities or evaluating a particular situation.

- **Option D:** Sedation should be avoided, if possible because it will interfere with CNS functioning and may contribute to the client's confusion. During the middle and later stages of AD, the patient must not be left unattended. Patients with AD have impaired thinking and cannot rationalize cause and effect. This can result in wandering outside without clothes on, exposure to extreme cold or heat, and may cause dehydration in the long run.

96. Which behaviors would be exhibited during the letting-go phase of maternal role adaptation. Select all that apply.

- A. Emergence of the family unit.
- B. Dependent behaviors.
- C. Sexual intimacy continues.
- D. Defining one's individual roles.
- E. Being talkative and excited about becoming a mother.

Correct Answer: Answer: A, C, & D

The emergence of family unit, sexual intimacy relationship continuing and defining one's individual roles represent interdependent behaviors associated with the letting-go phase. During the letting go phase, the woman finally accepts her new role and gives up her old roles like being a childless woman or just a mother of one child.

- **Option B:** Dependent behaviors are exhibited in the taking-in phase. The taking-in phase is the time of reflection for the woman because within the 2 to 3 day period, the woman is passive.
- **Option E:** Being talkative and excited about becoming a mother represents the taking-hold phase and is an example of dependent-independent behaviors. The woman starts to initiate actions on her own and makes decisions without relying on others.

97. On auscultation, which finding suggests a right pneumothorax?

- A. Bilateral inspiratory and expiratory crackles.
- B. Absence of breaths sound in the right thorax.
- C. Inspiratory wheezes in the right thorax.
- D. Bilateral pleural friction rub.

Correct Answer: B. Absence of breaths sound in the right thorax

In pneumothorax, the alveoli are deflated and no air exchange occurs in the lungs. Therefore, breath sounds in the affected lung field are absent. A pneumothorax is defined as a collection of air outside the lung but within the pleural cavity. It occurs when air accumulates between the parietal and visceral pleura inside the chest. The air accumulation can apply pressure on the lung and make it collapse. The degree of collapse determines the clinical presentation of pneumothorax. None of the other options are associated with pneumothorax.

- **Option A:** Bilateral crackles may result from pulmonary congestion. Pneumonia is an infection in the lungs. It may be in one or both lungs. The infection causes air sacs in the lungs to become pus-filled and inflamed. This causes a cough, difficulty breathing, and crackles. Pneumonia may be

mild or life-threatening.

- **Option C:** Inspiratory wheezes may signal asthma. Asthma is a heterogeneous syndrome characterized by variable, reversible airway obstruction and abnormally increased responsiveness (hyperreactivity) of the airways to various stimuli. The syndrome is characterized by wheezing, chest tightness, dyspnea, and/or cough, and results from widespread contraction of tracheobronchial smooth muscle (bronchoconstriction), hypersecretion of mucus, and mucosal edema, all of which narrow the caliber of the airways.
- **Option D:** A pleural friction rub may indicate pleural inflammation. Auscultation of a pleural friction rub can occur when the normally smooth surfaces of the visceral and parietal pleura become roughened by inflammation. A pleural friction rub is an adventitious breath sound heard on auscultation of the lung. The pleural rub sound results from the movement of inflamed and roughened pleural surfaces against one another during movement of the chest wall. This sound is non-musical, and described as “grating,” “creaky,” or “the sound made by walking on fresh snow.”

98. A licensed practical nurse is planning the client assignments for the day. Which of the following is the most appropriate assignment for the nursing assistant? Select all that apply.

- A. A client who requires wound irrigation
- B. A client who requires frequent ambulation
- C. A client who is receiving continuous tube feedings
- D. A client who requires frequent vital signs after a cardiac catheterization
- E. A client who needs to be turned or repositioned in bed

Correct Answer: B & E.

The nurse must determine the most appropriate assignment on the basis of the skills of the staff member and the needs of the client.

- **Option A:** Wound irrigations and tube feedings are not performed by unlicensed personnel. The staff members' levels of education, knowledge, past experiences, skills, abilities, and competencies are also evaluated and matched with the needs of all of the patients in the group of patients that will be cared for.
- **Option B:** In general, simple, routine tasks such as making unoccupied beds, supervising patient ambulation, assisting with hygiene, and feeding meals can be delegated. But if the patient is morbidly obese, recovering from surgery, or frail, work closely with the UAP or perform the care yourself.
- **Option C:** Care of the client receiving continuous tube feedings should be delegated to another registered nurse because it requires monitoring. Scopes of practice are also considered prior to the assignment of care. All states have scopes of practice for advanced nurse practitioners, registered nurses, licensed practical nurses and unlicensed assistive personnel like nursing assistants and patient care technicians.
- **Option D:** The client who had a cardiac catheterization will require specific monitoring in addition to that of the vital signs. Based on the basic entry educational preparation differences among these members of the nursing team, care should be assigned according to the level of education of the particular team member.

- **Option E:** In this case, the most appropriate assignment for a nursing assistant would be to care for the client who requires client repositioning. The nursing assistant is skilled in these tasks.

99. The nurse is sure to implement strategies to reduce noise on the unit particularly on the _____ night of admission when the client is especially sensitive to hospital noises.

- A. 1st
- B. 2nd
- C. 3rd
- D. 4th

Correct Answer: A. 1st

The client is most sensitive to noise in the hospital setting the first night because everything is new. This represents sensory overload, which interferes with sleep and decreases rapid eye movement (REM) as well as total sleep time. Place the client in a room away from any distractions or noise such as the nursing station. The nursing station is often the center of noise and activity.

- **Option B:** Eliminate any activities that are not important. This measure facilitates minimal interruption in sleep or rest. Render bedtime nursing care such as back rub and other relaxation techniques. These kinds of activities facilitate relaxation and promote the onset of sleep.
- **Option C:** Educate the client about their sleep requirements. Most people need at least six hours of sleep for normal memory and brain function. Attempt to allow for sleep cycles of at least 90 minutes. Research shows that 60 to 90 minutes are necessary to complete one sleep cycle and that completion of an entire sleep cycle is beneficial.
- **Option D:** Introduce relaxing activities such as a warm bath, calm music, reading a book, and relaxation exercises before bedtime. These activities provide relaxation and distraction to prepare the mind and body for sleep. Encourage daytime physical activities but instruct the patient to avoid strenuous activities before bedtime.

100. The following are considered steps in the qualitative research process, A. Literature review?

- A. Literature review
- B. Hypothesis
- C. Sample
- D. Data collection

Correct Answer: B. Hypothesis

A hypothesis is the tool of quantitative studies and is only found in such studies. A hypothesis states the predictions about what the research will find. It is a tentative answer to a research question that has not yet been tested. A hypothesis is not just a guess — it should be based on existing theories and knowledge. It also has to be testable, which means the researcher can support or refute it through scientific research methods (such as experiments, observations, and statistical analysis of data).

- **Option A:** A literature review is a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. The review should enumerate, describe, summarize, objectively evaluate and clarify this previous research.
- **Option C:** In research terms, a sample is a group of people, objects, or items that are taken from a larger population for measurement. The sample should be representative of the population to ensure that we can generalize the findings from the research sample to the population as a whole.
- **Option D:** This step revolves around obtaining the information that the researcher will need to solve the issue or problem identified. Data collection involves a field force or staff that operates either in the field, as in the case of personal interviewing (in-home, mall intercept, or computer-assisted personal interviewing), from an office by telephone (telephone or computer-assisted telephone interviewing), or through the mail (traditional mail and mail panel surveys with recruited households).