

# Kevin's Review - 100 NCLEX Practice Questions

**1. Because of difficulties with hemodialysis, peritoneal dialysis is initiated to treat a female client's uremia. Which finding signals a significant problem during this procedure?**

- A. Potassium level of 3.5 mEq/L
- B. Hematocrit (HCT) of 35%
- C. Blood glucose level of 200 mg/dl
- D. White blood cell (WBC) count of 20,000/mm<sup>3</sup>

**Correct Answer: D. White blood cell (WBC) count of 20,000/mm<sup>3</sup>**

An increased WBC count indicates infection, probably resulting from peritonitis, which may have been caused by insertion of the peritoneal catheter into the peritoneal cavity. Peritonitis can cause the peritoneal membrane to lose its ability to filter solutes; therefore, peritoneal dialysis would no longer be a treatment option for this client.

- **Option A:** A potassium level of 3.5 mEq/L can be treated by adding potassium to the dialysate solution. People on peritoneal dialysis (PD) are usually encouraged to eat more potassium-rich foods than people dialyzing with traditional in-center hemodialysis. PD is performed daily and as a result, the body does not have as much potassium buildup.
- **Option B:** An HCT of 35% is lower than normal. However, in this client, the value isn't abnormally low because of the daily blood samplings. A lower HCT is common in clients with chronic renal failure because of the lack of erythropoietin.
- **Option D:** Hyperglycemia occurs during peritoneal dialysis because of the high glucose content of the dialysate; it's readily treatable with sliding-scale insulin. Since PD uses sugar-based solutions (glucose) to perform dialysis, people with diabetes starting PD often see a rise in their blood sugar levels. Very high sugar levels (greater than 300 mg/dl) can occur in PD patients, but it is uncommon for this to cause symptoms.

**2. Nurse Betina should begin screening for lead poisoning when a child reaches which age?**

- A. 3 months
- B. 12 months
- C. 24 months
- D. 30 months

**Correct Answer: B. 12 months**

The nurse should start screening a child for lead poisoning at age 12 months and perform repeat screening at age 24, 30, and 36 months. The Advisory Committee on Childhood Lead Poisoning Prevention recommends that all children enrolled in Medicaid be screened for elevated blood lead levels at 12 and 24 months of age or at 36 to 72 months of age if they have not previously been screened.

- **Option A:** High-risk infants, such as premature infants and formula-fed infants not receiving iron supplementation, should be screened for iron deficiency anemia at 6 months. Early use and overuse of cow's milk exacerbates existing causes of iron deficiency in infants. Less often, the problem is due to a severe blood loss or something interfering with the body's ability to absorb iron,

such as a medication the infant is taking or a chronic illness involving the stomach or intestines.

- **Option C:** The American Academy of Pediatrics (AAP) recommends that a risk assessment be performed for lead exposure at well-child visits at 6 months, 9 months, 12 months, 18 months, 24 months, and at 3, 4, 5, and 6 years of age. A blood lead level test should be done only if the risk assessment comes back positive.
- **Option D:** The American Academy of Pediatrics (AAP), as part of an expert committee representing several national healthcare organizations, makes the following recommendation: routine obesity screening of children aged 2 years old or older should include a yearly assessment of weight. BMI changes should be monitored by calculating and plotting BMI on the Centers for Disease Control and Prevention (CDC) growth charts at every healthcare visit.

**3. Rho (D) immune globulin (RhoGAM) is prescribed for a woman following delivery of a newborn infant and the nurse provides information to the woman about the purpose of the medication. The nurse determines that the woman understands the purpose of the medication if the woman states that it will protect her next baby from which of the following?**

- A. Being affected by Rh incompatibility.
- B. Having Rh-positive blood.
- C. Developing a rubella infection.
- D. Developing physiological jaundice.

**Correct Answer: A. Being affected by Rh incompatibility.**

Rh incompatibility can occur when an Rh-negative mom becomes sensitized to the Rh antigen. Sensitization may develop when an Rh-negative woman becomes pregnant with a fetus who is Rh-positive. Administration of Rho(D) immune globulin prevents the woman from developing antibodies against Rh-positive blood by providing passive antibody protection against the Rh antigen.

- **Option B:** During pregnancy and at delivery, some of the baby's Rh-positive blood can enter the maternal circulation, causing the woman's immune system to form antibodies against Rh-positive blood.
- **Option C:** Rubella can be prevented with MMR vaccine. This protects against three diseases: measles, mumps, and rubella. CDC recommends children get two doses of MMR vaccine, starting with the first dose at 12 through 15 months of age, and the second dose at 4 through 6 years of age. Teens and adults also should be up to date on their MMR vaccination.
- **Option D:** The best preventive of infant jaundice is adequate feeding. Breast-fed infants should have eight to 12 feedings a day for the first several days of life. Formula-fed infants usually should have 1 to 2 ounces (about 30 to 60 milliliters) of formula every two to three hours for the first week.

**4. Which of the following is being used when the mother of a hospitalized child calls the student nurse and states, "You idiot, you have no idea how to care for my sick child"?**

- A. Displacement
- B. Projection

- C. Repression
- D. Psychosis

**Correct Answer: B. Projection**

The mother is using projection, the defense mechanism used when a person attributes his or her own undesirable traits to another.

- **Option A:** Displacement is the transfer of emotion onto an unrelated object, such as when the mother would kick a chair or bang the door shut.
- **Option C:** Repression is the submerging of painful ideas into the unconscious. Repression is an unconscious mechanism employed by the ego to keep disturbing or threatening thoughts from becoming conscious.
- **Option D:** Psychosis is a state of being out of touch with reality. During a period of psychosis, a person's thoughts and perceptions are disturbed and the individual may have difficulty understanding what is real and what is not. Symptoms of psychosis include delusions (false beliefs) and hallucinations (seeing or hearing things that others do not see or hear).

**5. A client with chronic schizophrenia who takes neuroleptic medication is admitted to the psychiatric unit. Nursing assessment reveals rigidity, fever, hypertension, and diaphoresis. These findings suggest which life-threatening reaction:**

- A. Tardive dyskinesia
- B. Dystonia
- C. Neuroleptic malignant syndrome
- D. Akathisia

**Correct Answer: C. Neuroleptic malignant syndrome**

The client's signs and symptoms suggest neuroleptic malignant syndrome, a life-threatening reaction to neuroleptic medication that requires immediate treatment. Neuroleptic malignant syndrome (NMS) is a life-threatening syndrome associated with the use of dopamine-receptor antagonist medications or with rapid withdrawal of dopaminergic medications. NMS has been associated with virtually every neuroleptic agent but is more commonly reported with the typical antipsychotics like haloperidol and fluphenazine. Classic clinical characteristics include mental status changes, fever, muscle rigidity, and autonomic instability. While uncommon, NMS remains an important part of the differential diagnosis of fever and mental status changes because it requires early diagnosis and treatment to prevent significant mortality and death.

- **Option A:** Tardive dyskinesia causes involuntary movements of the tongue, mouth, facial muscles, and arm and leg muscles. Tardive dyskinesia (TD) is a syndrome which includes a group of iatrogenic movement disorders caused due to a blockade of dopamine receptors. The movement disorders include akathisia, dystonia, buccolingual stereotypy, myoclonus, chorea, tics and other abnormal involuntary movements which are commonly caused by the long-term use of typical antipsychotics.
- **Option B:** Dystonia is characterized by cramps and rigidity of the tongue, face, neck, and back muscles. Dystonia is defined by involuntary maintained contraction of agonist and antagonist muscles yielding abnormal posturing, twisting and repetitive movements, or tremulous and can be initiated or worsened by attempted movement. Dystonia is a dynamic disorder that changes in

severity based on the activity and posture. Dystonia may assume a pattern of overextension or over-flexion of the hand, inversion of the foot, lateral flexion or retroflexion of the head, torsion of the spine with arching and twisting of the back, forceful closure of the eyes, or a fixed grimace. It may come to an end when the body is in action and during sleep.

- **Option D:** Akathisia causes restlessness, anxiety, and jitteriness. Akathisia is defined as an inability to remain still. It is a neuropsychiatric syndrome that is associated with psychomotor restlessness. The individual with akathisia will generally experience an intense sensation of unease or an inner restlessness that usually involves the lower extremities. This results in a compulsion to move. In most cases the movement is repetitive. The individual may cross, uncross, swing, or shift from one foot to the other. To the observer, this may appear as a persistent fidget.

**6. The nurse is assigned to care for a female client with herpes zoster (Shingles). Which of the following characteristics would the nurse expect to note when assessing the lesions of this infection?**

- A. Clustered skin vesicles
- B. A generalized body rash
- C. Small blue-white spots with a red base
- D. Cutaneous lesions on the hands, feet, and buttocks

**Correct Answer: A. Clustered skin vesicles**

The primary lesion of herpes zoster is a vesicle. The classic presentation is grouped vesicles on an erythematous base along a dermatome. Because the lesions follow nerve pathways, they do not cross the midline of the body.

- **Option B:** Generalized rashes are normally the result of skin inflammation that is observed in eczema and atopic dermatitis.
- **Option C:** Small blue-white spot with a red base is a characteristic of a Koplik spot that is seen in measles.
- **Option D:** Cutaneous lesions on the hands, feet, and buttocks are signs of Hand-foot-and-mouth disease (HFMD).

**7. The home health nurse visits the Cox family 2 weeks after hospital discharge. She observes that the umbilical cord has dried and fallen off. The area appears healed with no drainage or erythema present. The mother can be instructed to:**

- A. cover the umbilicus with a band-aid.
- B. continue to clean the stump with alcohol for one week.
- C. apply an antibiotic ointment to the stump.
- D. give him a bath in an infant tub now.

**Correct Answer: D. give him a bath in an infant tub now.**

- **Option D:** The baby's umbilical cord stump dries out and eventually falls off — usually within one to three weeks after birth. After the cord has fallen off, the navel will gradually heal. It's normal for the center to look red at the point of separation. Sponge baths are recommended for a few more days

or tub baths will be fine.

**8. Alendronate (Fosamax) is given to a client with osteoporosis. The nurse advises the client to?**

- A. Take the medication in the morning with meals.
- B. Take the medication before bedtime.
- C. Take the medication with a glass of water after rising in the morning.
- D. Take the medication during lunch.

**Correct Answer: C. Take the medication with a glass of water after rising in the morning.**

Alendronate needs to be taken with a glass of water after rising in the morning in order to prevent gastrointestinal effects.

- **Options A and D:** Alendronate is given on an empty stomach since food can affect gastrointestinal absorption.
- **Option B:** Alendronate should not be taken before bedtime because the medication may not work properly and it can also cause damage to the esophagus.

**9. In addition to analgesia, narcotic effects include:**

- A. Euphoria, diarrhea, increased respirations
- B. Euphoria, miosis, nausea and vomiting
- C. Respiratory depression, increased blood pressure
- D. Dependence, seizures, muscle spasms

**Correct Answer: B. Euphoria, miosis, nausea, and vomiting**

These are the effects that often occur with the administration of narcotics. Common side effects of opioid administration include sedation, dizziness, nausea, vomiting, constipation, physical dependence, tolerance, and respiratory depression.

- **Option A:** Constipation (not diarrhea) noted during the administration of narcotics. The most common side effects of opioid usage are constipation (which has a very high incidence) and nausea. These 2 side effects can be difficult to manage and frequently tolerance to them does not develop; this is especially true for constipation. They may be severe enough to require opioid discontinuation and contribute to under-dosing and inadequate analgesia.
- **Option C:** Decreased respirations (not increased) are noted in narcotic administration. Decreased blood pressure results from narcotic administration. Less common side effects may include delayed gastric emptying, hyperalgesia, immunologic and hormonal dysfunction, muscle rigidity, and myoclonus.
- **Option D:** Narcotics do not cause the effects in choice D at all. Physical dependence and addiction are clinical concerns that may prevent proper prescribing and in turn inadequate pain management.

**10. A 16-year-old girl has returned home following hospitalization for treatment of anorexia nervosa. The parents tell the family nurse performing a home visit**

***that their child has always done everything to please them and they cannot understand her current stubbornness about eating. The nurse analyzes the family situation and determines it is characteristic of which relationship style?***

- A. Differentiation
- B. Disengagement
- C. Enmeshment
- D. Scapegoating

**Correct Answer: C. Enmeshment**

Enmeshment is a fusion or over involvement among family members whereby the expectation exists that all members think and act alike. The child who always acts to please her parents is an example of how enmeshment affects development in many cases, a child who develops anorexia nervosa exerts control only in the area of eating behavior. Enmeshed families are families in which the individual is expected to give up their own needs and desires. In enmeshed families, there is a total lack of boundaries, which usually leads to codependent relationships and a dysfunctional family.

- **Option A:** Differentiation is the process of becoming an individual developing autonomy while staying in contact with the family system. "The ability to be in emotional contact with others yet still autonomous in one's own emotional functioning is the essence of the concept of differentiation." (Kerr & Bowen. 1988) "Differentiation is a product of a way of thinking that translates into a way of being. Such changes are reflected in the ability to be in emotional contact with a difficult, emotionally charged problem and not feel compelled to preach about what others "should" do, not rush in to "fix" the problem and not pretend to be detached by emotionally insulating oneself." (Kerr & Bowen 1988).
- **Option B:** The lines of responsibility and authority are strictly enforced and must be followed; however, they are not necessarily communicated or explained. Access to all family members, especially parents or those in authority, is limited. Appropriate communication and expression across subsystems (e.g., children to parents) is stifled.
- **Option D:** In Family Systems theory, scapegoating in a dysfunctional family system is understood to be fueled by unconscious processes whereby the family displaces their own collective psychological difficulties and complexes onto a specific family member. 'The Scapegoat' is one of the roles 'assigned' to a child growing up in a dysfunctional family system (I say more about this process in my answer to question 2). The scapegoating typically (but not always) begins in childhood and often continues into and throughout adulthood, although the role may be passed around to different family members at times.

***11. Which of the following classes of medications maximizes cardiac performance in clients with heart failure by increasing ventricular contractility?***

- A. Beta-adrenergic blockers
- B. Calcium channel blockers
- C. Diuretics
- D. Inotropic agents

**Correct Answer: D. Inotropic agents**

Inotropic agents are administered to increase the force of the heart's contractions, thereby increasing ventricular contractility and ultimately increasing cardiac output. Inotropic agents such as milrinone, digoxin, dopamine, and dobutamine are used to increase the force of cardiac contractions. Intravenous positive inotropic agents should only be used in inpatient settings — and then only in patients who manifest signs and symptoms of low cardiac output syndrome (volume overload with evidence of organ hypoperfusion).

- **Option A:** The catecholamines, epinephrine, and norepinephrine bind to B1 receptors and increase cardiac automaticity as well as conduction velocity. B1 receptors also induce renin release, and this leads to an increase in blood pressure. In contrast, binding to B2 receptors causes relaxation of the smooth muscles along with increased metabolic effects such as glycogenolysis.
- **Option B:** Calcium channel antagonists block the inward movement of calcium by binding to the L-type “long-acting” voltage-gated calcium channels in the heart, vascular smooth muscle, and pancreas. The non-dihydropyridines have inhibitory effects on the sinoatrial (SA), and atrioventricular (AV) nodes are resulting in a slowing of cardiac conduction and contractility.
- **Option C:** They act by diminishing sodium reabsorption at different sites in the nephron, thereby increasing urinary sodium and water losses. The second class of diuretics, sometimes termed aquaretics, instead inhibit water reabsorption by blocking vasopressin receptors along the connecting tubule and collecting duct.

**12. The following medications will likely be prescribed for the client except:**

- A. Prozac
- B. Tofranil
- C. Parnate
- D. Zyprexa

**Correct Answer: D. Zyprexa**

This is an antipsychotic. Olanzapine is a second-generation (atypical) antipsychotic medication. Olanzapine also has approval for use with fluoxetine, a selective serotonin reuptake inhibitor (SSRI), in patients with episodes of depression associated with bipolar disorder type 1 and treatment-resistant depression. It is important to note that olanzapine is not FDA approved for patients under the age of 13, and the combination of olanzapine with fluoxetine does not have approval for patients under the age of 10.

- **Option A:** Prozac is a SSRI antidepressant. Fluoxetine has FDA-approval for major depressive disorder (age eight and older), obsessive-compulsive disorder (age seven and older), panic disorder, bulimia, binge eating disorder, premenstrual dysphoric disorder, bipolar depression (as an adjunct with olanzapine also known as Symbyax), and treatment-resistant depression when used in combination with olanzapine.
- **Option B:** Tofranil antidepressant belongs to the Tricyclic group. Imipramine is a tertiary amine tricyclic antidepressant. Tricyclic antidepressants (TCAs) had been approved by the Food and Drug Administration (FDA) as antidepressants in the 1950s. Although it is FDA approved for the treatment of depression, it is a second-line treatment notably in severe depression with melancholic and atypical features, due to its undesirable side effects and due to its toxicity in overdose.
- **Option C:** Parnate is a MAOI antidepressant. The main FDA-approved indication of tranlycypromine is for major depressive disorder without melancholia. The non-FDA-approved indications for this medication include treatment-resistant depression, treatment-resistant social anxiety disorder, treatment-resistant panic disorder, and atypical depression.

consists of hyperphagia, hypersomnia, rejection sensitivity, and leaden paralysis accompanying the depression.

**13. Norepinephrine (Levophed) is contraindicated in which of the following conditions?**

- A. Hypovolemic shock.
- B. Neurogenic shock.
- C. Blood pressures above 80-100 mmHg (systolic).
- D. Decreased renal perfusion.

**Correct Answer: A. Hypovolemic shock.**

Norepinephrine (Levophed) is contraindicated in hypovolemia. Norepinephrine use may be contraindicated to treat hypotension that is likely secondary to cardiogenic mechanisms. Additionally, for hypotension primarily related to hypovolemia, norepinephrine is probably not the best agent. The FDA does state that its use could be a consideration in low volume states, but only as an emergency measure for maintaining coronary or cerebral perfusion pressure while waiting for appropriate volume resuscitation.

- **Option B:** Neurogenic shock is an indication for norepinephrine use. Norepinephrine generally has more predictive pharmacologic properties than other alpha agonists. This predictive quality, in combination with some of its beta-agonism (which improves cardiac function relative to pure alpha agonists), makes norepinephrine a widely used vasoactive agent. It is commonly utilized in intensive care units to treat hypotension secondary to distributive shock.
- **Option C:** Norepinephrine is given to maintain a systolic blood pressure of 80-100 mmHg. Norepinephrine is a sympathomimetic amine derived from tyrosine. It is structurally identical to epinephrine but differs in that it lacks a methyl group on its nitrogen atom. This difference makes it primarily agonistic at alpha1 and beta1 receptors, with little-to-no beta2 or alpha2 activity. At low doses (less than 2 mcg/min), the beta1 effects may be more pronounced and potentially increase cardiac output.
- **Option D:** Decreased renal perfusion is an adverse reaction. The most common adverse effects of norepinephrine relate directly to the activation of alpha1 receptors. That is, excessive vasoconstriction can result in decreased end-organ perfusion, which is primarily caused by infusions of norepinephrine without appropriately treating hypovolemia; this can be detrimental as most patients require infusions of norepinephrine already have poor oxygen delivery or utilization.

**14. A 3-year-old child was brought to the pediatric clinic after the sudden onset of findings that include irritability, thick muffled voice, croaking on inspiration, hot to touch, sit leaning forward, tongue protruding, drooling, and suprasternal retractions. What should the nurse do first?**

- A. Prepare the child for X-ray of upper airways
- B. Examine the child's throat
- C. Collect a sputum specimen
- D. Notify the healthcare provider of the child's status



**Correct Answer: D. Notify the healthcare provider of the child's status**

These findings suggest a medical emergency and may be due to epiglottitis. Any child with an acute onset of an inflammatory response in the mouth and throat should receive immediate care.

- **Option A:** If epiglottitis is seriously considered, no imaging studies are required. In less-clear cases, imaging studies are occasionally helpful in establishing the diagnosis or excluding epiglottitis.
- **Option B:** Examining the child's throat should not be attempted because it may compromise respiratory effort.
- **Option C:** There are no indications for the collection of sputum specimens.

**15. Nurse Imee is implementing a teaching plan for a group of adolescents regarding the causes of acne. Which of the following is an appropriate nursing statement regarding the cause of this disorder?**

- A. "Acne is caused by oily skin"
- B. "The actual cause is not known"
- C. "Acne is caused by eating chocolate"
- D. "Acne is caused as a result of exposure to heat and humidity"

**Correct Answer: B. "The actual cause is not known"**

There are a lot of theories regarding the causes of acne. Some of these ideas are scientifically explained, but many aren't. For example, people sometimes say that not washing properly contributes to acne or makes it worse. There is no scientific proof that this is true. But claims like this can make teenagers feel guilty because they believe they are to blame for their acne.

- **Options A & C:** Oily skin or the consumption of foods such as chocolate, nuts, or fatty foods are not causes of acne.
- **Option D:** Exacerbations that coincide with the menstrual cycle result from hormonal activity. Heat, humidity, and excessive perspiration may play a role in exacerbating acne but do not cause it.

**16. Which of the following is the appropriate meaning of CBR?**

- A. Cardiac Board Room
- B. Complete Bathroom
- C. Complete Bed Rest
- D. Complete Board Room

**Correct Answer: C. Complete Bed Rest**

CBR means complete bed rest. For more abbreviations, please see this post. Standardization and uniform use of codes, symbols, and abbreviations can improve communication and understanding between health care practitioners, leading to safer and more effective care for patients.

- **Option A:** When developing lists, hospitals need to ensure that abbreviations on the approved list are not also on the do-not-use list, and vice versa. In addition, abbreviations can have only one meaning within the entire organization—for example, the abbreviation NKDA could mean "no

known drug allergies,” or it could mean “nonketotic diabetic acidosis,” but it cannot have both meanings in an organization.

- **Option B:** Appropriate use of abbreviations is particularly important. Numerous studies have focused on health care practitioners’ understanding and interpretation of abbreviations in medical documents, such as medical records, discharge summaries, and medication orders. Findings indicate that it is not uncommon for practitioners to have difficulty understanding the abbreviations used in their hospitals.
- **Option D:** To prevent misunderstandings and potential risks to patient safety, requires hospitals to establish lists for approved and do-not-use abbreviations and monitor for appropriate abbreviation use. There are resources for identifying abbreviations for the do-not-use list, such as the Institute for Safe Medication Practices (ISMP), which publishes a list of dangerous abbreviations not to be used due to frequent misinterpretation and associated medication errors.

**17. A 50-year-old female patient is admitted to the hospital with recurrent episodes of upper abdominal pain and nausea. Upon evaluation, the gastroenterologist finds out that the pain is localized to the epigastric region and suspects gastritis or a peptic ulcer. To get a clearer picture, an endoscopic examination of the stomach is scheduled. The patient inquires about the areas of the stomach that will be inspected, and the medical team discusses the different regions of the stomach. Seizing this as an instructive moment, the nursing instructor asks the students a related question. In light of the patient’s upcoming endoscopic evaluation and the discussion of stomach anatomy, which of the following options should the instructor ask students to identify as NOT correctly matched with its description regarding stomach structures?**

- A. Cardiac region: the area closest to the small intestine
- B. Fundus: the most superior portion of the stomach
- C. Pyloric opening: opening from the stomach into the small intestine
- D. Body: the largest portion of the stomach

**Correct Answer: A. Cardiac region: the area closest to the small intestine**

This is incorrect. The cardiac region, or cardia, is the area surrounding the entrance of the esophagus into the stomach. It is not the area closest to the small intestine; that description would apply to the pyloric region.

- **Option B:** This is correct. The fundus is the dome-shaped uppermost part of the stomach. It lies superior to the cardiac region and the body of the stomach.
- **Option C:** This is correct. The pyloric opening is the exit from the stomach, leading into the small intestine (specifically, the duodenum). The pyloric sphincter controls the passage of stomach contents into the small intestine.
- **Option D:** This is correct. The body is the central and largest part of the stomach. It lies between the fundus and the pyloric region.

**18. She wants to ensure that every task is carried out as planned. Which of the following tasks is not included in the controlling process?**

- A. Instructing the members of the standards committee to prepare policies.
- B. Reviewing the existing policies of the hospital.
- C. Evaluating the credentials of all nursing staff.
- D. Checking if activities conform to the schedule.

**Correct Answer: A. Instructing the members of the standards committee to prepare policies**

Instructing the members involves a directing function. Controlling involves ensuring that performance does not deviate from standards. Controlling consists of five steps: (1) set standards, (2) measure performance, (3) compare performance to standards, (4) determine the reasons for deviations and then (5) take corrective action as needed.

- **Option B:** Performance standards are often stated in monetary terms such as revenue, costs, or profits but may also be stated in other terms, such as units produced, number of defective products, or levels of quality or customer service.
- **Option C:** The measurement of performance can be done in several ways, depending on the performance standards, including financial statements, sales reports, production results, customer satisfaction, and formal performance appraisals. Managers at all levels engage in the managerial function of controlling to some degree.
- **Option D:** The managerial function of controlling should not be confused with control in the behavioral or manipulative sense. This function of management concerns the manager's role in taking necessary actions to ensure that the work-related activities of subordinates are consistent with and contributing toward the accomplishment of organizational and departmental objectives.

**19. During the assessment of a client's mouth, the nurse notes the absence of saliva. The client is also complaining of pain near the area of the ear. The client has been NPO for several days because of the insertion of a NG tube. Based on these findings, the nurse suspects that the client is developing which of the following mouth conditions?**

- A. Stomatitis
- B. Oral candidiasis
- C. Parotitis
- D. Gingivitis

**Correct Answer: C. Parotitis**

The lack of saliva, pain near the area of the ear, and the prolonged NPO status of the client should lead the nurse to suspect the development of parotitis, or inflammation of the parotid gland. Parotitis usually develops in cases of dehydration combined with poor oral hygiene or when clients have been NPO for an extended period. Preventative measures include the use of sugarless hard candy or gum to stimulate saliva production, adequate hydration, and frequent mouth care.

- **Option A:** Stomatitis (inflammation of the mouth) produces excessive salivation and a sore mouth. Stomatitis may involve swelling and redness of the oral mucosa or discrete, painful ulcers (single or multiple). Less commonly, whitish lesions form, and, rarely, the mouth appears normal despite significant symptoms. Symptoms hinder eating, sometimes leading to dehydration and malnutrition. Secondary infection occasionally occurs, especially in immunocompromised patients.

- **Option B:** Oral candidiasis or thrush is an infection of the oral cavity by *Candida albicans*. Oral candidiasis is generally obtained secondary to immune suppression, whether a patient's oral cavity has decreased immune function or if it is systemic. This immunosuppression is dose-dependent.
- **Option D:** Gingivitis is an inflammatory condition of the gingival tissue, most commonly caused by bacterial infection. Unlike periodontitis, there is no attachment loss and therefore no migration of the junctional epithelium. The condition is restricted to the soft-tissue area of the gingival epithelium and connective tissue.

**20. The nurse is counseling a couple who has sought information about conceiving. The couple asks the nurse to explain when ovulation usually occurs. Which statement by the nurse is correct?**

- A. Two weeks before menstruation.
- B. Immediately after menstruation.
- C. Immediately before menstruation.
- D. Three weeks before menstruation.

**Correct Answer: A. Two weeks before menstruation**

Ovulation occurs 14 days before the first day of the menstrual period (A). Although ovulation can occur in the middle of the cycle or 2 weeks after menstruation, this is only true for a woman who has a perfect 28-day cycle. For many women, the length of the menstrual cycle varies.

- **Option B:** After the follicle releases its egg, it changes into the corpus luteum. This structure releases hormones, mainly progesterone and some estrogen. The rise in hormones keeps the uterine lining thick and ready for a fertilized egg to implant. If the woman does get pregnant, her body will produce human chorionic gonadotropin (hCG). This is the hormone pregnancy tests detect. It helps maintain the corpus luteum and keeps the uterine lining thick. If the woman doesn't get pregnant, the corpus luteum will shrink away and be resorbed. This leads to decreased levels of estrogen and progesterone, which causes the onset of the period. The uterine lining will shed during this period.
- **Option C:** The menstrual phase is the first stage of the menstrual cycle. It's also when the woman gets her period. This phase starts when an egg from the previous cycle isn't fertilized. Because pregnancy hasn't taken place, levels of the hormones estrogen and progesterone drop. The thickened lining of the uterus, which would support a pregnancy, is no longer needed, so it sheds through the vagina. During this period, there is a release of a combination of blood, mucus, and tissue from the uterus.
- **Option D:** During each menstrual cycle, an egg develops and is released from the ovaries. The lining of the uterus builds up. If a pregnancy doesn't happen, the uterine lining sheds during a menstrual period. Then the cycle starts again.

**21. Before assessing the postpartum client's uterus for firmness and position in relation to the umbilicus and midline, which of the following should the nurse do first?**

- A. Assess the vital signs.
- B. Administer analgesia.

- C. Ambulate her in the hall.
- D. Assist her to urinate.

**Correct Answer: D. Assist her to urinate**

Before the uterine assessment is performed, it is essential that the woman empties her bladder. A full bladder will interfere with the accuracy of the assessment by elevating the uterus and displacing to the side of the midline.

- **Option A:** Vital sign assessment is not necessary unless an abnormality in uterine assessment is identified. Immediately postpartum, check the mother's vital signs every hour for 4 hours. Once she is stable, monitor every 4 hours.
- **Option B:** Uterine assessment should not cause acute pain that requires administration of analgesia. By approximately one hour post-delivery, the fundus is firm and at the level of the umbilicus. The fundus continues to descend into the pelvis at the rate of approximately 1 cm or finger-breadth per day and should be nonpalpable by 14 days postpartum.
- **Option C:** Ambulating the client is an essential component of postpartum care but is not necessary prior to assessment of the uterus. Since it is not justified anymore to keep healthy women in bed after giving birth to a child, most studies on early ambulation are performed with pregnant women who have to remain in bed for diseases or complications. A small increased risk of venous thrombosis of extended bed rest has been found. However, similar to studies performed in the beginning of the twentieth century, women who are obligatorily bedridden most often have a poorer health status, which results in a higher risk of venous thrombosis, compared to those who are allowed to leave the bed at an early stage.

**22. Nurse Jessie is assessing a client suffering from stress and anxiety. A common physiological response to stress and anxiety is:**

- A. Urticaria
- B. Vertigo
- C. Sedation
- D. Diarrhea

**Correct Answer: D. Diarrhea**

Diarrhea is a common physiological response to stress and anxiety. The ability of stress to impair physiological processes such as growth, reproduction, and immune competence and its association with diseases such as cardiovascular disease, type 2 diabetes, anxiety, and depression are well known. While acute responses to stress are generally considered effective in dealing with immediate threats, prolonged activation of stress processes could have significant adverse consequences for individuals

- **Option A:** Hives are red, swollen, itchy bumps on the skin. Some people get them as part of an allergic reaction to food, medicine, or an insect sting. Others notice hives popping up on their skin on a more regular basis. Stress can also cause hives and can make hives you already have even worse. Stress is also one of the most common triggers of rosacea flare-ups. Rosacea appears as a red flush that spreads across the nose, cheeks, and chin.
- **Option B:** About 5 percent of American adults experience vertigo, and many people notice it when they're feeling stressed or anxious. Even though stress doesn't directly cause vertigo, it can contribute to dysfunction of the part of your inner ear that controls balance, called your vestibular

system.

- **Option C:** Stress does not cause sedation. During stress, activation of the sympathoadrenal medullary (SAM) system results in the release of noradrenaline from sympathetic nerve terminals and adrenaline and noradrenaline from the adrenal medulla, which results in a range of rapid physiological and behavioral responses such as increases in heart rate (HR) and blood pressure and heightened vigilance.

**23. Which of the following is the priority focus of nursing practice with the current early postpartum discharge?**

- A. Promoting comfort and restoration of health.
- B. Exploring the emotional status of the family.
- C. Facilitating safe and effective self and newborn care.
- D. Teaching about the importance of family planning.

**Correct Answer: C. Facilitating safe and effective self and newborn care**

Because of early postpartum discharge and limited time for teaching, the nurse's priority is to facilitate the safe and effective care of the client and newborn.

- **Option A:** After a vaginal birth, recovery can take anywhere from three weeks if the woman didn't tear to six weeks or more if she had a perineal tear or an episiotomy. If the woman is delivered by C-section, expect to spend the first three to four days postpartum in the hospital recovering; it will take four to six weeks before the woman will feel back to normal.
- **Option B:** Having a baby is a life-changing experience. Almost every mom faces a bout of the baby blues due to a roller coaster of hormones, lack of sleep, and the struggle to adjust to that tiny new human at home. That said, if the woman has symptoms of postpartum depression — including feeling persistently hopeless, sad, isolated, irritable, worthless, or anxious — for more than two weeks postpartum, she should talk to a doctor.
- **Option D:** Teaching about family planning is important in postpartum/newborn nursing care, but they are not the priority focus in the limited time presented by early postpartum discharge.

**24. Which of the following is the priority nursing diagnosis for a client undergoing chemotherapy?**

- A. Altered nutrition
- B. Fear
- C. Decreased cardiac output
- D. Anxiety

**Correct Answer: C. Decreased cardiac output**

Decreased cardiac output is more important than the other choices because it can jeopardize the client's life. The goal of chemotherapy is to inhibit cell proliferation and tumor multiplication, thus avoiding invasion and metastasis. But this results in toxic effects of chemotherapy due to effect on normal cells as well. Inhibition of tumor growth can take place at several levels within the cell and its environment.

- **Option A:** With traditional agents, cell death may be delayed as a proportion of the cells die as a result of a given treatment. So, the treatment may require repeating to achieve a response. The toxicity of cytotoxic drugs is greatest during the S phase, as it is the DNA synthetic phase of the cell cycle. Vinca alkaloids and Taxanes act in the M phase and block mitotic spindle formation.
- **Option B:** Traditional chemotherapy agents primarily affect either macromolecular synthesis and function of neoplastic cells by interfering DNA, RNA, or proteins synthesis or affecting the appropriate functioning of the preformed molecule. When interference in macromolecular synthesis or function is sufficient, it leads to cell death either due to the chemotherapeutic agent's direct effect or by triggering apoptosis.
- **Option D:** Combination chemotherapy is a common choice to produce effective responses as well. They appear to prevent the development of resistant clones by promoting cytotoxicity in resting and dividing cells. Cellular mechanisms that promote or suppress cell proliferation and cell differentiation are intricate, involving several genes, receptors, and signal transduction. Investigations in cancer cell biology have led to significant insight into mechanisms of apoptosis, angiogenesis, metastasis, cell signal transduction, differentiation, and growth factor modulation.

**25. A patient with Crohn's disease is receiving an infusion therapy of infliximab (Remicade). Which of the following should the nurse do while the patient is on this medication?**

- A. Monitoring liver function test prior to the infusion
- B. Monitoring the vomiting episodes
- C. Monitoring the frequency and consistency of bowel movements
- D. Monitoring urine output and orientation

**Correct Answer: C. Monitoring the frequency and consistency of bowel movements**

Crohn's disease is a condition in which the body attacks the lining of the digestive tract, causing pain, diarrhea, weight loss, and fever. Infliximab works by reducing the inflammation in the colon, thereby decreasing diarrhea.

- **Options A, B, & D:** These are not related to this medication.

**26. Nurse Ron enters a client's room, the client says, "They're crawling on my sheets! Get them off my bed!" Which of the following assessments is the most accurate?**

- A. The client is experiencing aphasia.
- B. The client is experiencing dysarthria.
- C. The client is experiencing a flight of ideas.
- D. The client is experiencing visual hallucination.

**Correct Answer: D. The client is experiencing visual hallucination**

The presence of a sensory stimulus correlates with the definition of a hallucination, which is a false sensory perception. Visual hallucinations involve seeing things that aren't there. The hallucinations may be of objects, visual patterns, people, or lights. Hallucinations, defined as the perception of an object or event (in any of the 5 senses) in the absence of an external stimulus, are experienced by patients with

conditions that span several fields (e.g., psychiatry, neurology, and ophthalmology). When noted by nonpsychiatrists, visual hallucinations, one type of sensory misperception, often trigger requests for psychiatric consultation, although visual hallucinations are not pathognomonic of a primary psychiatric illness.

- **Option A:** Aphasia refers to a communication problem. Aphasia is an impairment of language, affecting the production or comprehension of speech and the ability to read or write. Aphasia is always due to injury to the brain—most commonly from a stroke, particularly in older individuals. But brain injuries resulting in aphasia may also arise from head trauma, from brain tumors, or from infections.
- **Option B:** Dysarthria is a difficulty in speech production. Dysarthria is a motor speech disorder in which the muscles that are used to produce speech are damaged, paralyzed, or weakened. The person with dysarthria cannot control their tongue or voice box and may slur words. Motor speech disorders like dysarthria result from damage to the nervous system. Many neuromuscular conditions (diseases that affect the nerves controlling certain muscles) can result in dysarthria. In dysarthria, the muscles used to speak become damaged, paralyzed, or weakened.
- **Option C:** Flight of ideas is rapidly shifting from one topic to another. A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When severe, speech may be disorganized and incoherent. It is part of the DSM-5 criteria for Manic episodes.

**27. Which type of research allows researchers to be neutral observers?**

- A. Qualitative research
- B. Ethnographic research
- C. Quantitative research
- D. Case studies

**Correct Answer: C. Quantitative research**

Quantitative research is the process of collecting and analyzing numerical data. It can be used to find patterns and averages, make predictions, test causal relationships, and generalize results to wider populations.

- **Option A:** In qualitative research, researchers are never considered neutral. Qualitative research involves collecting and analyzing non-numerical data (e.g., text, video, or audio) to understand concepts, opinions, or experiences. It can be used to gather in-depth insights into a problem or generate new ideas for research.
- **Option B:** In ethnography, a type of qualitative research, researchers are never considered neutral. Researchers immerse themselves in groups or organizations to understand their cultures.
- **Option D:** In case studies, a type of qualitative research, researchers are never considered neutral. A case study is a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. It is an established research design that is used extensively in a wide variety of disciplines, particularly in the social sciences.

**28. A patient with newly diagnosed diabetes mellitus is learning to recognize the symptoms of hypoglycemia. Which of the following symptoms is indicative of hypoglycemia?**



- A. Polydipsia
- B. Confusion
- C. Blurred vision
- D. Polyphagia

**Correct Answer: B. Confusion**

Hypoglycemia in diabetes mellitus causes confusion, indicating the need for carbohydrates. Neuroglycopenic signs and symptoms are signs and symptoms that result from direct central nervous system (CNS) deprivation of glucose. These include behavioral changes, confusion, fatigue, seizure, coma, and potential death if not immediately corrected.

- **Option A:** Neurogenic signs and symptoms can either be adrenergic (tremor, palpitations, anxiety) or cholinergic (hunger, diaphoresis, paresthesias). Neurogenic symptoms and signs arise from sympathoadrenal involvement (either norepinephrine or acetylcholine release) in response to perceived hypoglycemia.
- **Option C:** Patients with diabetes mellitus (DM) often experience subjective symptoms of blurred vision associated with hyperglycemia. The nature and origin of this phenomenon are still unclear. Blurred vision during hyperglycemia could be a result of transient refractive alterations due to changes in the lens, but it could also be caused by changes in the retina.
- **Option D:** Polydipsia, blurred vision, and polyphagia are symptoms of hyperglycemia. Symptoms of severe hyperglycemia include polyuria, polydipsia, and weight loss. As the patient's blood glucose increases, neurologic symptoms can develop. The patient may experience lethargy, focal neurologic deficits, or altered mental status. The patient can progress to a comatose state.

**29. Mrs. Anderson, a 52-year-old librarian, visits the optometrist for her annual eye examination. Over the last year, she has noticed changes in her vision, particularly when reading small print, which she attributes to her aging. While the optometrist sets up the equipment for the examination, Mrs. Anderson, ever curious, begins asking questions about the anatomy of the eye, expressing a particular interest in the part that allows light to enter. Always keen to educate her patients, the optometrist poses a question to Mrs. Anderson about this specific structure. During an eye examination, a patient inquires about the specific part of the eye that allows light to enter. What is the transparent, anterior sixth of the eye called?**

- A. Sclera
- B. Cornea
- C. Lens
- D. Iris
- E. Pupil

**Correct Answer: B. Cornea**

The cornea is the clear, dome-shaped front surface of the eye that acts as a protective and focusing element. It refracts or bends light as it enters the eye, helping to focus it onto the retina at the back of the eye, where visual information is processed.

- **Option A:** The sclera is the firm, white, outer connective tissue layer of the posterior five-sixths of the fibrous tunic. It helps maintain the shape of the eye and provides attachment sites for the extrinsic eye muscles.
- **Option C:** Located behind the pupil and iris, the lens helps in focusing light onto the retina. Although it plays a crucial role in vision by refracting light, it is not the primary structure that allows light into the eye.
- **Option D:** The iris is the colored part of the eye and lies in front of the lens. It controls the size of the pupil, thereby regulating the amount of light entering the eye, but it itself is not the primary structure allowing light entrance.
- **Option E:** The pupil is the dark, central opening within the iris. It does allow light to enter the eye by changing its size in response to light conditions. However, the specific transparent structure being referred to in this scenario is the cornea.

**30. Which of the following should be included in a plan of care for a client who is lactose intolerant?**

- A. Remove all dairy products from the diet.
- B. Frozen yogurt can be included in the diet.
- C. Drink small amounts of milk on an empty stomach.
- D. Spread out selection of dairy products throughout the day.

**Correct Answer: B. Frozen yogurt can be included in the diet.**

Clients who are lactose intolerant can digest frozen yogurt. Yogurt products are formed by bacterial action, and this action assists in the digestion of lactose. The freezing process further stops bacterial action so that limited lactase activity remains. Some people who are lactose-intolerant can eat some kinds of yogurt without problems, especially yogurt with live cultures.

- **Option A:** Elimination of all dairy products can lead to significant clinical deficiencies of other nutrients. Be sure to get enough calcium in the diet, especially if the client avoids milk products completely. To get enough calcium, the client would need to eat calcium-rich foods as often as someone would drink milk. Calcium is very important because it keeps bones strong and reduces the risk of osteoporosis.
- **Option C:** Drinking milk on an empty stomach can exacerbate clinical symptoms. Drinking milk with a meal may benefit the client because other foods, (especially fat) may decrease transit time and allow for increased lactase activity. Limit the amount of milk and milk products in the diet. Try to drink 1 glass of milk each day. Drink small amounts several times a day. All types of milk contain the same amount of lactose.
- **Option D:** Although individual tolerance should be acknowledged, spreading out the use of known dairy products will usually exacerbate clinical symptoms. Eat or drink milk and milk products along with other foods. For some people, combining solid food (like cereal) with a dairy product (like milk) can reduce symptoms.

**31. A 68-year-old client is diagnosed with a right-sided brain attack and is admitted to the hospital. In caring for this client, the nurse should plan to:**

- A. Application of elastic stockings to prevent flaccid by muscle

- B. Use hand roll and extend the left upper extremity on a pillow to prevent contractions
- C. Use a bed cradle to prevent dorsiflexion of feet
- D. Do passive range of motion exercise

**Correct Answer: B. Use hand roll and extend the left upper extremity on a pillow to prevent contractions**

The left side of the body will be affected in a right-sided brain attack. Begin active or passive ROM to all extremities (including splinted) on admission. Encourage exercises such as quadriceps/glutes exercise, squeezing rubber ball, extension of fingers and legs/feet. Minimizes muscle atrophy, promotes circulation, helps prevent contractures. Reduces risk of hypercalciuria and osteoporosis if the underlying problem is hemorrhage.

- **Option A:** The left upper extremity will be affected, application of elastic stockings is unnecessary. Assist the patient with exercise and perform ROM exercises for both the affected and unaffected sides. Teach and encourage the patient to use his unaffected side to exercise his affected side. ROM exercise helps in reducing muscle stiffness and spasticity. It can also help prevent contractures.
- **Option C:** There is no dorsiflexion of foot in a right-sided brain attack. Prop extremities in functional position; use footboard during the period of flaccid paralysis. Maintain a neutral position of the head. Prevents contractures and foot drop and facilitates use when function returns. Flaccid paralysis may interfere with ability to support the head, whereas spastic paralysis may lead to deviation of the head to one side.
- **Option D:** Active-assistive range of motion exercises would be recommended for the client. Encourage the patient to assist with movement and exercises using unaffected extremity to support and move the weaker side. May respond as if the affected side is no longer part of the body and needs encouragement and active training to “reincorporate” it as a part of own body.

**32. A 67-year-old female client has been complaining of sleeping more, increased urination, anorexia, weakness, irritability, depression, and bone pain that interferes with her going outdoors. Based on these assessment findings, the nurse would suspect which of the following disorders?**

- A. Diabetes mellitus
- B. Diabetes insipidus
- C. Hypoparathyroidism
- D. Hyperparathyroidism

**Correct Answer: D. Hyperparathyroidism**

Hyperparathyroidism is most common in older women and is characterized by bone pain and weakness from excess parathyroid hormone (PTH). Clients also exhibit hypercalciuria-causing polyuria. Patients should be asked about any history of kidney stones, bone pain, myalgias or muscle weakness, symptoms of depression, use of thiazide diuretics, calcium products, vitamin D supplements, or other symptoms associated with the multiple etiologies of hypercalcemia. While clients with diabetes mellitus and diabetes insipidus also have polyuria, they don't have bone pain and increased sleeping.

- **Option A:** It often presents asymptotically, but when symptoms develop, patients usually present with polyuria, polydipsia, and weight loss. On physical examination of someone with hyperglycemia, one may see poor skin turgor (from dehydration) and smell a distinctive fruity odor

on their breath (in patients with ketosis).

- **Option B:** The most common findings in patients with diabetes insipidus are polydipsia, polyuria, and nocturia. Polyuria is defined as a urine output of more than 3 L/day in adults or 2 L/m<sup>2</sup> in children. In children, symptoms can be nonspecific, and they may present with severe dehydration, constipation, vomiting, fevers, irritability, failure to thrive, and growth retardation. In patients with central nervous system (CNS) tumors, headaches, and visual defects may present in addition to the classic symptoms.
- **Option C:** Hypoparathyroidism is characterized by urinary frequency rather than polyuria. Significant hypocalcemia can cause numbness and paresthesias, muscle cramps, and carpopedal spasms. When severe it can be life-threatening with laryngospasm, tetany, and seizures.

**33. Which of the following interventions is the key to increasing the survival rates of clients with lung cancer?**

- A. High-dose chemotherapy
- B. Early bronchoscopy
- C. Smoking cessation
- D. Early detection

**Correct Answer: D. Early detection**

- **Option D:** Early detection of cancer when the cells may be premalignant and potentially curable would be most beneficial. However, a tumor must be 1 cm in diameter before it's detectable on a chest x-ray, so this is difficult.
- **Option A:** High-dose chemotherapy has minimal effect on long-term survival.
- **Option B:** A bronchoscopy may help identify cell type but may not increase the survival rate.
- **Option C:** Smoking cessation won't reverse the process but may help prevent further decompensation.

**34. After 1 week of hospitalization, Mr. Gray develops hypokalemia. Which of the following is the most significant symptom of his disorder?**

- A. Lethargy
- B. Increased pulse rate and blood pressure
- C. Muscle weakness
- D. Muscle irritability

**Correct Answer: C. Muscle weakness**

Presenting symptoms of hypokalemia ( a serum potassium level below 3.5 mEq/liter) include muscle weakness, chronic fatigue, and cardiac dysrhythmias. The combined effects of inadequate food intake and prolonged diarrhea can deplete the potassium stores of a patient with GI problems. Significant muscle weakness occurs at serum potassium levels below 2.5 mmol/L but can occur at higher levels if the onset is acute. Similar to the weakness associated with hyperkalemia, the pattern is ascending in nature affecting the lower extremities, progressing to involve the trunk and upper extremities, and potentially advancing to paralysis.

- **Option A:** Periodic paralysis is a rare neuromuscular disorder, which is inherited or acquired, that is caused by an acute transcellular shift of potassium into the cells. It is characterized by potentially fatal episodes of muscle weakness or paralysis that can affect the respiratory muscles. Clinical manifestations mainly involve the musculoskeletal and cardiovascular systems. Hence, the physical exam should focus on identifying neurologic manifestations and cardiac dysrhythmias.
- **Option B:** Clinical symptoms of hypokalemia do not become evident until the serum potassium level is less than 3 mmol/L unless there is a precipitous fall or the patient has a process that is potentiated by hypokalemia. The severity of symptoms also tends to be proportional to the degree and duration of hypokalemia. Symptoms resolve with correction of the hypokalemia.
- **Option D:** Affected muscles can include the muscles of respiration which can lead to respiratory failure and death. Involvement of GI muscles can cause an ileus with associated symptoms of nausea, vomiting, and abdominal distension. Severe hypokalemia can also lead to muscle cramps, rhabdomyolysis, and resultant myoglobinuria.

**35. A client, age 22, is admitted with bacterial meningitis. Which hospital room would be the best choice for this client?**

- A. A private room down the hall from the nurses' station.
- B. An isolation room three doors from the nurses' station.
- C. A semi-private room with a 32-year-old client who has viral meningitis.
- D. A two-bedroom with a client who previously had bacterial meningitis.

**Correct Answer: B. An isolation room three doors from the nurses' station**

A client with bacterial meningitis should be kept in isolation for at least 24 hours after admission. Patients suspected of having meningococcal meningitis should be placed in droplet precautions until they have received 24 hours of antibiotics. Close contacts should also be treated prophylactically. Ciprofloxacin, rifampin, or ceftriaxone may be used. Close contacts are defined as people within 3 feet of the patient for more than 8 hours during the seven days before and 24 hours after receiving antibiotics. People exposed to the patient's oral secretions during this time should also be treated.

- **Option A:** During the initial acute phase, should be as close to the nurses' station as possible to allow maximal observation. The mortality for bacterial meningitis varies from 10-15%. Survival depends on early recognition of acute bacterial meningitis, followed by administration of appropriate antibiotic therapy. Delay in treatment can result in increased intracranial pressure causing decreased cerebral perfusion and may rapidly lead to loss of consciousness and death.
- **Option C:** Placing the client in a room with a client who has viral meningitis may cause harm to both clients because the organisms causing viral and bacterial meningitis differ; either client may contract the other's disease. These patients need inpatient treatment until all symptoms have disappeared, therefore the nursing staff will be responsible for administration as well as monitoring for therapeutic effectiveness and adverse drug events, reporting any concerns to the team.
- **Option D:** Immunity to Bacterial meningitis can't be acquired; therefore, a client who previously had bacterial meningitis shouldn't be put at risk by rooming with a client who has just been diagnosed with this disease. Vaccines are available to help prevent bacterial meningitis. Children can get a meningitis vaccine around ages 11 to 12, followed by a booster vaccine at age 16. Bacterial meningitis is more common in infants under 1 year of age and young people ages 16 to 21.

**36. A paradoxical pulse occurs in a client who had a coronary artery bypass graft (CABG) surgery two (2) days ago. Which of the following surgical complications should the nurse suspect?**

- A. Left-sided heart failure
- B. Aortic regurgitation
- C. Complete heart block
- D. Pericardial tamponade

**Correct Answer: D. Pericardial tamponade**

A paradoxical pulse (a palpable decrease in pulse amplitude on quiet inspiration) signals pericardial tamponade, a complication of CABG surgery. Cardiac tamponade is a medical or traumatic emergency that happens when enough fluid accumulates in the pericardial sac compressing the heart and leading to a decrease in cardiac output and shock.

- **Option A:** Left-sided heart failure can cause pulsus alternans (pulse amplitude alternation from beat to beat, with a regular rhythm). Right ventricular alternans occur as a result of right ventricular strain, often precipitated by a pulmonary embolism or pulmonary hypertension. Other potential etiologies of right ventricular alternans include reactive airway disease, mitral stenosis, or left-sided heart failure.
- **Option B:** Aortic regurgitation may cause bisferious pulse (an increased arterial pulse with a double systolic peak). The most common causes of pulsus bisferiens are mixed aortic valve disease (infective endocarditis, rheumatic heart disease, Marfan syndrome, bicuspid aortic valve) and hypertrophic cardiomyopathy with obstruction (HOCM). Pulsus bisferiens a single central pulse wave with two peaks separated by a distinct mid-systolic dip. An early component percussion wave results from rapid left ventricular ejection. The late component tidal wave represents a reflected wave from the periphery due to an artery's recoil effect.
- **Option C:** Complete heart block may cause a bounding pulse (a strong pulse with increased pulse pressure). The physical exam is usually remarkable for bradycardia. JVP examination often demonstrates cannon A-waves owing to the simultaneous contraction of the atria and ventricles. Thus a very large pressure wave is felt up against the vein.

**37. A two-year-old child has sustained an injury to the leg and refuses to walk. The nurse in the emergency department documents swelling of the lower affected leg. Which of the following does the nurse suspect is the cause of the child's symptoms?**

- A. Possible fracture of the tibia.
- B. Bruising of the gastrocnemius muscle.
- C. Possible fracture of the radius.
- D. No anatomic injury, the child wants his mother to carry him.

**Correct Answer: A. Possible fracture of the tibia.**

The child's refusal to walk, combined with swelling of the limb is suspicious for fracture.

- **Option B:** Toddlers will often continue to walk on a muscle that is bruised or strained.

- **Option C:** The radius is found in the lower arm and is not relevant to this question.
- **Option D:** Toddlers rarely feign injury to be carried, and swelling indicates a physical injury.

**38. Mr. Cruz visits the physician's office to seek treatment for depression, feelings of hopelessness, poor appetite, insomnia, fatigue, low self-esteem, poor concentration, and difficulty making decisions. The client states that these symptoms began at least 2 years ago. Based on this report, the nurse Tiffany suspects:**

- A. Cyclothymic disorder.
- B. Atypical affective disorder.
- C. Major depression.
- D. Dysthymic disorder.

**Correct Answer: D. Dysthymic disorder.**

Dysthymic disorder is marked by feelings of depression lasting at least 2 years, accompanied by at least two of the following symptoms: sleep disturbance, appetite disturbance, low energy or fatigue, low self-esteem, poor concentration, difficulty making decisions, and hopelessness. These symptoms may be relatively continuous or separated by intervening periods of normal mood that last a few days to a few weeks.

- **Option A:** Cyclothymic disorder is a chronic mood disturbance of at least 2 years' duration marked by numerous periods of depression and hypomania. It is currently classified under the umbrella of bipolar mood disorders. It is a chronic disease that must be present for at least two years in order to be diagnosable in adults and over 1 year in children and adolescents. As with many other psychiatric disorders, it must lead to dysfunction and stress in order to be classified as a disorder and must not be concurrent or caused by another general medical condition or substance use disorder.
- **Option B:** Atypical affective disorder is characterized by manic signs and symptoms. Affective disorders may include manic (elevated, expansive, or irritable mood with hyperactivity, pressured speech, and inflated self-esteem) or depressive (dejected mood with disinterest in life, sleep disturbance, agitation, and feelings of worthlessness or guilt) episodes, and often combinations of the two.
- **Option C:** Major depression is a recurring, persistent sadness or loss of interest or pleasure in almost all activities, with signs and symptoms recurring for at least 2 weeks. The investigation into depressive symptoms begins with inquiries of the neurovegetative symptoms which include changes in sleeping patterns, appetite, and energy levels. Positive responses should elicit further questioning focused on evaluating for the presence of the symptoms which are diagnostic of major depression.

**39. Macoy and Helen seek emergency crisis intervention because he slapped her repeatedly the night before. The husband indicates that his childhood was marred by an abusive relationship with his father. When intervening with this couple, nurse Gerry knows they are at risk for repeated violence because the husband:**

- A. Has only moderate impulse control.
- B. Denies feelings of jealousy or possessiveness.
- C. Has learned violence as an acceptable behavior.
- D. Feels secure in his relationship with his wife.

**Correct Answer: C. Has learned violence as an acceptable behavior**

Family violence usually is a learned behavior, and violence typically leads to further violence, putting this couple at risk. Unfortunately, each form of family violence begets interrelated forms of violence, and the “cycle of abuse” is often continued from exposed children into their adult relationships, and finally to the care of the elderly. Domestic violence is thought to be underreported. Domestic violence affects the victim, families, co-workers, and community. It causes diminished psychological and physical health, decreases the quality of life, and results in decreased productivity.

- **Option A:** Repeated slapping may indicate poor, not moderate, impulse control. According to the CDC, 1 in 4 women and 1 in 7 men will experience physical violence by their intimate partner at some point during their lifetimes. About 1 in 3 women and nearly 1 in 6 men experience some form of sexual violence during their lifetimes. Intimate partner violence, sexual violence, and stalking are high, with intimate partner violence occurring in over 10 million people each year.
- **Option B:** At least 5 million acts of domestic violence occur annually to women aged 18 years and older, with over 3 million involving men. While most events are minor, for example grabbing, shoving, pushing, slapping, and hitting, serious and sometimes fatal injuries do occur. Approximately 1.5 million intimate partner female rapes and physical assaults are perpetrated annually, and approximately 800,000 male assaults occur. About 1 in 5 women have experienced completed or attempted rape at some point in their lives. About 1% to 2% of men have experienced completed or attempted rape.
- **Option D:** Violent people commonly are jealous and possessive and feel insecure in their relationships. While the research is not definitive, a number of characteristics are thought to be present in perpetrators of domestic violence. Abusers tend to be possessive, jealous, suspicious, and paranoid. Approximately one-third of women and one-fifth of men will be victims of abuse. The most common sites of injuries are the head, neck, and face. Clothes may cover injuries to the body, breasts, genitals, rectum, and buttocks. One should be suspicious if the history is not consistent with the injury.

**40. 12-year-old Caroline has recurring nephrotic syndrome. Which of the following areas of potential disturbances should be a prime consideration when planning ongoing nursing care?**

- A. Body image
- B. Sexual maturation
- C. Muscle coordination
- D. Intellectual development

**Correct Answer: A. Body image**

Because of edema associated with nephrotic syndrome, potential self-concept, and body image disturbances related to changes in appearance and social isolation should be considered. Nephrotic syndrome is a condition that causes the kidneys to leak large amounts of protein into the urine. This can lead to a range of problems, including swelling of body tissues and a greater chance of catching



infections.

- **Option B:** Sexual maturation is not affected. Instruct parents to provide frequent oral hygiene. Oral hygiene reduces dryness of the mouth and mucous membranes. Advise them to limit fluid intake as ordered. The amount of allowed fluid intake is determined based on the child's weight, urine output, and response to treatment.
- **Option C:** Muscle coordination is not affected. Assess their knowledge of disease, signs and symptoms of relapse, dietary and activity aspects of care, medication administration and side effects, monitoring urine and vital signs. This provides information about education needs for follow-up care.
- **Option D:** Intellectual function is not affected. Offer parents and child with praise and encouragement as they acquire skills. Positive reinforcement improves willingness to learn new skills.

**41. A nurse is supervising a student nurse who is performing tracheostomy care for a client. Which of the following actions by the student should the nurse intervene?**

- A. Removing the inner cannula and cleaning using universal precaution.
- B. Suctioning the tracheostomy tube before performing tracheostomy care.
- C. Changing the old tracheostomy ties and securing the tube in place.
- D. Replacing the inner cannula and cleaning the site of the stoma.

**Correct Answer: A. Removing the inner cannula and cleaning using universal precaution.**

When performing tracheostomy care, a sterile field is set up and sterile technique is required. Standard precautions such as washing hands must also be maintained but are not enough when performing tracheostomy care. The presence of the tracheostomy tube provides direct access to the lungs for organisms, so sterile technique is used to prevent infection.

- **Option B:** Suctioning of the tracheostomy tube is necessary to remove mucus, maintain a patent airway, and avoid tracheostomy tube blockages. The frequency of suctioning varies and is based on individual patient assessment. The depth of insertion of the suction catheter needs to be determined prior to suctioning. Using a spare tracheostomy tube of the same type and size and a suction catheter insert the suction catheter to measure the distance from the length of the tracheostomy tube 15mm connector to the end of the tracheostomy tube. Ensure the tip of the suction catheter remains within the tracheostomy tube.
- **Option C:** If tie changes are required before the first tube change – it is imperative that the procedure must be undertaken with both medical and nursing staff present who are able to reinsert the tracheostomy tube in case of accidental decannulation and the appropriate equipment is available at the bedside. Tracheostomy tie changes are performed daily in conjunction with stoma care, or as required if they become wet or soiled to maintain skin integrity.
- **Option D:** Care of the stoma is commenced in the immediate postoperative period, and is ongoing. Inspect the stoma area at least daily to ensure the skin is clean and dry to maintain skin integrity and avoid breakdown. Daily cleaning of the stoma is recommended using 0.9% sterile saline solution.

**42. During the client's dialysis, the nurse observes that the solution draining from the abdomen is consistently blood-tinged. The client has a permanent peritoneal catheter in place. Which interpretation of this observation would be correct?**

- A. Bleeding is expected with a permanent peritoneal catheter.
- B. Bleeding indicates abdominal blood vessel damage.
- C. Bleeding can indicate kidney damage.
- D. Bleeding is caused by too-rapid infusion of the dialysate.

**Correct Answer: B. Bleeding indicates abdominal blood vessel damage.**

Because the client has a permanent catheter in place, blood-tinged drainage should not occur. Persistent blood-tinged drainage could indicate damage to the abdominal vessels, and the physician should be notified. Catheter insertion, manipulation, and trauma/pulling of the external limb of the catheter can all cause local tissue damage at the peritoneal entry site, which could lead to blood staining.

- **Option A:** Insertion-related trauma to intra-abdominal organs and/or vasculature can also cause more serious and more persistent bleeding. This may be reduced by laparoscopic-assisted placement of catheters, which allows more direct visualization of the catheter during insertion. The risk of bleeding obviously increases if patients have significant adhesions and previous surgeries (often relative contraindications to successful PD).
- **Option C:** The bleeding is originating in the peritoneal cavity, not the kidneys. Hemoperitoneum is seen in patients receiving peritoneal dialysis (PD) because the PD catheter provides a window to the peritoneum. Gynecological-associated phenomena account for the majority of cases. Intra-abdominal pathology of solid organs such as the kidney, liver, and spleen as well as the gastrointestinal tract is recognized. Unique to PD patients, hemoperitoneum may be associated with the catheter itself, uremic bleeding, or peritonitis.
- **Option D:** Too rapid infusion of the dialysate can cause pain. Infusion pain is a frequent problem in peritoneal dialysis (PD), and can markedly vary in intensity and risk. Among the many etiologies are peritonitis and other inflammatory processes of the peritoneum, accidental infusion of air, and acidic pH of the dialysate, and expired dialysate with high concentrations of glucose degradation products or GDPs, extreme temperatures of dialysis solution, hypertonicity of the solution, rapid infusion rates and high pCO<sub>2</sub> levels in the peritoneal dialysis fluid.

**43. A firefighter who was involved in extinguishing a house fire is being treated for smoke inhalation. He developed severe hypoxia 48 hours after the incident, requiring intubation and mechanical ventilation. Which of the following conditions has he most likely developed?**

- A. Atelectasis
- B. Pneumonia
- C. Bronchitis
- D. Acute respiratory distress syndrome (ARDS)

**Correct Answer: D. Acute respiratory distress syndrome (ARDS).**

Severe hypoxia after smoke inhalation typically is related to ARDS. The other choices aren't typically associated with smoke inhalation.

- **Option A:** Atelectasis is a complete or partial collapse of the entire lung or area (lobe) of the lung. It occurs when the tiny air sacs (alveoli) within the lung become deflated or possibly filled with alveolar fluid. Atelectasis is one of the most common breathing (respiratory) complications after surgery.
- **Option B:** Pneumonia is an infection that inflames the air sacs in one or both lungs.
- **Option C:** Bronchitis is an inflammation of the lining of your bronchial tubes, which carry air to and from your lungs.

**45. A female client is admitted to the psychiatric clinic for treatment of anorexia nervosa. To promote the client's physical health, nurse Tair should plan to:**

- A. Severely restrict the client's physical activities.
- B. Weigh the client daily, after the evening meal.
- C. Monitor vital signs, serum electrolyte levels, and acid-base balance.
- D. Instruct the client to keep an accurate record of food and fluid intake.

**Correct Answer: C. Monitor vital signs, serum electrolyte levels, and acid-base balance**

An anorexic client who requires hospitalization is in poor physical condition from starvation and may die as a result of arrhythmias, hypothermia, malnutrition, infection, or cardiac abnormalities secondary to electrolyte imbalances. Therefore, monitoring the client's vital signs, serum electrolyte level, and acid-base balance is crucial.

- **Option A:** Restricting the client's physical activities may worsen anxiety. Clients with anorexia appear slow, lethargic, and fatigued; they may be emaciated depending on the amount of weight loss; clients with bulimia may be underweight or overweight but are generally close to expected body weight for age and size.
- **Option B:** This is incorrect because a weight obtained after breakfast is more accurate than one obtained after the evening meal. When clients can eat, a diet of 1200 to 1500 calories per day is ordered, with gradual increases in calories until clients are ingesting adequate amounts for height, activity level, and growth needs; the nurse is responsible for monitoring meals and snacks and often initially will sit with a client during eating at a table away from other clients; after each meal or snack, clients may be required to remain in view of staff for 1 to 2 hours to ensure that they do not empty the stomach by vomiting.
- **Option D:** This would reward the client with attention for not eating and reinforce the control issues that are central to the underlying psychological problem; also, the client may record food and fluid intake inaccurately. The nurse can help clients begin to recognize emotions such as anxiety or guilt by asking them to describe how they are feeling and allowing adequate time for response.

**46. The nurse is teaching a female client how to perform a colostomy irrigation. To enhance the effectiveness of the irrigation and fecal returns, what measure should the nurse instruct the client to do?**

- A. Increase fluid intake
- B. Place heat on the abdomen

- C. Perform the irrigation in the evening
- D. Reduce the amount of irrigation solution

**Correct Answer: A. Increase fluid intake.**

To enhance the effectiveness of the irrigation and fecal returns, the client is instructed to increase fluid intake and to take other measures to prevent constipation. A colostomy may make the client more prone to constipation or diarrhea. It's important to get enough fiber in the diet and drink plenty of water to prevent these problems. Some people experience a small amount of stool leakage between irrigations.

- **Option B:** Abdominal pain or nausea may occur during irrigation, and may mean that water flow is too fast or the water is too cold. In six to eight weeks, the bowels will typically adjust, and bowel movements will become regular.
- **Option C:** It is best to perform irrigation at the same time each day. The client may want to try irrigating at the time of day he typically had a bowel movement (before getting the colostomy). Irrigation may be easier after a meal or hot drink.
- **Option D:** Fill the irrigating container with about 16 to 50 ounces (500 to 1500 mL) of lukewarm water. The water should not be cold or hot. Ask how much water will be needed to irrigate. Hang the irrigation container so that it is level with the shoulder.

**47. The most common normal position of the fetus in utero is:**

- A. Transverse position
- B. Vertical position
- C. Oblique position
- D. None of the above

**Correct Answer: B. Vertical position**

Vertical position means the fetal spine is parallel to the maternal spine thus making it easy for the fetus to go out of the birth canal. Most babies are lying vertically by the seventh month, with the baby's head towards the cervix of the uterus. This is the safest position for normal delivery.

- **Option A:** The transverse lie position is where the fetus's head is on one side of the mother's body and the feet on the other, rather than having the head close to the cervix or close to the heart. The fetus can also be slightly at an angle, but still more sideways, than up or down.
- **Option C:** If a fetus is lying diagonally across the uterus, the position is called oblique. It's very unusual for a fetus to stay in this position right up until labor. Only one percent of babies will be transverse or oblique.

**48. Cholinergic agents are used to:**

- A. Produce miosis
- B. Facilitate neuromuscular blockade
- C. Synergize neuromuscular blockers
- D. Facilitate tricyclic activity

**Correct Answer: A. Produce miosis.**

Miosis is a parasympathetic activity and is, therefore, the correct choice. Cholinergic medications are a category of pharmaceutical agents that act upon the neurotransmitter acetylcholine, the primary neurotransmitter within the parasympathetic nervous system (PNS). There are two broad categories of cholinergic drugs: direct-acting and indirect-acting. The direct-acting cholinergic agonists work by directly binding to and activating the muscarinic receptors. Indirect-acting cholinergic agents increase the availability of acetylcholine at the cholinergic receptors. B, C and D are incorrect because cholinergic agents are antidotes to neuromuscular blockers and tricyclic antidepressants.

- **Option B:** Acetylcholine is a major neurotransmitter in the body. Depending on the type of receptors through which it undergoes mediation, the peripheral actions of acetylcholine classify as working on muscarinic (M1, M2, M3, M4, M5) or nicotinic (Nm, Nn) receptors. M1 receptors are present on the gastric parietal cells and in the central nervous system. M2 receptors are present on the heart, visceral smooth muscle. M3 receptors on the smooth muscle, exocrine glands, and receptors of the bladder. Nicotinic receptors are present in the central nervous system, adrenal medulla, autonomic ganglia, and neuromuscular junction.
- **Option C:** The peripheral nervous system consists of the autonomic and the somatic nervous system. The autonomic nervous system can be further broken down into sympathetic and parasympathetic nervous systems. The parasympathetic nervous system regulates various organ and gland functions and primarily uses acetylcholine as its primary neurotransmitter, as do all the cholinomimetics.
- **Option D:** Anticholinesterase medications are agents that inhibit choline esterase, protect acetylcholine from hydrolysis, and produce cholinergic effects. Anticholinesterases further classify into reversible (carbamates) and irreversible agents (organophosphates).

**49. After surgery for an ileal conduit, the nurse should closely evaluate the client for the occurrence of which of the following complications related to pelvic surgery?**

- A. Peritonitis
- B. Thrombophlebitis
- C. Ascites
- D. Inguinal hernia

**Correct Answer: B. Thrombophlebitis**

After pelvic surgery, there is an increased chance of thrombophlebitis owing to the pelvic manipulation that can interfere with circulation and promote venous stasis. The pathogenesis is thought to include injury to the intima of the pelvic vein caused by a spreading uterine infection, bacteremia, and endotoxins, which can also occur secondary to the trauma of delivery or surgery.

- **Option A:** Peritonitis is a potential complication of any abdominal surgery, not just pelvic surgery. Typically, patients who experience spontaneous bacterial peritonitis have chronic liver disease with a Child-Pugh classification, which assesses the prognosis of liver disease, of C. This ranking involves a high to a maximum score of 10 to 15 points (on the Child-Pugh scale), and measures 1-year patient survival at 45% and 2-year survival at 35%.
- **Option C:** Ascites is most frequently an indication of liver disease. In the United States, the most common disease that causes patients to get ascites is cirrhosis, which accounts for approximately 80% of cases. Other causes of ascites include cancer, 10%; heart failure, 3%; tuberculosis, 2%;

dialysis, 1%; pancreatic disease, 1%; and others, 2%.

- **Option D:** Inguinal hernia may be caused by an increase in abdominal pressure or congenital weakness of the abdominal wall; a ventral hernia occurs at the site of previous abdominal surgery. Inguinal hernias are considered to have both a congenital and acquired component. Most adult hernias are considered acquired. However, there is evidence to suggest genetics also play a role. Patients with a known family history of a hernia are at least 4 times more likely to have an inguinal hernia than patients with no known family history.

**50. Daniel who is a marathon runner is at high risk for fluid volume deficit. Which one of the following is a related factor?**

- A. Decreased diuresis
- B. Disease-related process
- C. Decreased breathing and perspiration
- D. Increased breathing and perspiration

**Correct Answer: D. Increased breathing and perspiration**

Excessive fluid can be lost if breathing and perspiration are at an increased rate for a prolonged period. Identify the possible cause of the fluid disturbance or imbalance. Establishing a database of history aids accurate and individualized care for each patient.

- **Option A:** Assess color and amount of urine. Report urine output less than 30 ml/hr for 2 consecutive hours. A normal urine output is considered normal not less than 30ml/hour. Concentrated urine denotes fluid deficit.
- **Option B:** Monitor for the existence of factors causing deficient fluid volume (e.g., gastrointestinal losses, difficulty maintaining oral intake, fever, uncontrolled type II diabetes mellitus, diuretic therapy). Early detection of risk factors and early intervention can decrease the occurrence and severity of complications from deficient fluid volume. The gastrointestinal system is a common site of abnormal fluid loss.
- **Option C:** Oral fluid replacement is indicated for mild fluid deficit and is a cost-effective method for replacement treatment. Older patients have a decreased sense of thirst and may need ongoing reminders to drink. Being creative in selecting fluid sources (e.g., flavored gelatin, frozen juice bars, sports drink) can facilitate fluid replacement. Oral hydrating solutions (e.g., Rehydralyte) can be considered as needed.

**51. When taking a dietary history from a newly admitted female client, Nurse Len should remember which of the following foods is a common allergen?**

- A. Bread
- B. Carrots
- C. Orange
- D. Strawberries

**Correct Answer: D. Strawberries**

Common food allergens include berries, peanuts, Brazil nuts, cashews, shellfish, and eggs.

- **Option A:** Bread is not a common allergen. Wheat, a common ingredient in some breads, may cause wheat allergy in some people.
- **Option B:** Carrots rarely cause allergies. An allergic reaction to carrots can be one element of oral allergy syndrome, which is also known as pollen-food allergy syndrome.
- **Option C:** Oranges rarely cause allergic reactions. If they do, the reaction is mild.

**52. Surgical procedure to treat breast cancer involves the removal of the entire breast, pectoralis major muscle and the axillary lymph nodes is:**

- A. Simple mastectomy
- B. Modified radical mastectomy
- C. Halstead Surgery
- D. Radical mastectomy

**Correct Answer: B. Modified radical mastectomy**

- **Option B:** Removal of the entire breast, pectoralis major muscle and the axillary lymph nodes is a surgical procedure called modified radical mastectomy.
- **Option A:** Simple mastectomy is the removal of the entire breast but the pectoralis muscles and nipples remain intact.
- **Options C and D:** Halstead surgery also called radical mastectomy involves the removal of the entire breast, pectoralis major and minor muscles and neck lymph nodes. It is followed by skin grafting.

**53. A client is sent to the psychiatric unit for forensic evaluation after he is accused of arson. His tentative diagnosis is antisocial personality disorder. In reviewing the client's record, the nurse would expect to find:**

- A. A history of consistent employment
- B. A below-average intelligence
- C. A history of cruelty to animals
- D. An expression of remorse for his actions

**Correct Answer: C. A history of cruelty to animals**

- **Option C:** A history of cruelty to people and animals, truancy, and setting fires with a diagnosis of conduct disorder in children, which becomes a diagnosis of antisocial personality disorder in adults.
- **Option A:** A client with an antisocial personality disorder does not hold consistent employment.
- **Option B:** IQ is usually higher than average.
- **Option D:** A client with antisocial personality disorder lacks guilt or remorse for wrong-doing.

**54. Which of the following urinary symptoms does the pregnant woman most frequently experience during the first trimester?**

- A. Dysuria
- B. Frequency
- C. Incontinence
- D. Burning

**Correct Answer: B. Frequency**

Pressure and irritation of the bladder by the growing uterus during the first trimester is responsible for causing urinary frequency.

- **Option A:** The term dysuria is used to describe painful urination, which often signifies an infection of the lower urinary tract. The discomfort is usually described by the patient as burning, stinging, or itching.
- **Option C:** Urinary incontinence — the loss of bladder control — is a common and often embarrassing problem. It can be caused by everyday habits, underlying medical conditions, or physical problems.
- **Option D:** A burning sensation with urination can be caused by infectious (including sexually transmitted infections, or STDs such as chlamydia and gonorrhea) and noninfectious conditions, but it is most commonly due to bacterial infection of the urinary tract affecting the bladder.

**55. A nurse prepares to administer a vitamin K injection to a newborn infant. The mother asks the nurse why her newborn infant needs the injection. The best response by the nurse would be:**

- A. "Your infant needs vitamin K to develop immunity."
- B. "Vitamin K will protect your infant from having jaundice."
- C. "Newborn infants are deficient in vitamin K, and this injection prevents your infant from abnormal bleeding."
- D. "Newborn infants have sterile bowels, and vitamin K promotes the growth of bacteria in the bowel."

**Correct Answer: C. "Newborn infants are deficient in vitamin K, and this injection prevents your infant from abnormal bleeding."**

- **Option C:** Vitamin K is necessary for the body to synthesize coagulation factors. Vitamin K is administered to the newborn infant to prevent abnormal bleeding.
- **Option D:** Newborn infants are vitamin K deficient because the bowel does not have the bacteria necessary for synthesizing fat-soluble vitamin K. The infant's bowel does not support the production of vitamin K until bacteria adequately colonize it by food ingestion.

**56. The nurse places an aquathermia pad on a client with a muscle sprain. The nurse informs the client the pad should be removed in 30 minutes. Why will the nurse return in 30 minutes to remove the pad?**

- A. Reflex vasoconstriction occurs.
- B. Reflex vasodilation occurs.
- C. Systemic response occurs.



D. Local response occurs.

**Correct Answer: A. Reflex vasoconstriction occurs.**

If heat is applied for 1 hour or more, blood flow is reduced by reflex vasoconstriction. Vasoconstriction is the opposite of the desired effect of heat application. An aquathermia (Aqua-K) pad, which produces dry heat, is used to treat muscle sprains and mild inflammations and for pain relief.

Temperature-controlled, distilled water flows through the waterproof pad.

- **Option B:** Aquathermia pad is used as a heating pad for various parts of the body. This heating pad is used on the upper side of the body because it cannot be placed on the underside of the body part. There is a specific time period, beyond which blood vessels will start shrinking leading to increased blood pressure.
- **Option C:** Hot aquathermia pad is applied for 20 to 40 minutes and then it should be removed to avoid vasoconstriction. The human body cannot tolerate this heating aquathermia pad for more than 40 minutes, if it exceeds 40 minutes, the patient will start feeling a burning sensation and the blood vessels will constrict leading to further complications.
- **Option D:** Increased temperature of aquathermia pad may burn the skin and the blood vessels may constrict. Due to vasoconstriction, blood pressure may rise. So there is a specific temperature that should be maintained. The ideal temperature set for adults is 45°C. A thin cloth or pillowcase should be placed between a hot aquathermia pad and skin, as it prevents direct heat action on the skin. 20 to 40 minutes is the ideal time for the application of these pads and they should not be placed for more than 40 minutes.

**57. Kim is using bronchodilators for asthma. The side effects of these drugs that you need to monitor this patient for include:**

- A. tachycardia, nausea, vomiting, heart palpitations, inability to sleep, restlessness, and seizures.
- B. tachycardia, headache, dyspnea, temp. 101 F, and wheezing.
- C. blurred vision, tachycardia, hypertension, headache, insomnia, and oliguria.
- D. restlessness, insomnia, blurred vision, hypertension, chest pain, and muscle weakness.

**Correct Answer: A. Tachycardia, nausea, vomiting, heart palpitations, inability to sleep, restlessness, and seizures.**

Bronchodilators can produce the side effects listed in answer choice (A) for a short time after the patient begins using them. The adverse effects of bronchodilators are due to sympathetic system activation. The most frequent and common adverse effects include trembling, nervousness, sudden, noticeable heart palpitations, and muscle cramps.

- **Option B:** More severe effects include sudden constriction of the bronchial airways, or paradoxical bronchospasm, hypokalemia, and in rare cases, myocardial infarction. A patient should talk to their primary care physician if they have any comorbidities.
- **Option C:** For anticholinergics, side effects include symptoms caused by a decrease in vagal tone. These can include dry mouth, urinary retention, tachycardia, constipation, and an upset stomach.
- **Option D:** Serious adverse effects of bronchodilators include bronchospasm, hypersensitivity reactions, hypertension, hypotension, cardiac arrest, hypokalemia, and hyperglycemia. Anticholinergics have correlated with dry mouth, constipation, urinary retention, and delirium.

**58. In the high-acuity setting of a respiratory intensive care unit, a vigilant nurse is closely monitoring a client who has been diagnosed with severe pneumonia leading to ineffective airway clearance. The client, who is receiving mechanical ventilation, is at risk of accumulating secretions that could obstruct the airway and compromise respiratory function. The nurse understands the critical importance of timely and appropriate suctioning to maintain airway patency. Which clinical indicator should the nurse prioritize to most accurately determine the immediate need for suctioning in this client?**

- A. Oxygen saturation
- B. Respiratory rate
- C. Breath sounds
- D. Arterial blood gases
- E. Client's level of consciousness
- F. Visible secretions in the artificial airway

**Correct Answer: C. Breath sounds**

Adventitious breath sounds, such as crackles or wheezes, can indicate secretions in the airways and are a direct sign that the client may benefit from suctioning. Listening to breath sounds provides specific information about airway clearance and is a primary assessment tool for respiratory status.

- **Option A:** While a drop in oxygen saturation is an important indicator of respiratory distress, it is a late sign of airway obstruction. It may not specifically indicate the need for suctioning as various other factors can affect oxygen saturation.
- **Option B:** An increased respiratory rate can indicate respiratory distress, but it is not specific enough to determine the need for suctioning. Like oxygen saturation, many conditions can lead to tachypnea.
- **Option D:** Arterial blood gases (ABGs) provide comprehensive information about oxygenation, ventilation, and acid-base balance but are an invasive test and not a practical tool for making immediate decisions about suctioning.
- **Option E:** A decrease in the client's level of consciousness can indicate hypoxia or other complications but is not a specific indicator of the need for suctioning.
- **Option F:** Visible secretions in the artificial airway are a clear sign that suctioning is needed; however, secretions may be present deeper in the airways and not immediately visible.

**59. Which nursing intervention would be a priority during the care of a 2-month-old after surgery?**

- A. Minimize stimuli for the infant.
- B. Restrain all extremities.
- C. Encourage stroking of the infant.
- D. Demonstrate to the mother how she can assist with her infant's care.

**Correct Answer: C. Encourage stroking of the infant.**

Tactile stimulation is imperative for an infant's normal emotional development. After the trauma of surgery, sensory deprivation can cause failure to thrive. Most babies with FTT do not have a specific underlying disease or medical condition to account for their growth failure. This is referred to as Non-organic FTT. Up to 80% of all children with FTT have Non-organic type FTT. Non-organic FTT most commonly occurs when there is inadequate food intake or there is a lack of environmental stimuli.

- **Option A:** Provide sensory stimulation. Attempt to cuddle the child and talk to him or her in a warm, soothing tone and allow for play activities appropriate for the child's age. Feed the child slowly and carefully in a quiet environment; during feeding, the child might be closely snuggled and gently rocked; it may be necessary to feed the child every 2 to 3 hours initially.
- **Option B:** Do not restrain the child. Burp the child frequently during and at the end of each feeding, and then place him or her on the side with the head slightly elevated or held in a chest-to-chest position.
- **Option D:** If a family caregiver is present, encourage him or her to become involved in the child's feedings. While caring for the child, point out to the caregiver the child's development and responsiveness, noting and praising any positive parenting behaviors the caregiver displays.

**60. 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.

**61. A nurse is giving instruction to a client who is receiving cholestyramine (Questran) for the treatment of hyperlipidemia. Which of the following statements made by the client indicates the need for further instructions?**

- A. "This medication comes in a powder that must be mixed with juice or water before administration".
- B. "I will avoid eating foods rich in saturated fats".
- C. "I will take my Vitamin A 30 minutes after cholestyramine".
- D. "Constipation, belching and heartburn are some of the side effects".

**Correct Answer: C. "I will take my Vitamin A 30 minutes after cholestyramine".**

Cholestyramine (Questran) affects the fat digestion of vitamins such as Vitamin A, D, E, and K, therefore, decreasing its absorption. It is advised that other oral medications should be taken 1 hour before or 4 to 6 hours after taking cholestyramine.

- **Options A, B, & D:** These are correct statements regarding the medication.

**62. The mother of a 6-month-old asks when her child will have all his baby teeth. The nurse knows that most children have all their primary teeth by age:**

- A. 15 months
- B. 18 months
- C. 27 months
- D. 33 months

**Correct Answer: D. 33 months**

- **Option D:** All 20 primary, or deciduous, teeth should be present by age 33 months.

**63. Which of the following blood gas abnormalities is initially most suggestive of pulmonary edema?**

- A. Anoxia
- B. Hypercapnia
- C. Hyperoxygenation
- D. Hypocapnia

**Correct Answer: D. Hypocapnia**

In an attempt to compensate for increased work of breathing due to hyperventilation, carbon dioxide decreases, causing hypocapnia. If the condition persists, CO<sub>2</sub> retention occurs and hypercapnia results. Hypoxemia and hypocapnia occur in stages 1 and 2 of pulmonary edema because of a ventilation/perfusion (V/Q) mismatch. In stage 3 of pulmonary edema, right-to-left intrapulmonary shunt develops secondary to alveolar flooding and further contributes to hypoxemia.

- **Option A:** Oxygen diffusion is impaired between the alveolus and the pulmonary capillaries. Causes are usually interstitial edema, interstitial inflammation or fibrosis. Clinical examples include pulmonary edema and interstitial lung disease.

- **Option B:** In more severe cases, hypercapnia and respiratory acidosis are usually observed. The decision regarding intubation and the use of mechanical ventilation is frequently based on many clinical parameters, including oxygenation, ventilation, and mental status.
- **Option C:** The alveolar epithelial and alveolar capillary endothelial cells are vulnerable targets for O<sub>2</sub>-free-radical-induced injury caused by hyperoxia. In acute lung injury (ALI) caused by hyperoxia, hyperpermeability of the pulmonary microvasculature causes flooding of the alveolus with plasma extravasations leading to pulmonary edema and abnormalities in the coagulation and fibrinolysis pathways promoting fibrin deposition.

**64. A client with heart failure has been told to maintain a low sodium diet. A nurse who is teaching this client about foods that are allowed includes which food item in a list provided to the client?**

- A. Pretzels
- B. Whole wheat bread
- C. Tomato juice canned
- D. Dried apricot

**Correct Answer: D. Dried apricot**

Foods that are lower in sodium include fruits and vegetables like dried apricot. Dried apricots are sodium-free. Dried apricots, as part of a low sodium diet, may reduce the risk of high blood pressure. Apricots contain numerous antioxidants, most notably flavonoids. They help protect the body from oxidative stress, which is linked to many chronic diseases.

- **Option A:** These classic snacks are high in sodium — almost 20 percent of the recommended daily intake is in one serving of pretzels. Too much sodium leads to increased water retention, which can lead to bloating and puffiness, and too much sodium over time can lead to heart disease.
- **Option B:** Sodium is finding its way into a lot of whole wheat bread brands in amounts that average 240 to 400 mg per slice. If your serving usually contains two slices, the sodium can add up quickly.
- **Option C:** Many tomato juice products contain added salt — which bumps up the sodium content. For example, a 1.4-cup (340-ml) serving of Campbell's 100% tomato juice contains 980 mg of sodium — which is 43% of the DV. Research shows that diets high in sodium may contribute to high blood pressure.

**65. Jose is in danger of respiratory arrest following the administration of a narcotic analgesic. An arterial blood gas value is obtained. Nurse Oliver would expect the paco<sub>2</sub> to be which of the following values?**

- A. 15 mm Hg
- B. 30 mm Hg
- C. 40 mm Hg
- D. 80 mm Hg

**Correct Answer: D. 80 mm Hg**

A client about to go into respiratory arrest will have inefficient ventilation and will be retaining carbon dioxide. The value expected would be around 80 mm Hg. All other values are lower than expected.

- **Option A:** 15 mmHg is a low value for a client about to go into respiratory arrest.
- **Option B:** 30 mmHg is lower than the expected value because of inefficient ventilation.
- **Option C:** 40 mmHg is still less than the expected value for a client who is about to go into respiratory arrest.

**66. A client with vaginal cancer is being treated with a radioactive vaginal implant. The client's husband asks the nurse if he can spend the night with his wife. The nurse should explain that:**

- A. Overnight stays by family members is against hospital policy.
- B. There is no need for him to stay because staffing is adequate.
- C. His wife will rest much better knowing that he is at home.
- D. Visitation is limited to 30 minutes when the implant is in place.

**Correct Answer: D. Visitation is limited to 30 minutes when the implant is in place.**

Clients with radium implants should have close contact limited to 30 minutes per visit. The general rule is limiting time spent exposed to radium, putting distance between people and the radium source, and using lead to shield against the radium. Teaching the family member these principles is extremely important. Internal radiation therapy uses a pill, liquid, implant or temporary source to put radiation inside the body to kill the cancer cells, and may require certain safety precautions for staff and family while the patient is in the hospital or at home, according to the National Cancer Institute

- **Option A:** Do not spend any more time in the patient's room than is necessary to care for the patient. In particular, time at the patient's bedside should be kept to a minimum. Specific "stay times" will be provided on the patient's door.
- **Option B:** Visitors are allowed provided that: visitors shall be 18 years or older; the patient shall not have pregnant visitors, and visitors should remain at least 6 feet from the patients and should not stay more than 2 hours per day (unless other information is provided).
- **Option C:** The most common safety precautions related to preventing unnecessary radiation exposure are limiting time near the patient, maintaining a safe distance of three to six feet from the source of the radiation, and using lead shielding to protect family and staff.

**67. Which is a major concern when providing drug therapy for older adults?**

- A. Older adults may chew on tablets instead of swallowing them
- B. Older adults have difficulty in swallowing large tablets
- C. Alcohol is used by older adults to cope with the multiple problems of aging
- D. Hepatic clearance is reduced in older adults

**Correct Answer: D. Hepatic clearance is reduced in older adults.**

Age-related changes such as a reduction in total liver size and decrease in hepatic blood flow would limit the exposure of the drug to the metabolizing enzymes resulting in reduced hepatic clearance of a drug increasing its side effects.

- **Option A:** Older adults may end up chewing tablets that will quickly release the effect of long-acting medications when crushed or the drug may not work properly however a physician may give smaller pills that will be easier to swallow or a liquid preparation may also be available.
- **Option B:** Older adults may experience difficulty taking tablets due to swallowing problems secondary to health conditions such as stroke, dementia, Parkinson's disease but there are other techniques to make swallowing pills easier (e.g. "pop bottle method").
- **Option C:** Alcohol is not used to cope with problems of aging since it can cause bad interactions with medications causing adverse effects. Aging can lower the body's tolerance for alcohol. Older adults generally experience the effects of alcohol more quickly than when they were younger. This puts older adults at higher risks for falls, car crashes, and other unintentional injuries that may result from drinking.

**68. A client taking a beta-adrenergic blocker for HTN can experience interference with sleep patterns such as:**

- A. Nocturia
- B. Increased daytime sleepiness.
- C. Increased awakening from sleep.
- D. Increased difficulty falling asleep.

**Correct Answer: B. Increased daytime sleepiness.**

Beta-Blockers can cause nightmares, insomnia, and awakenings from sleep. Sleep disorders are the common side effects of beta-blockers. Beta-blockers have been shown to reduce the production of melatonin via specific inhibition of adrenergic beta1-receptors.

- **Option A:** Results of two placebo-controlled studies of hypertensive patients, investigating the relationship between beta-blocker induced central nervous system (CNS) side effects and the nightly urinary excretion of melatonin, demonstrated that the CNS side effects (sleep disorder, nightmares) during beta-blockade are related to a reduction of melatonin levels.
- **Option C:** Beta-blockers have been shown to reduce the production of melatonin via specific inhibition of beta-1 adrenergic receptors. Although atenolol had no effect on subjective measures of sleep this hydrophilic drug also reduced REM frequency, suggesting that either it has some central effect, or that REM reduction is due to a peripheral 'shielding' effect.
- **Option D:** Beta-blockers have long been associated with sleep disturbances, including awakenings at night and nightmares. They are thought to do this by inhibiting the nighttime secretion of melatonin, a hormone involved in regulating both sleep and the body's circadian clock. Low levels of melatonin have sometimes been observed in chronic insomnia.

**69. After a long leg cast is removed, the male client should:**

- A. Cleanse the leg by scrubbing with a brisk motion
- B. Put leg through full range of motion twice daily
- C. Report any discomfort or stiffness to the physician
- D. Elevate the leg when sitting for long periods of time.

**Correct Answer: D. Elevate the leg when sitting for long periods of time.**

Elevation will help control the edema that usually occurs.

- **Option A:** Cleansing the leg should be done by patting a wet cloth to avoid injuring the dry skin. It is not unusual for the skin to have some changes (dry skin and more hair). A few baths in warm water will soak off the dry, flaky skin. This may take a few days, but be patient and avoid scrubbing the skin. Scrubbing may damage the new skin.
- **Option B:** The leg should be exercised daily but not put through a full range of motion because the bones are still on the mend and the muscles are weak. It is normal for there to be some discomfort in the muscles and joints that were immobilized. It is not unusual for an arm or leg to be smaller than the other side. Begin gentle range of motion and strengthening of your injured area after the cast is removed. You may be placed into a removable splint after the cast is removed.
- **Option C:** Discomfort and stiffness are normal after a cast is removed. Regular exercises recommended by the physician would help the extremity return to its normal function. As the client progresses out of the cast, physical therapy may be beneficial to help the client to return to normal everyday activities, work, or even sports activities.

**70. What clinical manifestation indicates that an escharotomy is needed on a circumferential extremity burn?**

- A. The burn is full thickness rather than partial thickness.
- B. The client is unable to fully pronate and supinate the extremity.
- C. Capillary refill is slow in the digits and the distal pulse is absent.
- D. The client cannot distinguish the sensation of sharp versus dull in the extremity.

**Correct Answer: C. Capillary refill is slow in the digits and the distal pulse is absent.**

Circumferential eschar can act as a tourniquet when edema forms from the fluid shift, increasing tissue pressure, and preventing blood flow to the distal extremities, and increasing the risk for tissue necrosis. This problem is an emergency and, without intervention, can lead to loss of the distal limb. This problem can be reduced or corrected with an escharotomy.

- **Option A:** The American Burn Association recommends burn center referrals for patients with full-thickness burns. Patients being transferred to burn centers do not need extensive debridement or topical antibiotics before transfer.
- **Option B:** Once established, burn contractures can be treated with serial splinting, release of contracting bands with Z-plasties, incision, and skin grafting or excision, and resurfacing with skin grafts or flaps, local rotation flaps, use of tissue expanders, or with free flap reconstruction.
- **Option D:** After a deep burn injury, cutaneous nerve regeneration will occur with the migration of new nerve fibers from the wound bed or from the collateral sprouting of nerve fibers from adjacent uninjured areas. This nerve regeneration process is imperfect. It was reported that 71% of extensively burned victims suffer from abnormal sensations and 36% from chronic pain. Recent studies on rats have shown that vagus nerve stimulation improved thermal injury-induced shock symptoms.

**71. When teaching parents about typical toddler eating patterns, which of the following should be included?**

- A . Food "jags."



- B. Preference to eat alone
- C. Consistent table manners
- D. Increase in appetite

**Correct Answer: A. Food “jags.”**

Toddlers become picky eaters, experiencing food jags, and eating large amounts one day and very little the next. A toddler’s food jags express a preference for the ritualism of eating one type of food for several days at a time.

- **Option B:** Toddlers typically enjoy socialization and limiting others at mealtime.
- **Option C:** Toddlers prefer to feed themselves and thus are too young to have table manners.
- **Option D:** A toddler’s appetite and the need for calories, protein, and fluid decrease due to the dramatic slowing of growth rate.

**72. The nurse is monitoring a female client receiving paregoric to treat diarrhea for drug interactions. Which drugs can produce additive constipation when given with an opium preparation?**

- A. Antiarrhythmic drugs
- B. Anticholinergic drugs
- C. Anticoagulant drugs
- D. Antihypertensive drugs

**Correct Answer: B. Anticholinergic drugs**

Paregoric has an additive effect of constipation when used with anticholinergic drugs. The opiate anhydrous morphine, which is contained in paregoric, can decrease motility more than loperamide or the combination of diphenoxylate and atropine can. Antiarrhythmics, anticoagulants, and antihypertensives aren’t known to interact with paregoric.

- **Option A:** Of the Class III antiarrhythmics, amiodarone is involved in a significant number of interactions since it is a potent inhibitor of several cytochrome P450 enzymes. It can significantly impair the metabolism of digoxin, theophylline and warfarin. Dosages of digoxin and warfarin should empirically be decreased by one-half when amiodarone therapy is added.
- **Option C:** The anticoagulant effect of warfarin is inhibited by drugs like barbiturates, rifampin, azathioprine, and carbamazepine, which increase its clearance by inducing hepatic metabolism. Azathioprine also reduces the anticoagulant effect of warfarin, presumably through a potentiating effect on hepatic clearance.
- **Option D:** Nonsteroidal anti-inflammatory drugs (NSAIDs) can induce an increase in blood pressure (BP) and may potentially reduce the efficacy of several antihypertensive drugs. Probably the main mechanism of action is inhibition of prostaglandin (PG) synthesis since NSAIDs have a higher propensity to increase BP as the regulation of BP (and renal function) is more PG-dependent and to interact with drugs (diuretics, beta-blockers, and ACE inhibitors) that may act through the increase of PG formation.

**73. Which of the following should the nurse do first after noting that a child with Hirschsprung disease has a fever and watery explosive diarrhea?**

- A. Notify the physician immediately.
- B. Administer antidiarrheal medications.
- C. Monitor child every 30 minutes.
- D. Nothing, this is characteristic of Hirschsprung disease.

**Correct Answer: A. Notify the physician immediately.**

For the child with Hirschsprung disease, fever and explosive diarrhea indicate enterocolitis, a life-threatening situation. Therefore, the physician should be notified immediately.

- **Option B:** Generally, because of the intestinal obstruction and inadequate propulsive intestinal movement, antidiarrheals are not used to treat Hirschsprung disease.
- **Option C:** The child is acutely ill and requires intervention, with monitoring more frequently than every 30 minutes.
- **Option D:** Hirschsprung disease typically presents with chronic constipation. Hirschsprung's disease (congenital megacolon) is caused by the failed migration of colonic ganglion cells during gestation. Varying lengths of the distal colon are unable to relax, causing functional colonic obstruction.

**74. The doctor has prescribed aspirin 325 mg daily for a client with transient ischemic attacks. The nurse knows that aspirin was prescribed to:**

- A. Prevent headaches
- B. Boost coagulation
- C. Prevent cerebral anoxia
- D. Keep platelets from clumping together

**Correct Answer: D. Keep platelets from clumping together**

- Option D: Aspirin prevents the platelets from clumping together to slow down the blood's clotting action. It reduces the risk of recurrent stroke when used immediately after a transient ischemic attack.
- Options A, B, and D: A low-dose aspirin will not prevent headaches, cerebral anoxia, and boost coagulation.

**75. Gracie, the mother of a 3-month-old infant calls the clinic and states that her child has a diaper rash. What should the nurse advise?**

- A. "Leave the diaper off while the infant sleeps."
- B. "Use baby wipes with each diaper change."
- C. "Switch to cloth diapers until the rash is gone"
- D. "Offer extra fluids to the infant until the rash improves."

**Correct Answer: A. "Leave the diaper off while the infant sleeps."**

Leaving the diaper off while the infant sleeps helps to promote air circulation to the area, improving the condition. Air out the infant's skin by letting him or her go without a diaper and ointment for short periods of time, perhaps three times a day for 10 minutes each time, such as during naps.

- **Option B:** Baby wipes contain alcohol, which may worsen the condition. Moist washcloths, cotton balls, and baby wipes can aid in cleaning the skin, but be gentle. Don't use wipes with alcohol or fragrance.
- **Option C:** Switching to cloth diapers isn't necessary; in fact, that may make the rash worse. The best way to keep the infant's diaper area clean and dry is by changing diapers immediately after they are wet or soiled. Until the rash is better, this may mean getting up during the night to change the diaper.
- **Option D:** Extra fluids won't make the rash better. When possible, let the infant go without a diaper. Exposing skin to air is a natural and gentle way to let it dry. To avoid messy accidents, try laying the infant on a large towel and engage in some playtime while he or she is bare-bottomed.

**76. When performing a postpartum check, the nurse should:**

- A. Assist the woman into a lateral position with upper leg flexed forward to facilitate the examination of her perineum.
- B. Assist the woman into a supine position with her arms above her head and her legs extended for the examination of her abdomen.
- C. Instruct the woman to avoid urinating just before the examination since a full bladder will facilitate fundal palpation.
- D. Wash hands and put on sterile gloves before beginning the check.

**Correct Answer: A. Assist the woman into a lateral position with upper leg flexed forward to facilitate the examination of her perineum.**

While the supine position is best for examining the abdomen, the woman should keep her arms at her sides and slightly flex her knees in order to relax abdominal muscles and facilitate palpation of the fundus. The nurse must be well versed in postpartum assessment and be able to identify subtle changes that could indicate a woman's deteriorating condition. Components of care should be standardized regardless of whether the recovery is done in a post-anesthesia care unit (PACU), a labor and delivery room, or a postpartum room.

- **Option B:** According to the 2010 recommendations from the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN), the nurse caring for the woman should not have any other patient or infant care responsibilities until an initial assessment is completed and documented, the repair of the episiotomy or perineal lacerations is complete and the woman is hemodynamically stable. Assessments during the immediate postpartum period start from the delivery of the placenta and continue for at least 2 hours or until stable. Assessments should be orderly and ongoing so that timely identification can be made of any abnormal changes in the woman's clinical condition.
- **Option C:** The bladder should be emptied before the check. A full bladder alters the position of the fundus and makes the findings inaccurate. Assist the woman to empty her bladder. Catheterize only if the woman is unable to void and the bladder is distended. Once the bladder is empty, reevaluate the fundal height. Note the overall appearance of the woman, including skin color, motor activity, facial expression, speech, mood, state of awareness, and interactions with others. Any variation from normal assessment parameters requires reassessment, communication, and early intervention as indicated to prevent potentially serious consequences.

- **Option D:** Although hands are washed before starting the check, clean (not sterile) gloves are put on just before the perineum and pad are assessed to protect from contact with blood and secretions. Involution is the process of the uterus returning to its prepregnant state. Uterine tone should be assessed at least as frequently as vital signs, every 15 minutes in the first 2 hours.<sup>4</sup> Amount of blood loss should be assessed on an ongoing basis during this time. Uterine atony is the most common cause of postpartum hemorrhage, which remains a major cause of maternal morbidity and mortality.

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

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

**Correct Answer: D. The client gains weight.**

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

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

**78. When a husband takes out his work frustrations and anger by abusing his wife at home, the nurse will identify this crisis as which type?**

- A. Psychiatric emergency crisis
- B. Developmental crisis
- C. Anticipated life transition

D. Dispositional crisis

**Correct Answer D. Dispositional crisis**

A dispositional crisis is a response to an external situational crisis. External anger at work is the dispositional crisis displaced to his wife through abuse. These crises can ensue from a lack of information, such as not knowing which job to take, what type of medical referral to seek for a particular symptom, what one's options are about living arrangements, whom to ask for what.

- **Option A:** Psychiatric emergency crisis is when the individual's general functioning has been severely impaired, and the individual has been rendered incompetent. These are crisis situations in which one's general functioning is severely impaired and one is rendered incompetent or unable to maintain responsibility for oneself; in other words, one is dangerous to oneself and/or others.
- **Option B:** Developmental crisis occurs in response to triggering emotions related to unresolved conflict in one's life. This is called a developmental crisis based on Freudian psychology. These occur as part of the process of growing and developing through various periods of life. Sometimes a crisis is a predictable part of the life cycle, such as the crisis described in Erikson's stages of psychosocial development.
- **Option C:** An anticipated life transition crisis is a crisis that is normal in the life cycle; transitional is one over which the person has no control. These are normative, developmental crises that are fairly common in our society. They may result from midlife career changes, getting married, becoming a parent, divorce, the onset of chronic or terminal illness, or changing schools.

**79. A client reports experiencing vulvar pruritus. Which assessment factor may indicate that the client has an infection caused by *Candida albicans*?**

- A. Cottage cheese-like discharge
- B. Yellow-green discharge
- C. Gray-white discharge
- D. Discharge with a fishy odor

**Correct Answer: A. Cottage cheese-like discharge**

The symptoms of *C. albicans* include itching and a scant white discharge that has the consistency of cottage cheese. The patient with vulvovaginitis may present with intense itching and irritation in the vagina and vulva, a burning sensation with urination which can be mistaken for urinary tract infection, vaginal soreness, or pain, a dry erythematous rash, and a thick white cottage cheese-like discharge.

- **Option B:** Yellow-green discharge is a sign of *Trichomonas vaginalis*. A vaginal discharge is common in women; the discharge is thin, frothy, and has an abnormal odor. The genitals are often red and edematous. A strawberry cervix is seen in about 40% of patients. Palpation of the pelvis may reveal mild tenderness.
- **Option C:** Gray-white discharge is a sign of *Gardnerella vaginalis*. Gray vaginal discharge is not healthy, and it can be a symptom of a common bacterial infection called bacterial vaginosis (BV). Anyone with gray discharge should promptly see a doctor. Following diagnosis, the doctor will usually prescribe antibiotics to treat the BV.
- **Option D:** Most women with BV present with a complaint of malodorous vaginal discharge, which often becomes more pronounced after sexual intercourse. The whiff test is performed by adding a small amount of potassium hydroxide (KOH) to the microscopic slide containing the vaginal discharge and is considered to be positive if a characteristic fishy-scent is revealed.

**80. A nurse assists in the vaginal delivery of a newborn infant. After the delivery, the nurse observes the umbilical cord lengthen and a spurt of blood from the vagina. The nurse documents these observations as signs of:**

- A. Hematoma
- B. Placenta previa
- C. Uterine atony
- D. Placental separation

**Correct Answer: D. Placental separation**

As the placenta separates, it settles downward into the lower uterine segment. The umbilical cord lengthens, and a sudden trickle or spurt of blood appears. Delivery of the placenta usually happens within 5-10 minutes after delivery of the fetus, but it is considered normal up to 30 minutes after delivery of the fetus.

- **Option A:** A hematoma is a bad bruise. It happens when an injury causes blood to collect and pool under the skin. The pooling blood gives the skin a spongy, rubbery, lumpy feel. A hematoma usually is not a cause for concern. It is not the same thing as a blood clot in a vein, and it does not cause blood clots.
- **Option B:** Placenta previa occurs when a baby's placenta partially or totally covers the mother's cervix — the outlet for the uterus. Placenta previa can cause severe bleeding during pregnancy and delivery. If the woman has placenta previa, she might bleed throughout her pregnancy and during her delivery.
- **Option C:** Atony of the uterus, also called uterine atony, is a serious condition that can occur after childbirth. It occurs when the uterus fails to contract after the delivery of the baby, and it can lead to a potentially life-threatening condition known as postpartum hemorrhage.

**81. Which technique is considered the gold standard for diagnosing DVT?**

- A. Ultrasound imaging
- B. Venography
- C. MRI
- D. Doppler flow study

**Correct Answer: B. Venography**

Proximal leg vein ultrasound, which when positive, indicates that the patient should be treated as having a DVT. If a patient scores 2 or above, either a proximal leg vein ultrasound scan should be done within 4 hours, and if the result is negative, a D-dimer test should be done. If imaging is not possible within 4 hours, a D-dimer test should be undertaken, and an interim 24-hour dose of a parenteral anticoagulant should be given. A proximal leg vein ultrasound scan should be carried out within 24 hours of being requested.

- **Option A:** Complex duplex ultrasound is the imaging modality of choice. There is non-compressible venous segment; loss of phasic flow on Valsalva maneuver; absent color flow if completely occlusive; lack of flow augmentation with calf squeeze; and increased flow in superficial veins.

- **Option C:** Vascular structures should always be interrogated during a routine assessment of the peripheries and pelvis. Incidental DVT has a prevalence of around 0.3% on routine outpatient knee MRI
- **Option D:** Doppler flow is a type of ultrasound. It uses sound waves to measure the flow of blood through a blood vessel. The results are shown on a computer screen in lines called waveforms. It's sometimes called Doppler velocimetry. A Doppler flow study may be used during pregnancy to check the health of the unborn baby (fetus).

**82. A nurse is preparing to give a lung surfactant to a 36 weeks old baby with respiratory distress syndrome. Which of the following is the correct route of administration?**

- A. Intradermal
- B. Intratracheal
- C. Intramuscular
- D. Intravenous

**Correct Answer: B. Intratracheal**

Lung surfactant is instilled through the catheter inserted into the newborn's endotracheal tube.

- **Options A, C, & D:** These are not the routes of administration for this medication.

**83. Meryl, age 19, is highly dependent on her parents and fears leaving home to go away to college. Shortly before the semester starts, she complains that her legs are paralyzed and is rushed to the emergency department. When physical examination rules out a physical cause for her paralysis, the physician admits her to the psychiatric unit where she is diagnosed with conversion disorder. Meryl asks the nurse, "Why has this happened to me?" What is the nurse's best response?**

- A. "You've developed this paralysis so you can stay with your parents. You must deal with this conflict if you want to walk again."
- B. "It must be awful not to be able to move your legs. You may feel better if you realize the problem is psychological, not physical."
- C. "Your problem is real but there is no physical basis for it. We'll work on what is going on in your life to find out why it's happened."
- D. "It isn't uncommon for someone with your personality to develop a conversion disorder during times of stress."

**Correct Answer: C. "Your problem is real but there is no physical basis for it. We'll work on what is going on in your life to find out why it's happened."**

The nurse must be honest with the client by telling her that the paralysis has no physiologic cause while also conveying empathy and acknowledging that her symptoms are real. The client will benefit from psychiatric treatment, which will help her understand the underlying cause of her symptoms. After the psychological conflict is resolved, her symptoms will disappear.

- **Option A:** Telling her that she has developed paralysis to avoid leaving her parents or that her personality caused her disorder wouldn't help her understand and resolve the underlying conflict. Conversion disorder, also known as functional neurological symptom disorder (FND), is a psychiatric disorder characterized by symptoms affecting sensory or motor function. These signs and symptoms are inconsistent with patterns of known neurologic diseases or other medical conditions. Although conversion disorder has no organic basis, the symptoms significantly impact a patient's ability to function.
- **Option B:** Saying that it must be awful not to be able to move her legs wouldn't answer the client's question; knowing that the cause is psychological wouldn't necessarily make her feel better. Psychological, social, and biological factors can all contribute to, precipitate, or perpetuate conversion disorder. Often, there is a trauma, adverse life event, or acute/chronic stressor preceding symptoms of conversion disorder. Many patients with conversion disorder are found to have a history of childhood abuse, both emotional and sexual. Other psychological factors contributing to conversion disorder include poor coping skills and internal psychological conflicts.
- **Option D:** Patients with conversion disorder are more likely to have certain psychiatric disorders (depression, anxiety, and personality disorders) than patients with known neurologic conditions. They are also more likely to have a history of multiple somatic complaints, including symptoms like generalized fatigue, weakness, or pain, without a known cause.

**84. A female child, age 2, is brought to the emergency department after ingesting an unknown number of aspirin tablets about 30 minutes earlier. On entering the examination room, the child is crying and clinging to the mother. Which data should the nurse obtain first?**

- A. Heart rate, respiratory rate, and blood pressure
- B. Recent exposure to communicable diseases
- C. Number of immunizations received
- D. Height and weight

**Correct Answer: A. Heart rate, respiratory rate, and blood pressure**

The most important data to obtain on a child's arrival in the emergency department are vital sign measurements. Salicylate toxicity is a medical emergency. Intentional ingestion or accidental overdose can cause severe metabolic derangements, making treatment difficult. In an acute salicylate overdose, the onset of symptoms will occur within 3 to 8 hours. The severity of symptoms is dependent on the amount ingested.

- **Option B:** If the patient can provide history, there are several important pieces of information to obtain. These include time of ingestion, amount ingested, as well as formulation. The latter is important as it may affect the rate of absorption.
- **Option C:** It is critical to determine if there were any other substances ingested as this may complicate treatment and increase mortality. Determine whether this was accidental or intentional. This information should be corroborated by family, friends, or EMS personnel.
- **Option D:** The nurse should gather these data later. Aspirin has the propensity to form bezoars which will delay absorption. Aspirin can cause pyloric sphincter spasms, which increases the amount of time in the stomach allowing for more absorption.



**85. The 6-year-old son of Mr. and Mrs. Peters is admitted to the healthcare facility with the diagnosis of idiopathic hypopituitarism. His height is measured below the third percentile and weight at the 40th percentile. Which of the following would be the first action of his attending nurse?**

- A. Recommend orthodontic referral for underdeveloped jaw.
- B. Collaborate with a dietician to access his caloric needs.
- C. Provide for a tutor for his precocious intellectual ability.
- D. Place him in a room with a 2-year-old boy.

**Correct Answer: B. Collaborate with a dietician to access his caloric needs.**

Because the child's weight is excessive for his height, he needs a dietary assessment and a weight-loss program. Weight gain typically is out of proportion to growth, resulting in relative obesity. This obesity is truncal in distribution; skull and head circumference growth are typically preserved, producing the impression of a large head.

- **Option A:** An underdeveloped jaw is not usually a problem with hypopituitarism. Common presenting features include growth failure, disorders of pubertal development, and diabetes insipidus. Growth failure may be the most common presenting symptom in this age group, possibly with an associated delay in tooth development.
- **Option C:** Providing a tutor to educate him is an appropriate action, but the rationale is incorrect. Although children with hypopituitarism generally appear intellectually precocious because of the disparity between their size and their cognitive ability, they are usually of normal intelligence.
- **Option D:** Placing the child in a room with a toddler could contribute to poor self-esteem. Depending on the etiology of hypopituitarism, associated findings in the neonate, infant, or child may include developmental delay, various visual and neurologic symptoms, seizure disorder, and a number of congenital malformation syndromes.

**86. Veronica is a 14-year-old girl who wears a brace for structural scoliosis; which of the following statements indicate effective use of the brace?**

- A. "I sure am glad that I only have to wear this awful thing at night."
- B. "I'm really glad that I can take this thing off whenever I get tired."
- C. "I wonder if I can take the brace off when I go to the homecoming dance."
- D. "I'll look forward to taking this thing off to take my bath every day."

**Correct Answer: D. "I'll look forward to taking this thing off to take my bath every day."**

The brace should be dropped for simply 1 hour of every 24-hour period for hygiene and skincare. It is recommended to wear the Milwaukee brace 23 hours a day. The one hour that the child spends out of the brace should be spent doing exercises. Studies have proven that this protocol is effective for the conservative treatment of adolescent idiopathic scoliosis.

- **Option A:** Wearing the brace at night would be true only following radiologic studies indicate the spine has bone marrow maturity and the adolescent has been weaned from off whenever 1 to 2 years. It is important that the brace is checked and adjusted regularly while the child is growing and the curve correction progresses. The program stops when skeletal maturity is achieved and if the curve is under control.

- **Option B:** Taking the brace off whenever tired indicates poor understanding of the brace. The process of stopping the brace program should be done gradually and followed carefully. If there is any sign the curve deteriorates the patient should wear the brace again as before.
- **Option C:** Although physical appearance and social activities with peers are significant, the brace should not be excluded during these times. Activities and exercises are recommended and possible in the brace. Sports are also recommended, but the patient should avoid contact sports, where the brace can be harmful to the opponents.

**87. A client at 36 weeks gestation is scheduled for a routine ultrasound prior to amniocentesis. After teaching the client about the purpose of the ultrasound, which of the following client statements would indicate to the nurse in charge that the client needs further instruction?**

- A. The ultrasound will help to locate the placenta.
- B. The ultrasound identifies blood flow through the umbilical cord.
- C. The test will determine where to insert the needle.
- D. The ultrasound locates a pool of amniotic fluid.

**Correct Answer: B. The ultrasound identifies blood flow through the umbilical cord.**

Before amniocentesis, a routine ultrasound is valuable in locating the placenta, locating a pool of amniotic fluid, and showing the physician where to insert the needle. Color Doppler imaging ultrasonography identifies blood flow through the umbilical cord. A routine ultrasound does not accomplish this.

- **Option A:** As early as 10 weeks, the placenta can be detected by an ultrasound. The normal placenta is discoid with uniform echogenicity and rounded margins. It is usually located along the anterior or posterior uterine walls, extending into the lateral walls.
- **Option C:** Ultrasound is done before and during amniocentesis to ensure that the needle can safely pass through the walls of the abdomen and womb.
- **Option D:** The sample of amniotic fluid is removed through a fine needle inserted into the uterus through the abdomen, under ultrasound guidance.

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

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

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

Countertransference is an emotional reaction of the nurse on the client based on her unconscious needs and conflicts. Countertransference, which occurs when a therapist transfers emotions to a person in therapy, is often a reaction to transference, a phenomenon in which the person in treatment redirects feelings for others onto the therapist. Signs of countertransference in therapy can include a variety of behaviors, including excessive self-disclosure on the part of the therapist or an inappropriate

interest in irrelevant details from the life of the person in treatment. A therapist who acts on their feelings toward the person being treated or that person's situation or engages in behavior not appropriate to the treatment process may not be effectively managing countertransference.

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

**89. A male client who reportedly consumes one (1) qt of vodka daily is admitted for alcohol detoxification. To try to prevent alcohol withdrawal symptoms, Dr. Smith is most likely to prescribe which drug?**

- A. Clozapine (Clozaril)
- B. Thiothixene (Navane)
- C. Lorazepam (Ativan)
- D. Lithium carbonate (Eskalith)

**Correct Answer: C. Lorazepam (Ativan)**

The best choice for preventing or treating alcohol withdrawal symptoms is lorazepam, a benzodiazepine. Lorazepam is a benzodiazepine medication developed by DJ Richards. It went on the market in the United States in 1977. Lorazepam has common use as the sedative and anxiolytic of choice in the inpatient setting owing to its fast (1 to 3 minute) onset of action when administered intravenously. Lorazepam is also one of the few sedative-hypnotics with a relatively clean side effect profile. off-label (non-FDA-approved) uses for Lorazepam include rapid tranquilization of the agitated patient, alcohol withdrawal delirium, alcohol withdrawal syndrome, insomnia, panic disorder, delirium, chemotherapy-associated anticipatory nausea and vomiting (adjunct or breakthrough), as well as psychogenic catatonia.

- **Option A:** Clozapine is an FDA-approved atypical antipsychotic drug for treatment-resistant schizophrenia.[1] The definition of treatment-resistant schizophrenia is persistent or moderate delusions or hallucinations after failing two trials of antipsychotic medicines. Clozapine is part of a group of drugs known as second-generation antipsychotics or atypical antipsychotics.[1] Antipsychotic drugs are vital in treating the core symptoms of schizophrenia: hallucinations and delusions.
- **Option B:** Thiothixene is used to treat the symptoms of schizophrenia (a mental illness that causes disturbed or unusual thinking, loss of interest in life, and strong or inappropriate emotions). Thiothixene is in a group of medications called conventional antipsychotics. It works by decreasing abnormal excitement in the brain.

- **Option D:** Lithium was the first mood stabilizer and is still the first-line treatment option, but is underutilized because it is an older drug. Lithium is a commonly prescribed drug for a manic episode in bipolar disorder as well as maintenance therapy of bipolar disorder in a patient with a history of a manic episode. The primary target symptoms of lithium are mania and unstable mood. Lithium is also prescribed for major depressive disorder as an adjunct therapy, bipolar disorder without a history of mania, treatment of vascular headaches, and neutropenia. These are off-label uses, meaning they are not FDA-approved. Patients with rapid cycling and mixed state types of bipolar disorder generally do less well on lithium.

**90. A tentative diagnosis of opiate addiction, Nurse Candy should assess a recently hospitalized client for signs of opiate withdrawal. These signs would include:**

- A. Rhinorrhea, convulsions, subnormal temperature
- B. Nausea, dilated pupils, constipation
- C. Lacrimation, vomiting, drowsiness
- D. Muscle aches, papillary constriction, yawning

**Correct Answer: D. Muscle aches, papillary constriction, yawning**

These adaptations are associated with opiate withdrawal which occurs after cessation or reduction of prolonged moderate or heavy use of opiates. According to Diagnostic and Statistical Manual of Mental Disorders (DSM–5) criteria, signs and symptoms of opioid withdrawal include lacrimation or rhinorrhea, piloerection “goose flesh,” myalgia, diarrhea, nausea/vomiting, pupillary dilation and photophobia, insomnia, autonomic hyperactivity (tachypnea, hyperreflexia, tachycardia, sweating, hypertension, hyperthermia), and yawning.

- **Option A:** Opioid withdrawal syndrome is a life-threatening condition resulting from opioid dependence. Opioids are a group of drugs used for the management of severe pain. They are also commonly used as psychoactive substances around the world. Opioids include drugs such as morphine, heroin, oxycontin, codeine, methadone, and hydromorphone hydrochloride. They produce mental relaxation, pain relief, and euphoric feelings.
- **Option B:** The principal site in the brain that triggers the onset of opioid withdrawal syndrome is the locus coeruleus at the base of the brain. Neurons present in locus coeruleus are noradrenergic and have an increased number of opioid receptors. The locus coeruleus region is the main source of NAergic innervation of the limbic system and cerebral and cerebellar cortices. The NAergic activity in locus coeruleus neurons, an opioid receptor linked mechanism, is a prime causative site of opioid withdrawal symptoms. Furthermore, research has also shown that gray matter and nucleus raphe magnus is also involved in the presentation of opioid withdrawal syndrome.
- **Option C:** Sedative-hypnotic withdrawal symptoms may resemble opioid withdrawal characteristics, but opioid withdrawal is also characterized by lacrimation, rhinorrhea, and pupillary dilation. Hallucinogen and stimulant intoxication can also cause pupillary dilation, but other symptoms of opioid withdrawal-like nausea, diarrhea, vomiting, lacrimation, and rhinorrhea are usually not present.

**91. The nurse is teaching the client with insulin-dependent diabetes the signs of hypoglycemia. Which of the following signs is associated with hypoglycemia?**

- A. Nausea

- B. Flushed skin
- C. Tremulousness
- D. Slow pulse

**Correct Answer: C. Tremulousness**

- Option C: Hypoglycemia activates the sympathetic nervous system, causing neurogenic symptoms such as tremulousness.
- Options A, B, and D: These are symptoms of hyperglycemia.

**92. During a breast examination, which finding most strongly suggests that the Luz has breast cancer?**

- A. Slight asymmetry of the breasts
- B. A fixed nodular mass with dimpling of the overlying skin
- C. Bloody discharge from the nipple
- D. Multiple firm, round, freely movable masses that change with the menstrual cycle

**Correct Answer: B. A fixed nodular mass with dimpling of the overlying skin**

A fixed nodular mass with dimpling of the overlying skin is common during the late stages of breast cancer.

- **Option A:** Many women have slightly asymmetrical breasts.
- **Option C:** Bloody nipple discharge is a sign of intraductal papilloma, a benign condition.
- **Option D:** Multiple firm, round, freely movable masses that change with the menstrual cycle indicate fibrocystic breasts, a benign condition.

**93. George, age 8, is admitted with rheumatic fever. Which clinical finding indicates to the nurse that George needs to continue taking the salicylates he had received at home?**

- A. Chorea
- B. Polyarthrititis
- C. Subcutaneous nodules
- D. Erythema marginatum

**Correct Answer: B. Polyarthrititis**

Polyarthrititis is characterized by swollen, painful, hot joints that respond to salicylates. Polyarthrititis refers to a joint disease that involves at least five joints. One or more signs of inflammation, including pain, movement restriction, swelling, warmth, and redness, are seen in the joints involved.

- **Option A:** Chorea is the restless and sudden aimless and irregular movements of the extremities suddenly seen in persons with rheumatic fever, especially girls. Chorea may be viewed as resulting from increased dopaminergic activity in the projections from the substantia nigra to the striatum, resulting in decreased GABAergic projection from the striatum to the globus pallidus.

- **Option C:** Subcutaneous nodules are non tender swellings over bony prominences sometimes seen in persons with rheumatic fever. Subcutaneous nodules are deep-seated lesions in the skin, located in the deep dermis and subcutis, often with minimal changes appreciated on the surface of the skin. They are often easier to feel than see.
- **Option D:** Erythema marginatum is a skin condition characterized by nonpruritic rash, affecting the trunk and proximal extremities, seen in persons with rheumatic fever. The pathogenesis for the occurrence of these lesions in cases of hereditary angioedema is proposed to be bradykinin mediated. This was evidenced by the presence of dense stromal and endothelial deposits of bradykinin in skin biopsy specimens taken from lesions of erythema marginatum in patients with hereditary angioedema.

**94. A 23-year-old male client who has had a full-thickness burn is being discharged from the hospital. Which information is most important for the nurse to provide prior to discharge?**

- A. How to maintain home smoke detectors
- B. Joining a community reintegration program
- C. Learning to perform dressing changes
- D. Options available for scar removal

**Correct Answer: C. Learning to perform dressing changes**

Teaching the patient and his family to perform dressing changes is critical for the goal of progression towards independence. Proper management of burn injury through proper dressing changes helps prevent wound deterioration. Encouragement of the patient and his family members in participating in dressing changes and wound care helps prepare for the patient's eventual discharge and home care needs. All other choices (below) are important during the rehabilitation stage but dressing changes is a priority.

- **Option A:** Teach on the importance of installing and maintaining smoke detectors on every level of the home and changing batteries periodically to help prevent fires.
- **Option B:** Surviving a burn injury has a tremendous psychological impact on the patient and family. The nurse plays a key role in helping the patient adapt. Providing referrals to social services and counseling helps the patient during his rehabilitation phase.
- **Option D:** Discussion about burn reconstruction treatment after the scars have healed or matured is usually discussed after the first few years after injury. This option is often used to "improve both the function and the cosmetic appearance of burn scars".

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

- A. Administer Methergine 0.2 mg every 6 hours for 4 doses as ordered.
- B. Encourage the woman to void every 2 hours.
- C. Massage the fundus every hour for the first 24 hours following birth.
- D. Teach the woman the importance of rest and nutrition to enhance healing.

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

The fundus should be massaged only when boggy or soft. Massaging a firm fundus could cause it to relax. Uterine atony refers to the corpus uteri myometrial cells inadequate contraction in response to endogenous oxytocin that is released in the course of delivery. It leads to postpartum hemorrhage as delivery of the placenta leaves disrupted spiral arteries which are uniquely void of musculature and dependent on contractions to mechanically squeeze them into a hemostatic state.

- **Option A:** Active management of the third stage includes uterine massage with concomitant sustained low-level traction on the umbilical cord. Simultaneous oxytocin infusion is helpful, although it is reasonable to defer it to after delivery of the placenta. Medications used for postpartum hemorrhage secondary to Uterine atony include the following: oxytocin (Pitocin) can be given IV 10 to 40 units per 1000 ml or 10 units intramuscularly (IM). The rapid undiluted infusion may cause hypotension; methylergonovine (Methergine) given IM 0.2 mg. Given every 2 to 4 hours. Should be avoided in patients with hypertension: misoprostol (Cytotec): 800 to 1000 mg placed rectally. May cause a low-grade fever. It has a delayed action.
- **Option B:** A fundus that is higher than 2 cm above the umbilicus may indicate a distended bladder or a uterus that is filled with blood. After delivery of a large infant, the fundal height can be slightly elevated, and this may be a normal finding. Assist the woman to empty her bladder. Catheterize only if the woman is unable to void and the bladder is distended. Once the bladder is empty, reevaluate the fundal height. Bladder distention, incomplete emptying, urine retention, and/or the inability to void may occur during the first few days postpartum. Within 12 hours of birth, changes in hormone levels (decreased estrogen and oxytocin) occur resulting in diuresis. Measure and record urine output in the first 24 hours post-birth. A bladder scan can also be used at this time to assess for post-void residual.
- **Option D:** This is an effective measure to enhance and maintain contraction of the uterus and to facilitate healing. The nurse must be well versed in postpartum assessment and be able to identify subtle changes that could indicate a woman's deteriorating condition. Components of care should be standardized regardless of whether the recovery is done in a post-anesthesia care unit (PACU), a labor and delivery room, or a postpartum room.

**96. Which of the following should be included in a plan of care for a client receiving total parenteral nutrition (TPN)?**

- A. Withhold medications while the TPN is infusing.
- B. Change TPN solution every 24 hours.
- C. Flush the TPN line with water prior to initiating nutritional support.
- D. Keep the client on complete bed rest during TPN therapy.

**Correct Answer: B. Change TPN solution every 24 hours.**

TPN solutions should be changed every 24 hours in order to prevent bacterial overgrowth due to the hypertonicity of the solution. Because the central venous catheter needs to remain in place for a long time, a strict sterile technique must be used during the insertion and maintenance of the TPN line. The TPN line should not be used for any other purpose. External tubing should be changed every 24 hours with the first bag of the day. In-line filters have not been shown to decrease complications. Dressings should be kept sterile and are usually changed every 48 hours using strict sterile techniques.

- **Option A:** Medication therapy can continue during TPN therapy. Progress of patients with a TPN line should be followed on a flowchart. An interdisciplinary nutrition team, if available, should monitor patients. Weight, complete blood count, electrolytes, and blood urea nitrogen should be monitored often (eg, daily for inpatients). Plasma glucose should be monitored every 6 hours until patients and glucose levels become stable. Fluid intake and output should be monitored

continuously. When patients become stable, blood tests can be done much less often.

- **Option C:** Flushing is not required because the initiation of TPN does not require a client to remain on bed rest during therapy. Catheter-related sepsis rates have decreased since the introduction of guidelines that emphasize sterile techniques for catheter insertion and skincare around the insertion site. The increasing use of dedicated teams of physicians and nurses who specialize in various procedures including catheter insertion also has accounted for a decrease in catheter-related infection rates.
- **Option D:** However, other clinical conditions of the client may affect mobility issues and warrant the client's being on bed rest. Place the client in a semi-Fowler's or high-Fowler's position. Maintaining the head of the bed elevated will promote ease in breathing. This position also allows the pooling of fluid in the bases and for gas exchange to be more available to the lung tissue.

**97. When monitoring a female client recently admitted for treatment of cocaine addiction, nurse Aaron notes sudden increases in the arterial blood pressure and heart rate. To correct these problems, the nurse expects the physician to prescribe:**

- A. Norepinephrine (Levophed) and Lidocaine (Xylocaine)
- B. Nifedipine (Procardia) and Lidocaine.
- C. Nitroglycerin (Nitro-Bid IV) and Esmolol (Brevibloc)
- D. Nifedipine and Esmolol

**Correct Answer: D. Nifedipine and Esmolol**

This client requires a vasodilator, such as nifedipine, to treat hypertension, and a beta-adrenergic blocker, such as esmolol, to reduce the heart rate. Nifedipine is a calcium channel blocker that belongs to the dihydropyridine subclass. It is primarily used as an antihypertensive and antianginal medication. Esmolol (esmolol hydrochloride) is an intravenous cardioselective beta-1 adrenergic antagonist. Esmolol is FDA-approved for short-term duration use in control of supraventricular tachycardia, such as a rapid ventricular rate in patients with atrial fibrillation or atrial flutter.

- **Option A:** Norepinephrine's predominant use is as a peripheral vasoconstrictor. Specifically, the FDA has approved its use for blood pressure control in specific acute hypotensive states, as well as being a potential adjunct in the treatment of cardiac arrest with profound hypotension.
- **Option B:** Lidocaine, an antiarrhythmic, isn't indicated because the client doesn't have an arrhythmia. The drug is commonly used for local anesthesia, often in combination with epinephrine (which acts as a vasopressor and extends its duration of action at a site by opposing the local vasodilatory effects of lidocaine).
- **Option C:** Although nitroglycerin may be used to treat coronary vasospasm, it isn't the drug of choice in hypertension. Nitroglycerin is a vasodilatory drug used primarily to provide relief from anginal chest pain. Nitroglycerin has been FDA approved since 2000 and was first sold by Pfizer under the brand name Nitrostat. It is currently FDA approved for the acute relief of an attack or acute prophylaxis of angina pectoris secondary to coronary artery disease.

**98. A nurse understands that a patient may experience pain during peritoneal dialysis because of which of the following? Select all that apply.**



- A. Warming the dialysate
- B. Too rapid installation
- C. Infiltration of the solution into the bloodstream
- D. Accumulation of dialysate solution under the diaphragm
- E. Too rapid outflow of the dialysate

**Correct Answer: B and D.**

Infusion pain is a frequent problem in peritoneal dialysis (PD), and can markedly vary in intensity and risk. In general, treatment of infusion pain is dictated by the specific cause.

- **Option A:** Warming helps with discomfort. Warming the solution increases the rate of urea removal by dilating peritoneal vessels. Cold dialysate causes vasoconstriction, which can cause discomfort and excessively lower the core body temperature, precipitating cardiac arrest.
- **Option B:** If pain is caused by jetting of dialysate against the peritoneum, reducing the infusion rate may alleviate the pain.
- **Option C:** The dialysate does not infiltrate the circulation. Inadvertent introduction of air into the abdomen irritates the diaphragm and results in referred pain to the shoulder blade. This type of discomfort may also be reported during initiation of therapy or during infusions and usually is related to stretching and irritation of the diaphragm with abdominal distension.
- **Option D:** Not only the microorganisms but also free air can enter the peritoneal cavity. Presence of free air in the peritoneal cavity is called pneumoperitoneum (PP). Abdominal pain in a patient with a PD catheter in situ has many potential differential diagnoses.
- **Option E:** Rapid outflow doesn't cause pain. Abdominal pain or discomfort during complete drain of dialysis solution or during installation of peritoneal dialysis solution into an empty peritoneal cavity is an infrequent finding in CPD patients. Usually the pain is noted during the drain phase, near the end of the drain.

**99. When assessing a female client who is receiving tricyclic antidepressant therapy, which of the following would alert the nurse to the possibility that the client is experiencing anticholinergic effects?**

- A. Urine retention and blurred vision
- B. Respiratory depression and convulsion
- C. Delirium and Sedation
- D. Tremors and cardiac arrhythmias

**Correct Answer: A. Urine retention and blurred vision**

Anticholinergic effects, which result from blockage of the parasympathetic (craniosacral) nervous system including urine retention, blurred vision, dry mouth & constipation. TCAs have varying degrees of receptor affinities, leading to several adverse effects. The most common adverse effects include constipation, dizziness, and xerostomia. Due to its blockade of cholinergic receptors, it can lead to blurred vision, constipation, xerostomia, confusion, urinary retention, and tachycardia.

- **Option B:** Overall, the therapeutic index of TCAs is narrow, and the therapeutic range for each specific TCA is dependent on the drug prescribed. Because of the narrow therapeutic index of TCAs, patients should be monitored closely for symptoms of toxicity, i.e., QRS-widening on

electrocardiogram (ECG), tremors, confusion, muscle rigidity, and coma.

- **Option C:** Due to the blockade of alpha-1 adrenergic receptors, it can cause orthostatic hypotension and dizziness. TCA-induced histamine blockade (H1) may lead to sedation, increased appetite, weight gain, and confusion. TCA use has shown to lead to an increased risk of suicidal ideation and behavior in individuals aged 24 or less. Therefore, individuals started on TCAs that are age 24 or less should be followed closely to assess for thoughts and behaviors related to suicide.
- **Option D:** TCAs may also cause cardiovascular complications, including arrhythmias, such as QTc prolongation, ventricular fibrillation, and sudden cardiac death in patients with preexisting ischemic heart disease. Therefore, the examination of a patient's cardiac health is important before TCA prescription. There is evidence of TCAs increasing the risk of seizures in those with epilepsy, and use requires caution in this population.

**100. Which of the following physical assessment findings would the nurse expect to find in a client with advanced COPD?**

- A. Increased anteroposterior chest diameter.
- B. Underdeveloped neck muscles.
- C. Collapsed neck veins.
- D. Increased chest excursions with respiration.

**Correct Answer: A. Increased anteroposterior chest diameter.**

Increased anteroposterior chest diameter is characteristic of advanced COPD. Air is trapped in the overextended alveoli, and the ribs are fixed in an inspiratory position. The result is the typical barrel-chested appearance. In addition, coarse crackles beginning with inspiration may be heard.

- **Option B:** Overly developed, not underdeveloped, neck muscles are associated with COPD because of their increased use in the work of breathing. Use of accessory respiratory muscles and paradoxical indrawing of lower intercostal spaces is evident (known as the Hoover sign).
- **Option C:** Distended, not collapsed, neck veins are associated with COPD as a symptom of the heart failure that the client may experience secondary to the increased workload on the heart to pump into pulmonary vasculature. In advanced disease, cyanosis, elevated jugular venous pulse (JVP), and peripheral edema can be observed.
- **Option D:** Diminished, not increased, chest excursion is associated with COPD. The sensitivity of a physical examination in detecting mild to moderate COPD is relatively poor; however, physical signs are quite specific and sensitive for severe disease. Patients with severe disease experience tachypnea and respiratory distress with simple activities.