

# Kevin's Review - 100 NCLEX Practice Questions

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

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

**Correct Answer: B, E, & F.**

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

- **Option A:** A puzzle with large pieces only may be appropriate. Wood puzzles with only 4 to 12 large pieces aid in the toddler's development of critical thinking. Other appropriate toys may be blocks that snap together, objects to sort, and things with hooks, buttons, buckles, and snaps.
- **Options C and D:** A farm set and a golf set may contain items that the child could swallow. These kinds of toys are appropriate for preschoolers who like pretending and building. Preschoolers have a longer attention span than toddlers.
- **Options B and F:** Toys that make the use of large and small muscles are also appropriate for toddlers to develop their gross motor skills. This may include large or small balls for kicking and throwing, ride-on equipment, push and pull toys such as wagons, and low climbers with soft material underneath.
- **Option E:** A doll with accessories will catch the attention of a toddler too, as well as child-sized furniture, dress-up clothes, puppets, and sand and water play toys.

**2. A 73-year-old man, recently diagnosed with osteoporosis, is in the radiology department awaiting his scheduled dual-energy X-ray absorptiometry (DXA) scan. Appearing anxious, he turns to the attending nurse and inquires about the rationale behind this particular test. How should the nurse best address his concerns?**

- A. "The DXA scan is primarily used to quantify the density of your bones, helping us understand the severity of your osteoporosis."
- B. "This scan is designed to meticulously assess the blood circulation within your bones."
- C. "The main objective of the DXA scan is to gauge the efficiency and function of your muscle groups."
- D. "The test is primarily aimed at identifying any irregularities or deformities in your joints."
- **Option A:** A DXA scan is a diagnostic test used to measure bone mineral density and assess the risk of fractures. It helps diagnose osteoporosis and monitor treatment effectiveness.
- **Options B, C, and D:** These statements are unrelated to the purpose of a DXA scan.

**3. A male client has an abnormal result on a Papanicolaou test. After admitting, he read his chart while the nurse was out of the room, the client asked what dysplasia means. Which definition should the nurse provide?**

- A. Alteration in the size, shape, and organization of differentiated cells
- B. Increase in the number of normal cells in a normal arrangement in a tissue or an organ
- C. Presence of completely undifferentiated tumor cells that don't resemble cells of the tissues of their origin
- D. Replacement of one type of fully differentiated cell by another in tissues where the second type normally isn't found

**Correct Answer: A. Alteration in the size, shape, and organization of differentiated cells**

- **Option A:** Dysplasia refers to an alteration in the size, shape, and organization of differentiated cells.
- **Option B:** An increase in the number of normal cells in a normal arrangement in a tissue or an organ is called hyperplasia.
- **Option C:** The presence of completely undifferentiated tumor cells that don't resemble cells of the tissues of their origin is called anaplasia.
- **Option D:** Replacement of one type of fully differentiated cell by another in tissues where the second type normally isn't found is called metaplasia.

**4. A 60-year-old male client is admitted to the cardiology ward following an angioplasty for coronary artery disease. Nutrition education is a part of his discharge planning. What dietary advice should the nurse prioritize?**

- A. Eating three (3) balanced meals a day
- B. Adding complex carbohydrates
- C. Avoiding very heavy meals
- D. Limiting sodium to 7 gms per day

**Correct Answer: C. Avoiding very heavy meals**

Eating large, heavy meals can pull blood away from the heart for digestion and is dangerous for the client with coronary artery disease. Too much plaque may accumulate in the arteries and block the delivery of blood and oxygen in major organs of the body.

- **Option A:** Eating a balanced diet should be a part of the management of a client with coronary artery disease.
- **Option B:** Complex carbohydrates decrease inflammation and help decrease the risk of plaque build-up in the arteries.
- **Option C:** People with cardiovascular diseases should have a limit of less than 1.5 grams per day.

**5. A 32-year-old woman meets with the nurse on her first office visit since undergoing a left mastectomy. When asked how she is doing, the woman states her appetite is still not good, she is not getting much sleep because she doesn't**

***go to bed until her husband is asleep, and she is really anxious to get back to work. Which of the following nursing interventions should the nurse explore to support the client's current needs?***

- A. Ask open-ended questions about sexuality issues related to her mastectomy
- B. Suggest that the client learn relaxation techniques to help with her insomnia
- C. Call the physician to discuss allowing the client to return to work earlier
- D. Perform a nutritional assessment to assess for anorexia

**Correct Answer: A. Ask open-ended questions about sexuality issues related to her mastectomy**

- **Option A:** The content of the client's comments suggests that she is avoiding intimacy with her husband by waiting until he is asleep before going to bed. Addressing sexuality issues is appropriate for a client who has undergone a mastectomy.
- **Option B:** Suggesting that she learn relaxation techniques to help her with her insomnia is appropriate; however, the nurse must first address the psychosocial and sexual issues that are contributing to her sleeping difficulties.
- **Option C:** Rushing her return to work may debilitate her and add to her exhaustion.
- **Option D:** A nutritional assessment may be useful, but there is no indication that she has anorexia.

***6. In a specialized pediatric oncology unit, a 7-year-old patient, Noah, has been diagnosed with acute lymphoblastic leukemia (ALL) and is scheduled to commence a chemotherapy regimen as a part of his treatment plan. The pediatric oncology nursing team is meticulously preparing to administer the chemotherapy, cognizant of the potential adverse effects and the critical importance of precise administration to optimize treatment efficacy and patient safety. The charge nurse, with a well-versed knowledge in pediatric oncology nursing, is reviewing the protocol with the nursing staff to ensure a thorough understanding and adherence to the guidelines for chemotherapy administration. The discussion is comprehensive, covering a spectrum of considerations including monitoring for adverse reactions, ensuring a patent intravenous line, and being vigilant for signs of infusion-related complications. Which of the following actions, if performed by the nursing staff during the administration of chemotherapy to Noah, would be deemed inappropriate?***

- A. Monitoring the child for both general and specific adverse effects.
- B. Observing the child for 10 minutes to note for signs of anaphylaxis.
- C. Administering medication through a free-flowing intravenous line.
- D. Assessing for signs of infusion infiltration and irritation.
- E. Pre-medicating the child with anti-emetics as ordered, to manage nausea and vomiting.
- F. Conducting a thorough assessment of the child's overall health status and obtaining baseline vital signs prior to administering chemotherapy.

G. Administering the chemotherapy at a rapid rate to minimize the duration of the infusion.

**Correct Answer: G. Administering the chemotherapy at a rapid rate to minimize the duration of the infusion.**

Administering chemotherapy at a rapid rate to minimize infusion duration is inappropriate and dangerous. Chemotherapy agents are dosed specifically to balance efficacy with toxicity and should be administered at the prescribed rate to ensure patient safety and treatment effectiveness.

- **Option A:** Monitoring for adverse effects is a crucial aspect of chemotherapy administration to ensure the safety and well-being of the patient.
- **Option B:** Observing for signs of anaphylaxis, especially in the initial phase post administration, is crucial for early detection and management of a severe allergic reaction. However, an extended observation period might be more prudent given the severity of such a reaction.
- **Option C:** Ensuring a free-flowing intravenous line is a fundamental step to ensure accurate dosage delivery and to prevent complications such as infiltration or extravasation.
- **Option D:** Assessing for infusion infiltration and irritation is essential to prevent, identify, and manage potential complications associated with IV chemotherapy administration.
- **Option E:** Pre-medication with anti-emetics can be crucial for managing chemotherapy-induced nausea and vomiting, which are common side effects of chemotherapy.
- **Option F:** Conducting a thorough assessment prior to chemotherapy administration is a pivotal step in ensuring the patient's readiness for chemotherapy and for recognizing any potential contraindications.

### **7. Which of the following diagnostic tests is definitive for TB?**

- A. Chest x-ray
- B. Mantoux test
- C. Sputum culture
- D. Tuberculin test

**Correct Answer: C. Sputum culture**

The sputum culture for *Mycobacterium tuberculosis* is the only method of confirming the diagnosis. Mycobacterial culture is the gold standard for diagnosis. Mycobacterial culture should be performed on both the solid and liquid medium. Liquid media culture can detect very low bacterial load and is considered a gold standard. Culture essential for drug susceptibility testing.

- **Option A:** Lesions in the lung may not be big enough to be seen on x-ray. A chest x-ray is indicated to rule out or rule in the presence of active disease in all screening test positive cases. In pulmonary tuberculosis, initial testing includes a chest X-Ray, sputum evaluation.
- **Option B:** Skin tests may be falsely positive or falsely negative. The Mantoux reaction following injection of a dose of PPD (purified protein derivative) is the traditional screening test for exposure to Tuberculosis. The result is interpreted taking into consideration the patient's overall risk of exposure. Patients are classified into 3 groups based on the risk of exposure with three corresponding cut-off points.
- **Option D:** Note that a Mantoux test indicates exposure or latent tuberculosis. However, this test lacks specificity, and patients would require subsequent visits for interpreting the results as well as chest x-ray for confirmation. Although relatively sensitive, the Mantoux reaction is not very specific

and may give false-positive reactions in individuals who have been exposed to the BCG-vaccine.

**8. Match the acid-base status of the following blood samples to the disorders in the given choices. (PaCO<sub>2</sub> values are in mm Hg and bicarbonate values in mmol/l). pH 7.39, PaCO<sub>2</sub> 44, HCO<sub>3</sub><sup>-</sup> 26**

- A. Respiratory Acidosis
- B. Metabolic Acidosis
- C. Respiratory Alkalosis
- D. Metabolic Alkalosis
- E. Normal

**Correct Answer: E. Normal**

- Based on the given ABG values, pH is 7.39. For pH, the normal range is 7.35 to 7.45. So it is NORMAL.
- PaCO<sub>2</sub> is 44. The normal range for PaCO<sub>2</sub> is from 35 to 45. It is also NORMAL.
- HCO<sub>3</sub><sup>-</sup> is 26. The normal range for HCO<sub>3</sub> is from 22 to 26. It is also NORMAL.
- For these ABG values, pH, PACO<sub>2</sub>, and HCO<sub>3</sub> are NORMAL. Therefore, this group of ABG values is considered NORMAL.

**9. Upon assessment, the nurse found the following: fundus at 2 fingerbreadths above the umbilicus, last menstrual period (LMP) 5 months ago, fetal heartbeat (FHB) not appreciated. Which of the following is the most possible diagnosis of this condition?**

- A. Hydatidiform mole
- B. Missed abortion
- C. Pelvic inflammatory disease
- D. Ectopic pregnancy

**Correct Answer: A. Hydatidiform mole**

Hydatidiform mole begins as a pregnancy but early in the development of the embryo degeneration occurs. The proliferation of the vesicle-like substances is rapid causing the uterus to enlarge bigger than the expected size based on ages of gestation (AOG). In the situation given, the pregnancy is only 5 months but the size of the uterus is already above the umbilicus which is compatible with 7 months AOG. Also, no fetal heartbeat is appreciated because the pregnancy degenerated thus there is no appreciable fetal heartbeat.

- **Option B:** A missed abortion is a nonviable intrauterine pregnancy that has been retained within the uterus without spontaneous abortion. Typically, no symptoms exist besides amenorrhea, and the patient finds out that the pregnancy stopped developing earlier when a fetal heartbeat is not observed or heard at the appropriate time. An ultrasound usually confirms the diagnosis.
- **Option C:** Pelvic inflammatory disease (PID) is an infection of one or more of the upper reproductive organs, including the uterus, fallopian tubes, and ovaries. Untreated PID can cause

scar tissue and pockets of infected fluid (abscesses) to develop in the reproductive tract, which can cause permanent damage.

- **Option D:** An ectopic pregnancy is when a fertilized egg implants itself outside of the womb, usually in one of the fallopian tubes. The fallopian tubes are the tubes connecting the ovaries to the womb. If an egg gets stuck in them, it won't develop into a baby and the mother's health may be at risk if the pregnancy continues.

**10. After explaining to the parents about their child's unique psychological needs related to a seizure disorder and possible stressors, which of the following interests uttered by them would indicate further teaching?**

- A. Feeling different from peers
- B. Poor self-image
- C. Cognitive delays
- D. Dependency

**Correct Answer: C. Cognitive delays**

Children with seizure disorders do not necessarily have cognitive delays. Epilepsy is one of the most serious neurological conditions and has an impact not only on the affected individual but also on the family and, indirectly, on the community. A global approach to the individual must take into account cognitive problems, psychiatric comorbidities and all psychosocial complications that often accompany epilepsy.

- **Option A:** Others have found that children feel that having epilepsy is stigmatizing and keep their condition a secret from their friends (MacLeod and Austin, 2003). Epilepsy is a condition still highly stigmatized, and stigma greatly affects the QoL of people with epilepsy, leading to increased anxiety and depression and poor adherence to medication.
- **Option B:** In focus groups with children with epilepsy, McNelis and colleagues (2007) found that children were afraid to talk to their parents because they did not want to worry them. Social support mechanisms help people to overcome many of the difficulties they encounter. Individuals with good social support usually have an increased sense of control over their lives, enabling them to have better coping mechanisms for handling adversities.
- **Option D:** Dependency can put additional stress on a child trying to understand and manage chronic illness. Austin and colleagues (1993) found that children reflected their parents' fears including those related to procedures, dying, and becoming mentally ill. Successful integration of people with epilepsy into society is another important goal in epilepsy care.

**11. The nurse is reviewing the record of a client with Crohn's disease. Which of the following stool characteristics would the nurse expect to note documented on the client's record?**

- A. Chronic constipation
- B. Diarrhea
- C. Constipation alternating with diarrhea.
- D. Stool constantly oozes from the rectum.

**Correct Answer: B. Diarrhea**

Crohn's disease is characterized by nonbloody diarrhea of usually not more than four to five stools daily. Over time, the diarrhea episodes increase in frequency, duration, and severity. In CD, the inflammation extends through the entire thickness of the bowel wall from the mucosa to the serosa. The disease runs a relapsing and remitting course. The other options are not associated with diarrhea.

- **Option A:** Patients with flare-ups of Crohn's disease typically present with abdominal pain (right lower quadrant), flatulence/bloating, diarrhea (can include mucus and blood), fever, weight loss, anemia. In severe cases, perianal abscess, perianal Crohn's disease, and cutaneous fistulas can be seen.
- **Option C:** When the small bowel is involved, it may present with diarrhea, malabsorption, weight loss, abdominal pain, and anorexia. Enterovesical fistulae may present with pneumaturia, recurrent urinary tract infections, and feculent vaginal discharge.
- **Option D:** Granuloma formation is very common in Crohn's disease but their absence does not exclude the diagnosis. The ongoing inflammation and scarring lead to bowel obstruction and stricture formation. Crohn's disease is also associated with enterovesical, enteroenteral, enterocutaneous, and enterovaginal fistulas.

**12. Captopril may be administered to a client with HF because it acts as a:**

- A. Vasopressor
- B. Volume expander
- C. Vasodilator
- D. Potassium-sparing diuretic

**Correct Answer: C. Vasodilator**

ACE inhibitors have become the vasodilators of choice in the client with mild to severe HF. Vasodilator drugs are the only class of drugs clearly shown to improve survival in overt heart failure. ACEi improves heart failure by decreasing afterload. Apart from decreasing the afterload, it also reduces cardiac myocyte hypertrophy. The Heart Outcomes Prevention Evaluation (HOPE) Study demonstrated better outcomes for those prescribed ACE inhibitors.

- **Option A:** In 2014, the Eighth Joint National Commission (JNC8) published evidence-based guidelines for the treatment of high blood pressure in adults, which recommended that ACE inhibitors are one of four drug classes recommended for initial therapy for adults with elevated blood pressure.
- **Option B:** Current recommendations are the use of ACEi or ARB as first-line therapy for hypertension in patients with a history of diabetes. Also, the use of ACEi in diabetic hypertensive patients with no history of coronary heart disease has shown to decrease the incidence of myocardial infarction and improved heart function.
- **Option D:** The other three classes of drugs are calcium channel blockers, thiazide diuretics, and angiotensin receptor blockers, which are useful as initial therapy for the general nonblack population. Only thiazide and calcium channel blockers are recommended as initial therapy for the general black population with elevated blood pressure.

**13. Which of the following danger signs should be reported promptly during the antepartum period?**

- A. Constipation
- B. Breast tenderness
- C. Nasal stuffiness
- D. Leaking amniotic fluid

**Correct Answer: D. Leaking amniotic fluid**

Danger signs that require prompt reporting leaking of amniotic fluid, vaginal bleeding, blurred vision, rapid weight gain, and elevated blood pressure.

- **Option A:** Postpartum constipation, with symptoms such as pain or discomfort, straining, and hard stool, is a common condition affecting mothers. Hemorrhoids, pain at the episiotomy site, effects of pregnancy hormones, and haematinics used in pregnancy can increase the risk of postpartum constipation. Eating a high-fiber diet and increasing fluid intake is usually encouraged, although laxatives are commonly used in relieving constipation.
- **Option B:** The breasts may be extra tender as early as one or two weeks after conception. This is because the body is making so much estrogen and progesterone in early pregnancy that the glands in the breasts start growing. This hormone surge causes breasts to retain more fluids and feel heavy, sore, or more sensitive than normal PMS tenderness.
- **Option C:** Pregnancy rhinitis is an inflammation of the mucous membranes lining the nose. This causes nasal congestion. Increased blood flow to the nasal passages and enlargement of the nasal veins also play a role.

**14. The nurse is aware that the following terms used to describe reduced cardiac output and perfusion impairment due to ineffective pumping of the heart is:**

- A. Anaphylactic shock
- B. Cardiogenic shock
- C. Distributive shock
- D. Myocardial infarction (MI)

**Correct Answer: B. Cardiogenic shock**

Cardiogenic shock is shock related to ineffective pumping of the heart.

- **Option A:** Anaphylactic shock results from an allergic reaction. This severe reaction happens when an over-release of chemicals puts the person into shock.
- **Option C:** Distributive shock results from changes in the intravascular volume distribution and is usually associated with increased cardiac output.
- **Option D:** MI isn't a shock state, though in most cases, a lack of oxygen to the heart, usually from a heart attack, damages its main pumping chamber. Without oxygen-rich blood circulating to that area of the heart, the heart muscle can weaken and go into cardiogenic shock.

**15. What is the primary reason for administering morphine to a client with an MI?**



- A. To sedate the client.
- B. To decrease the client's pain.
- C. To decrease the client's anxiety.
- D. To decrease oxygen demand on the client's heart.

**Correct Answer: D. To decrease oxygen demand on the client's heart**

Morphine is administered because it decreases myocardial oxygen demand. Morphine can decrease the heart rate, blood pressure, and venous return. Morphine can also stimulate local histamine-mediated processes. In theory, the combination of these can reduce myocardial oxygen demand.

- **Option A:** Morphine is a potent opioid; it decreases pain, which in turn leads to a decrease in the activation of the autonomic nervous system. These are desirable effects when a patient is having an MI. Additionally, morphine has hemodynamic side effects that can be beneficial during an MI.
- **Option B:** Patients that are actively having acute coronary syndrome are often given morphine in the emergency setting before going to the cath lab. Morphine to relieve pain during a myocardial infarction (MI) has been in use since the early 1900s.
- **Option C:** Morphine will also decrease anxiety while causing sedation, but it isn't primarily given for those reasons. Morphine is rarely used for procedural sedation. However, for small procedures, physicians will sometimes combine a low dose of morphine with a low dose of benzodiazepine-like lorazepam.

## ***16. The nursing theorist who developed transcultural nursing theory is***

- A. Dorothea Orem
- B. Madeleine Leininger
- C. Betty Newman
- D. Sr. Callista Roy

**Correct Answer: B. Madeleine Leininger**

Madeleine Leininger developed the theory on transcultural theory based on her observations on the behavior of selected people within a culture. It involves learning and understanding various cultures regarding nursing and health-illness caring practices, beliefs, and values to implement significant and efficient nursing care services to people according to their cultural values and health-illness context.

- **Option A:** In her Self-Care Theory, she defined Nursing as "The act of assisting others in the provision and management of self-care to maintain or improve human functioning at the home level of effectiveness."
- **Option C:** In Neuman's System Model, she defined nursing as a "unique profession in that is concerned with all of the variables affecting an individual's response to stress." The focus is on the client as a system (which may be an individual, family, group, or community) and on the client's responses to stressors.
- **Option D:** In Adaptation Model, Roy defined nursing as a "health care profession that focuses on human life processes and patterns and emphasizes the promotion of health for individuals, families, groups, and society as a whole."

**17. The nurse is giving discharge teaching to a 45-year-old client, a professional athlete, seven (7) days post-myocardial infarction. The client, anxious about returning to his normal life and activities, asks the nurse why he must wait six (6) weeks before having sexual intercourse. He also inquires about the impact on his athletic performance. Given his profession and concerns, what is the best response by the nurse to this question?**

- A. "You need to regain your strength before attempting such exertion, especially considering your profession."
- B. "When you can climb 2 flights of stairs without problems or feeling short of breath, it is generally safe to engage in activities like sex."
- C. "Have a glass of wine to relax you, then you can try to have sex."
- D. "Your heart needs time to heal, and premature exertion can risk another cardiac event."
- E. "You should consider discussing this with your cardiologist, who can provide guidelines tailored to your athletic needs."

**Correct Answer: B. "When you can climb 2 flights of stairs without problems, it is generally safe."**

After a myocardial infarction, it's essential for the heart to heal and for the patient to gradually return to physical activities. The ability to climb 2 flights of stairs without experiencing symptoms is often used as a general benchmark to gauge a person's cardiovascular fitness and readiness to engage in activities that require exertion, such as sexual intercourse. Given the client's profession as an athlete, this benchmark is particularly relevant. The other options either provide incomplete advice or are not directly related to the client's primary concern.

**18. A client is prescribed by the physician to undergo an escharotomy. Which of the following statements made by the nurse is true regarding this procedure?**

- A. "It is the surgical removal of a thin layer of the client's own unburned skin."
- B. "A lengthwise incision is made through the burn eschar to relieve vasodilation."
- C. "It is performed at the bedside and without anesthesia."
- D. "It is the application of topical enzyme agents directly to the wound, and these agents digest necrotic collagen tissue."

**Correct Answer: C. "It is performed at the bedside and without anesthesia".**

An escharotomy is performed at the bedside and without anesthesia since nerve endings have been destroyed by the burn injury. An escharotomy is an emergency surgical procedure involving incising through areas of burnt skin to release the eschar and its constrictive effects, restore distal circulation, and allow adequate ventilation.

- **Option A:** A skin graft, also known as an autograft, involves taking skin from an unburned part of the patient's body and placing it on the wound after the burn has been removed.
- **Option B:** Escharotomy involves making a lengthwise incision through the burn eschar to relieve vasoconstriction. The incisions should extend from unburnt skin to unburnt skin ideally, or at least into areas of more superficial burns, down to subcutaneous fat, and release any constrictions.

- **Option D:** This is a selective method for debridement of necrotic tissue using an exogenous proteolytic enzyme, collagenase, to debride Clostridium bacteria. Collagenase digests the collagen in the necrotic tissue allowing it to detach.

**19. Which of the following positions would best aid breathing for a patient with acute pulmonary edema?**

- A. Lying flat in bed
- B. Left side-lying position
- C. High Fowler's position
- D. Semi-Fowler's position

**Correct Answer: C. High Fowler's position**

High Fowler's position facilitates breathing by reducing venous return. Lying flat and side-lying positions worsen breathing and increase the heart's workload.

- **Option A:** Lying flat in bed would make the patient feel like he is "drowning".
- **Option C:** Side-lying position worsens breathing and increases the heart's workload.
- **Option D:** Semi-Fowler's may not be enough to improve the patient's breathing.

**20. A male client with a peptic ulcer is scheduled for a vagotomy and the client asks the nurse about the purpose of this procedure. Which response by the nurse best describes the purpose of a vagotomy?**

- A. Halts stress reactions
- B. Heals the gastric mucosa
- C. Reduces the stimulus to acid secretions
- D. Decreases food absorption in the stomach

**Correct Answer: C. Reduces the stimulus to acid secretions.**

A vagotomy, or cutting of the vagus nerve, is done to eliminate parasympathetic stimulation of gastric secretion. A vagotomy is a type of surgery that removes all or part of the vagus nerve. This nerve runs from the bottom of the brain, through the neck, and along the esophagus, stomach, and intestines in the gastrointestinal (GI) tract.

- **Option A:** Vagotomy was once commonly performed to treat and prevent PUD; however, with the availability of excellent acid secretion control with H<sub>2</sub>-receptor antagonists, proton pump inhibitors, and anti-Helicobacter pylori medications, the need for surgical management of this condition has greatly decreased.
- **Option B:** The relevant physiology revolves around the mechanisms relating to stomach acid secretion. Intraluminal gastric acid is released by the parietal cells, mainly located in the body of the stomach. Parietal cells are stimulated via 3 mechanisms: gastrin, acetylcholine, and histamine. All 3 mechanisms activate the hydrogen-potassium ATPase-releasing hydrogen ion into the stomach lumen.

- **Option D:** The indications for vagotomy are few with the advancements of medical therapy. Generally, acid-reducing operations are reserved for complicated ulcer disease in a stable patient who has failed maximum medical therapy. The type of surgery performed depends on the type of ulcer (duodenal versus gastric), the complication of PUD (bleeding, perforation, obstruction, intractability), and the location of the ulcer (types I to V gastric ulcers as described by the Modified Johnson Classification system).

**21. Francis with anemia has been admitted to the medical-surgical unit. Which assessment findings are characteristic of iron-deficiency anemia?**

- A. Nights sweats, weight loss, and diarrhea
- B. Dyspnea, tachycardia, and pallor
- C. Nausea, vomiting, and anorexia
- D. Itching, rash, and jaundice

**Correct Answer: B. Dyspnea, tachycardia, and pallor**

Signs of iron-deficiency anemia include dyspnea, tachycardia, and pallor as well as fatigue, listlessness, irritability, and headache.

- **Option A:** Night sweats, weight loss, and diarrhea may signal acquired immunodeficiency syndrome (AIDS).
- **Option C:** Nausea, vomiting, and anorexia may be signs of hepatitis B.
- **Option D:** Itching, rash, and jaundice may result from an allergic or hemolytic reaction.

**22. 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.

**23. A patient on the cardiac telemetry unit unexpectedly goes into ventricular fibrillation. The advanced cardiac life support team prepares to defibrillate. Which of the following choices indicates the correct placement of the conductive gel pads?**

- A. The left clavicle and right lower sternum.
- B. Right of midline below the bottom rib and the left shoulder.
- C. The upper and lower halves of the sternum.
- D. The right side of the sternum just below the clavicle and left of the precordium.

**Correct Answer: D. The right side of the sternum just below the clavicle and left of the precordium.**

One gel pad should be placed to the right of the sternum, just below the clavicle and the other just left of the precordium, as indicated by the anatomic location of the heart. To defibrillate, the paddles are placed over the pads. According to the ILCOR guidelines, the sternal paddle should be placed 'just to the right of the upper sternal border below the clavicle' and the apical paddle 'to the left of the nipple with the centre of the electrode in the mid-axillary line'.

- **Option A:** During the gel pad placement study it was noticed that about 50% of doctors placed the rectangular apical paddle vertically upwards, pointing towards the left armpit. The other 50% placed it in a horizontal position across the chest. The present ILCOR guidelines do not specify which orientation should be used for defibrillation. It was hypothesized that, with the paddle method for defibrillation, it would be more difficult to get good skin contact across the curved chest wall with the horizontal orientation, and in a small study this proved to be the case.
- **Option B:** In theory, a paddle position that is too superomedial means that less current will traverse the myocardium. When 60 N (the median force used by defibrillator operators in clinical practice) is applied to both paddles, the resulting TTI is 5% greater with the horizontal orientation. Thus, if paddles are used, it is recommended to use a vertical orientation. It is expected that their flexibility will allow better electrode/skin contact across the curved chest wall; however, in the absence of any evidence to the contrary, it is advised to use vertical orientation for this method as well.
- **Option C:** Most healthcare workers are not achieving optimal TTI during defibrillation. There is now good evidence that the use of a coupling agent, chest hair removal, placement of the apical paddle in a vertical orientation lateral to the nipple in the mid-axillary line, and application of at least 80 N of force are all measures that help minimize the TTI.

**24. A newborn's failure to pass meconium within the first 24 hours after birth may indicate which of the following?**

- A. Hirschsprung disease
- B. Celiac disease
- C. Intussusception
- D. Abdominal wall defect

**Correct Answer: A. Hirschsprung disease**

Failure to pass meconium within the first 24 hours after birth may be an indication of Hirschsprung disease, a congenital anomaly resulting in mechanical obstruction due to inadequate motility in an intestinal segment.

- **Option B:** Celiac disease is a serious autoimmune disease that occurs in genetically predisposed people where the ingestion of gluten leads to damage in the small intestine. It is estimated to affect 1 in 100 people worldwide. Two and one-half million Americans are undiagnosed and are at risk for long-term health complications.
- **Option C:** Intussusception is a process in which a segment of intestine invaginates into the adjoining intestinal lumen, causing bowel obstruction. With early diagnosis, appropriate fluid resuscitation, and therapy, the mortality rate from intussusception in children is less than 1%. If left untreated, however, this condition is uniformly fatal in 2-5 days.
- **Option D:** Types of abdominal wall defects may include gastroschisis. Contents of the abdomen protrude out of the body through an opening in the abdominal muscles near the umbilical cord. Without a protective covering, the organs are exposed to amniotic fluid and may swell or become damaged.

**25. A nurse is developing a care plan for a client with an injury to the frontal lobe of the brain. Which nursing interventions should be included as part of the care plan? Select all that apply.**

- A. Keep instructions simple and brief because the client will have difficulty concentrating.
- B. Speak clearly and slowly because the client will have difficulty hearing.
- C. Assist with bathing because the client will have vision disturbances.
- D. Orient the client to person, place, and time as needed because of memory problems.
- E. Assess vital signs frequently because vital bodily functions are affected.

**Correct Answer: A & D.**

Damage to the frontal lobe affects personality, memory, reasoning, concentration, and motor control of speech. The cortex of the frontal lobe is the largest of the four and in many ways the lobe which participates most in making us human.

- **Option A:** The prefrontal cortex is known to be the higher-order association center of the brain as it is responsible for decision making, reasoning, personality expression, maintaining social appropriateness, and other complex cognitive behaviors.
- **Option B:** Damage to the temporal lobe, not the frontal lobe, causes hearing and speech problems. Another study divides the temporal area into 4 major subregions: a) dorsal, mostly language and auditory/somatosensory networks b) ventromedial, mostly visual network c) medial, connected to paralimbic structures and d) anterolateral, associated with a default-semantic network. These areas have many important functions such as processing of language, social cues, and emotions, facial recognition (auditory and visual aspects), emotional processing of different

stimuli (auditory, olfactory, and visual), and theory of mind.

- **Option C:** Damage to the occipital lobe causes vision disturbances. The occipital lobe is the visual processing area of the brain. It is associated with visuospatial processing, distance and depth perception, color determination, object and face recognition, and memory formation.
- **Option D:** Research has proven that the dominant (left) superior frontal gyrus is a key component in the neural network of working memory as well as spatial processing. Research has proven that the dominant (left) superior frontal gyrus is a key component in the neural network of working memory as well as spatial processing.
- **Option E:** Damage to the brain stem affects vital functions. The brainstem is the structure that connects the cerebrum of the brain to the spinal cord and cerebellum. It is composed of four sections in descending order: the diencephalon, midbrain, pons, and medulla oblongata. It is responsible for many vital functions of life, such as breathing, consciousness, blood pressure, heart rate, and sleep.

**26. A female client with second- and third-degree burns on the arms receives autografts. Two days later, the nurse finds the client doing arm exercises. The nurse knows that this client should avoid exercise because it may:**

- A. Dislodge the autografts.
- B. Increase edema in the arms.
- C. Increase the amount of scarring.
- D. Decrease circulation to the fingers.

**Correct Answer: A. Dislodge the autografts.**

Because exercising the autograft sites may dislodge the grafted tissue, the nurse should advise the client to keep the grafted extremity in a neutral position. None of the other options results from exercise. Patients who suffer hand burns are at a high contracture risk, partly due to numerous cutaneous functional units, or contracture risk areas, located within the hand. Patients who undergo split-thickness skin grafting are often immobilized postoperatively for graft protection.

- **Option B:** Restricting mobility immediately following an STSG is thought to protect against subdermal edema and shear forces, factors that interrupt revascularization leading to STSG failure. However, there is limited evidence to support that absolute restriction of motion results in superior STSG adherence and that mobility does not produce shearing forces as commonly believed.
- **Option C:** Postoperative hand burn management following a skin graft can be challenging and takes meticulous coordination to mitigate contracture risk and ensure the best functional outcome. Patients who undergo split-thickness skin grafting (STSG) to the hand are often immobilized postoperatively for graft protection.
- **Option D:** The most common surgical dressing used is a silver-impregnated glove wrapped with either moistened gauze or a cotton outer glove. This is then followed by a resting hand splint fitted and applied in the post-anesthesia care unit. The dressing and splint remain in place for 3 to 5 days postoperatively at which time the graft is evaluated and ROM is initiated following this prescribed immobilization period.

**27. IV heparin therapy is ordered for a client. While implementing this order, a nurse ensures that which of the following medications is available in the**

***nursing unit?***

- A. Vitamin K
- B. Aminocaproic acid
- C. Potassium chloride
- D. Protamine sulfate

**Correct Answer: D. Protamine sulfate**

The antidote to heparin is protamine sulfate and should be readily available for use if excessive bleeding or hemorrhage should occur. Protamine is a medication used to reverse and neutralize the anticoagulant effects of heparin. Protamine is the specific antagonist that neutralizes heparin-induced anticoagulation. Protamine is a strongly alkaline (nearly two-thirds of the amino acid composition is arginine) polycationic low-molecular-weight protein found in salmon sperm that is also currently available in a recombinant form.

- **Option A:** Vitamin K is an antidote for warfarin. Vitamin K is a medication used in the management and treatment of bleeding due to the coagulation disorder caused by warfarin and vitamin K deficiency. It is in the fat-soluble vitamin class of drugs.
- **Option B:** Aminocaproic acid, an antifibrinolytic agent, is a medication used to manage and treat acute bleeding disorders. Aminocaproic acid has received approval from the Food and Drug Administration (FDA) for the therapeutic management of acute hemorrhages caused by elevated fibrinolytic activity leading to surgical complications after cardiac surgery, hematological disorders, hepatic cirrhosis, and neoplastic disease.
- **Option C:** Potassium chloride is a medication used in the management and treatment of hypokalemia. It is in the electrolyte supplement class of medications. Regardless of the administration route, KCl is used to increase the potassium content of the body. Approximately 98% of all potassium in the body exists within cells, particularly skeletal muscle cells.

***28. A female client comes into the emergency room complaining of SOB and pain in the lung area. She states that she started taking birth control pills 3 weeks ago and that she smokes. Her VS are: 140/80, P 110, R 40. The physician orders ABG's, results are as follows: pH: 7.50; PaCO<sub>2</sub> 29 mm Hg; PaO<sub>2</sub> 60 mm Hg; HCO<sub>3</sub><sup>-</sup> 24 mEq/L; SaO<sub>2</sub> 86%. Considering these results, the first intervention is to:***

- A. Begin mechanical ventilation.
- B. Place the client on oxygen.
- C. Give the client sodium bicarbonate.
- D. Monitor for pulmonary embolism.

**Correct Answer: B. Place the client on oxygen**

The pH (7.50) reflects alkalosis, and the low PaCO<sub>2</sub> indicates the lungs are involved. The client should immediately be placed on oxygen via mask so that the SaO<sub>2</sub> is brought up to 95%. Encourage slow, regular breathing to decrease the amount of CO<sub>2</sub> she is losing.

- **Option A:** Mechanical ventilation may be ordered for acute respiratory acidosis. In patients who are not significantly encephalopathic and have no excessive secretions, noninvasive ventilation



with CPAP or BIPAP can be a useful modality to support ventilation and avoid the need for anesthesia and sedation, as well as the risk of nosocomial infection with endotracheal intubation.

- **Option C:** Sodium bicarbonate would be given to reverse acidosis. Sodium bicarbonate infusion reduces plasma ionized calcium concentration in critically ill patients with metabolic acidosis. In vitro, bicarbonate concentration has a major effect reducing ionized calcium level in serum
- **Option D:** This client may have pulmonary embolism, so she should be monitored for this condition, but it is not the first intervention. A timely diagnosis of a pulmonary embolism (PE) is crucial because of the high associated mortality and morbidity, which may be prevented with early treatment. It is important to note that 30% of untreated patients with pulmonary embolism die, while only 8% die after timely therapy.

**29. Nurse Donald is caring for a client following a modified radical mastectomy. Which assessment finding would indicate that the client is experiencing a complication related to this surgery?**

- A. Pain at the incisional site
- B. Complaints of decreased sensation near the operative site
- C. Arm edema on the operative side
- D. Sanguineous drainage in the Jackson-Pratt drain

**Correct Answer: C. Arm edema on the operative side**

- **Option C:** Arm edema on the operative side (lymphedema) is a complication following mastectomy and can occur immediately postoperatively or may occur months or even years after surgery. The surgery damages some of the nodes and vessels that lymph moves through resulting in a backup of fluid into the body's tissue.
- **Options A and B:** Pain and decreased sensation in the chest area is normal and it is caused by the damaged nerves in the armpit and chest during the surgery.
- **Option D:** A sanguineous drainage in the Jackson-Pratt drain is normal postoperatively. This output from the drain decreases each day and the color will turn into light yellow or light pink.

**30. A male client is admitted to the substance abuse unit for alcohol detoxification. Which of the following medications is Nurse Alice most likely to administer to reduce the symptoms of alcohol withdrawal?**

- A. Naloxone (Narcan)
- B. Haloperidol (Haldol)
- C. Magnesium sulfate
- D. Chlordiazepoxide (Librium)

**Correct Answer: D. Chlordiazepoxide (Librium)**

Chlordiazepoxide (Librium) and other tranquilizers help reduce the symptoms of alcohol withdrawal. Chlordiazepoxide is a long-acting benzodiazepine and is an FDA approved medication for adults with mild-moderate to severe anxiety disorder, preoperative apprehension and anxiety, and withdrawal symptoms of acute alcohol use disorder. Chlordiazepoxide has anti-anxiety, sedative,

appetite-stimulating, and weak analgesic actions. It binds to benzodiazepine receptors at the GABA-A ligand-gated chloride channel complex and enhances GABA's inhibitory effects.

- **Option A:** Naloxone (Narcan) is administered for narcotic overdose. Naloxone is indicated for the treatment of opioid toxicity, specifically to reverse respiratory depression from opioid use. It is useful in accidental or intentional overdose and acute or chronic toxicity. Naloxone is a pure, competitive opioid antagonist with a high affinity for the mu-opioid receptor, allowing for reversal of the effects of opioids. The onset of action varies depending on the route of administration but can be as fast as one minute when delivered intravenously (IV) or intraosseous (IO).
- **Option B:** Haloperidol (Haldol) may be given to treat clients with psychosis, severe agitation, or delirium. Haloperidol is a first-generation (typical antipsychotic) which exerts its antipsychotic action by blocking dopamine D2 receptors in the brain. When 72% of dopamine receptors are blocked, this drug achieves its maximal effect. Haloperidol is not selective for the D2 receptor. It also has noradrenergic, cholinergic, and histaminergic blocking action. The blocking of these receptors is associated with various side effects.
- **Option C:** Magnesium sulfate and other anticonvulsant medications are only administered to treat seizures if they occur during withdrawal. Magnesium sulfate administration can be oral (PO), intramuscular (IM), intraosseous (IO), or intravenous (IV). For every 1 gram of magnesium sulfate, it contains 98.6 mg or 8.12Eq of elemental magnesium. Magnesium sulfate can be combined with dextrose 5% or water to make intravenous solutions.

**31. A male client's left tibia was fractured in an automobile accident, and a cast is applied. To assess for damage to major blood vessels from the fracture tibia, the nurse in charge should monitor the client for:**

- A. Swelling of the left thigh
- B. Increased skin temperature of the foot
- C. Prolonged reperfusion of the toes after blanching
- D. Increased blood pressure

**Correct Answer: C. Prolonged reperfusion of the toes after blanching**

Damage to blood vessels may decrease the circulatory perfusion of the toes, this would indicate the lack of blood supply to the extremity. If the intracompartmental pressure becomes higher than arterial pressure, a decrease in arterial inflow will also occur. The reduction of venous outflow and arterial inflow result in decreased oxygenation of tissues causing ischemia. If the deficit of oxygenation becomes high enough, irreversible necrosis may occur.

- **Option A:** Compartment syndrome is one of the most serious complications of casting. Symptoms may include swelling, delayed capillary refill, or dusky appearance of exposed extremities. Beware that the presence or absence of a palpable arterial pulse may not accurately indicate relative tissue pressure or predict the risk for compartment syndrome. In some patients, a pulse is still present, even in a severely compromised extremity.
- **Option B:** Thermal injuries to the skin can occur as a result of casting. In the initial stages, pain may be characterized as a burning sensation or as a deep ache of the involved compartment. Paresthesia, hypoesthesia, or poorly localized deep muscular pain may also be present.
- **Option D:** Increased blood pressure is not a symptom of damage to the major blood vessels. Classically, the presentation of acute compartment syndrome has been remembered by "The Five P's": pain, pulselessness, paresthesia, paralysis, and pallor. However, aside from paresthesia,

which may occur earlier in the course of the condition, these are typically late findings.

**32. Which of the following variables will he likely exclude in his study?**

- A. Competence of nurses
- B. Caring attitude of nurses
- C. Salary of nurses
- D. Responsiveness of staff

**Correct Answer: C. Salary of nurses**

The salary of staff nurses is not an indicator of patient satisfaction, hence need not be included as a variable in the study. A variable in research simply refers to a person, place, thing, or phenomenon that the researcher is trying to measure in some way. The best way to understand the difference between a dependent and independent variable is that the meaning of each is implied by what the words tell us about the variable the researcher is using.

- **Option A:** The competence of nurses can affect the patient's satisfaction rate, therefore it is an independent variable. The variable that is stable and unaffected by the other variables the researcher is trying to measure. It refers to the condition of an experiment that is systematically manipulated by the investigator. It is the presumed cause.
- **Option B:** The caring attitude of the nurses can affect the patient's satisfaction rate, therefore it is an independent variable. An important distinction has to do with the term 'variable' is the distinction between an independent and dependent variable. This distinction is particularly relevant when the researcher is investigating cause-effect relationships.
- **Option D:** The responsiveness of the staff can affect the patient's satisfaction rate, therefore it is an independent variable. Anything that can vary can be considered a variable. For instance, age can be considered a variable because age can take different values for different people or for the same person at different times.

**33. Serious adverse effects of oral contraceptives include:**

- A. Increase in skin oil followed by acne.
- B. Headache and dizziness.
- C. Early or mid-cycle bleeding.
- D. Thromboembolic complications.

**Correct Answer: D. Thromboembolic complications.**

Oral contraceptives have been associated with an increased risk of stroke, myocardial infarction, and deep vein thrombosis. If the patient has other risk factors significant for increased risk of venous thromboembolism one may consider using a prophylactic anticoagulant medication temporarily.

- **Option A:** Increased skin oil and acne are the effects of progestin excess. Progestin-only methods such as the implant, hormonal IUD, or shot may worsen acne, hirsutism, or hair loss in some people.
- **Option B:** Headache and dizziness are effects of estrogen excess. These risks are increased in women who smoke. If a patient takes too many oral contraceptive pills at one time the most likely

complications will be severe headaches and nausea or vomiting. There is no antidote to treat this condition, just treatment of the symptoms with antiemetics and analgesics.

- **Option C:** Early or mid-cycle bleeding are effects of estrogen deficiency. Most side effects of OCP's are mild and disappear with continued use or switching to another pill formulation. The most common adverse effect of combined oral contraceptive pills is breakthrough bleeding.

**34. Isaiah, a 16-year-old high school student, presented to the school clinic complaining of a sore throat that began 2 days ago. He is worried as he has a big track meet the next day. Upon examination, the nurse found that he had a temperature of 101.8°F and enlarged, tender cervical lymph nodes. His pharynx is markedly erythematous with exudate. A Rapid Antigen Detection Test (RADT) for Group A Streptococcus is performed and comes back positive, confirming a diagnosis of streptococcal pharyngitis or “strep throat.” Considering the assessment data and Isaiah’s confirmed diagnosis, which of the following clinical manifestations would the nurse most likely expect?**

- A. A fiery red pharyngeal membrane and fever.
- B. Pain over the sinus area and purulent nasal secretions.
- C. Foul-smelling breath and noisy respirations.
- D. Weak cough and high-pitched noise on respirations.
- E. Tender, swollen anterior cervical lymph nodes.
- F. Chest discomfort and a productive cough with yellow sputum.
- G. Dry, scratchy throat and hoarseness lasting more than a week.

**Correct Answer: A. A fiery red pharyngeal membrane and fever.**

The clinical manifestations of strep throat (streptococcal pharyngitis) typically include a sore throat, painful swallowing, and fever. On examination, the pharyngeal membrane often appears red and swollen, sometimes with a “fiery” appearance. This choice represents the classical clinical presentation of strep throat, making it the most likely manifestation expected by the nurse.

- **Option B:** Pain over the sinus area and purulent nasal secretions are more indicative of sinusitis, which is an infection or inflammation of the paranasal sinuses.
- **Option C:** Foul-smelling breath and noisy respirations may be indicative of other respiratory or oropharyngeal infections but are not typically associated with strep throat.
- **Option D:** Weak cough and high-pitched noise on respirations could be associated with other respiratory conditions such as croup or a foreign body aspiration, but these symptoms are not typical of strep throat.
- **Option E:** Tender, swollen anterior cervical lymph nodes can be associated with strep throat due to the local infection and the body’s immune response. However, this choice doesn’t capture the quintessential manifestations of strep throat as comprehensively as Option A.
- **Option F:** Chest discomfort and a productive cough with yellow sputum are more indicative of a lower respiratory infection such as bacterial pneumonia rather than a strep throat.
- **Option G:** A dry, scratchy throat and hoarseness lasting more than a week may suggest other conditions such as viral pharyngitis, laryngitis, or even gastroesophageal reflux disease (GERD) rather than strep throat.

**35. Which of the following foods would the nurse Trish eliminate from the diet of a client in alcohol withdrawal?**

- A. Milk
- B. Orange Juice
- C. Soda
- D. Regular Coffee

**Correct Answer: D. Regular Coffee**

Regular coffee contains caffeine which acts as psychomotor stimulants and leads to feelings of anxiety and agitation. Serving coffee to the client may add to tremors or wakefulness. During acute alcohol intake, caffeine largely antagonizes the “unwanted” effects of alcohol by blocking A1 receptors, which mediate alcohol’s somnogenic and ataxic effects. On the other hand, an alcohol-induced increase in the extracellular concentration of adenosine can decrease the A1 receptor-mediated “unwanted” anxiogenic effects of caffeine. The mutual antagonism of “unwanted” effects gives the possibility of increasing significantly the intake of both drugs in the pursuit of the “wanted” reinforcing effects.

- **Option A:** Calcium is important for strong bones. Dairy such as milk contains plenty of calcium (but don’t have too much, because of the fat content). Eating leafy greens like chard, spinach, and kale work wonders – why not make a kale and spinach omelet?
- **Option B:** Potassium is very important for heart and muscular health. Bananas are very high in potassium, as are sweet and white baked potatoes, peas, beans, spinach, fish and seafood, dried fruits, and greens.
- **Option C:** If you’re going to undertake an alcohol detox, a fundamental rule is to cut out sugary foods, especially those with processed sugars and meals that have a high-fat content. Although we all need particular carbohydrates that are high in fiber, it is also recommended that you cut down on carbs too, such as crisps, bread, and pasta.

**36. A patient with diabetes mellitus and renal failure begins hemodialysis. Which diet is best on days between dialysis treatments?**

- A. Low-protein diet with unlimited amounts of water.
- B. Low-protein diet with a prescribed amount of water.
- C. No protein in the diet and use of a salt substitute
- D. No restrictions.

**Correct Answer: B. Low-protein diet with a prescribed amount of water**

The patient should follow a low-protein diet with a prescribed amount of water. The patient requires some protein to meet metabolic needs. Protein can help keep healthy blood protein levels and improve health. Protein also helps keep the muscles strong, helps wounds heal faster, strengthens the immune system, and helps improve overall health.

- **Option A:** Learn how much fluid you can safely drink (including coffee, tea, water, and any food that is liquid at room temperature). Diet is an important part of the treatment. The kidneys cannot get rid of enough waste products and fluids from the blood and the body now has special needs. Therefore, the client will need to limit fluids and change the intake of certain foods in the diet.

- **Option C:** Salt substitutes shouldn't be used without a doctor's order because it may contain potassium, which could make the patient hyperkalemic. Use less salt and eat fewer salty foods: This may help to control blood pressure. It may also help reduce fluid weight gains between dialysis sessions since salt increases thirst and causes the body to retain (or hold on to) fluid.
- **Option D:** Fluid and protein restrictions are needed. At first the kidney and diabetic diet appear to be very different, but they are alike in many ways. Both diets recommend eating 3 balanced meals, avoiding large amounts of protein, and limiting sodium. A balanced meal has at least 3 of the food groups (protein, grain, vegetables, fruits, and dairy). The kidney diet limits the amount of milk that you drink, but many people with diabetes already limit milk to 4 ounces a day.

**37. Which of the following signs and symptoms would most likely be found in a client with mitral regurgitation?**

- A. Exertional dyspnea
- B. Confusion
- C. Elevated creatine phosphokinase concentration
- D. Chest pain

**Correct Answer: A. Exertional dyspnea**

Weight gain, due to fluid retention and worsening heart failure, causes exertional dyspnea in clients with mitral regurgitation. The rise in left atrial pressure that accompanies mitral valve disease is transmitted backward into pulmonary veins, capillaries, and arterioles and eventually to the right ventricle. Signs and symptoms of pulmonary and systemic venous congestion follow.

- **Option B:** On auscultation, S1 may be diminished in acute mitral regurgitation (MR) and chronic severe MR with defective valve leaflets, and wide splitting of S2 may occur due to early closure of the aortic valve. S3 may be present due to LV dysfunction or as a result of increased blood flow across the mitral valve.
- **Option C:** Usually holosystolic, may be confined to early systole in acute MR, may be confined to late systole in MVP or papillary muscle dysfunction (S1 will probably be normal in these cases since initial closure of mitral valve cusps is unimpeded, and a midsystolic click preceding murmur is suggestive of MVP)
- **Option D:** Murmurs are usually high-pitched, blowing. Usually best heard over the apex; usually radiates to the left axilla or subscapular region: posterior leaflet dysfunction causes murmur to radiate to the sternum or aortic area, and anterior leaflet dysfunction causes murmur to radiate to the back or top of the head.

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

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

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

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

**39. A client with stomach cancer is admitted to the oncology unit after vomiting for 3 days. Physical assessment findings include irregular pulse, muscle twitching, and complaints of prickling sensations in the fingers and hands. Laboratory results include a potassium level of 2.9 mEq/L, a pH of 7.46, and a bicarbonate level of 29 mEq/L. The client is experiencing:**

- A. Metabolic alkalosis
- B. Respiratory acidosis
- C. Metabolic acidosis
- D. Respiratory alkalosis

**Correct Answer: A. Metabolic alkalosis**

- The client is experiencing metabolic alkalosis caused by loss of hydrogen and chloride ions from excessive vomiting. This is shown by a pH of 7.46 and elevated bicarbonate level of 29 mEq/L.

**40. The nurse is aware that the following solutions are routinely used to flush an IV device before and after the administration of blood to a patient is:**

- A. 0.9 percent sodium chloride.
- B. 5 percent dextrose in water solution.
- C. Sterile water.
- D. Heparin sodium.

**Correct Answer: A. 0.9 percent sodium chloride**

0.9 percent sodium chloride is normal saline. This solution has the same osmolarity as blood. Its use prevents red cell lysis. The solutions given in options 2 and 3 are hypotonic solutions and can cause red cell lysis. An isotonic concentration of sodium chloride, which is best suited for parenteral replacement of chloride losses that exceed or equal the sodium loss. Within each 100 mL of 0.9% sodium chloride Injection USP, there is 154 mEq of sodium ions and 154 mEq of chloride ions. Additionally, the osmolarity is 308 mOsmol/liter and a pH range of 4.5 to 7.

- **Option B:** A crystalloid fluid is an aqueous solution of mineral salts and other small, water-soluble molecules. Most commercially available crystalloid solutions are isotonic to human plasma. These fluids approximate concentrations of various solutes found in plasma and do not exert an osmotic effect in vivo. Crystalloid fluids function to expand intravascular volume without disturbing ion concentration or causing significant fluid shifts between intracellular, intravascular, and interstitial spaces.

- **Option C:** Sterile water contains water that is sterilized and packaged for use as an irrigant. No antimicrobial agent or other substance has been added. The pH is 5.5 (5.0 to 7.0). Sterile Water for Irrigation is hypotonic with an osmolarity of zero mOsm/L.
- **Option D:** Heparin sodium affects the patient coagulation and result in bleeding. Once administered, heparin binds to several proteins; however, it is binding to antithrombin that is important, as this causes a surface change and inactivates thrombin. By binding to antithrombin, it blocks several different factors of the clotting cascade, but two are predominant: thrombin (Factor IIa) and Factor Xa. By inactivating thrombin, it blocks the conversion of fibrinogen to fibrin; this prevents the formation of clots and prolongs the clotting time of blood. Heparin does not affect bleeding time, but it does prolong the time that blood takes to clot.

**41. After gastroscopy, an adaptation that indicates major complication would be:**

- A. Nausea and vomiting
- B. Abdominal distention
- C. Increased GI motility
- D. Difficulty in swallowing

**Correct Answer: B. Abdominal distention**

Abdominal distension may be associated with pain, may indicate perforation, a complication that could lead to peritonitis. Bowel perforation occurs in less than 0.3 % of cases, and infection is rarely reported. Complications typically are identified in the first 24 hours after the procedure. Perforation is identified due to fever, tachycardia, abdominal pain or discomfort.

- **Option A:** It is normal to feel nauseous a day or two after surgery. Complications following esophagogastroduodenoscopy (EGD) are rare, occurring in less than 2% of patients. These could be related to sedation, endoscopy, and complications related to diagnostic or therapeutic maneuvers.
- **Option C:** An increase in GI motility is not a cause for concern. The risk of bleeding following EGD with biopsy is 0.3%. Post mucosal biopsy bleeding can occur as intraluminal hemorrhage or intraluminal hematoma. A duodenal hematoma is a rare complication of EGD with an unknown incidence and seems to occur more often in children than adults.
- **Option D:** There would be difficulty in swallowing after the surgery until the local anesthesia fades. Adverse events from over sedation include hypoxemia, hypoventilation, hypotension, airway obstruction, arrhythmias, and aspiration. The complications following diagnostic EGD include infection, bleeding, duodenal hematoma, and bowel perforation.

**42. Which of the following aspects of psychosocial development is necessary for the nurse to keep in mind when providing care for the preschool child?**

- A. The child can use complex reasoning to think out of situations.
- B. Fear of body mutilation is a common preschool fear.
- C. The child engages in competitive types of play.
- D. Immediate gratification is necessary to develop initiative.



**Correct Answer: B. Fear of body mutilation is a common preschool fear**

During the preschool period, the child has mastered a sense of autonomy and goes on to master a sense of initiative. During this period, the child commonly experiences more fears than at any other time. One common fear is the fear of body mutilation, especially associated with painful experiences.

- **Option A:** In addition to the social aspects of play with peers already described, the type of play a child prefers reflects cognitive, fine and gross motor, and visual perceptual motor skills. Children will not play for long at activities that frustrate them because of a lack of ability. Fine motor and visual perceptual motor skills are being refined during these years, but there is a broad range of time for normal acquisition.
- **Option C:** By age 4, children usually can play with three others fairly well. Fantasy or pretend play gains prominence at about age 3. Children can play out longer stories as they mature, with each child taking a specific role. By age 5, the child has many social skills expected of adults, such as responding to the good fortune of others spontaneously with positive verbal messages, apologizing for unintentional mistakes, and relating to a group of friends.
- **Option D:** Almost all preschool children are noncompliant, at least some of the time—on the average, they comply with adult requests about 50% of the time. This struggle for autonomy can be viewed as a positive milestone of development, with passivity representing a potential symptom of depression or intimidation.

**43. The nurse is discussing electroconvulsive therapy (ECT) with a client who asks how long it will be before she feels better. The nurse explains that the beneficial effects of ECT usually occur within:**

- A. One week
- B. Three weeks
- C. Four weeks
- D. Six weeks

**Correct Answer: A. One (1) week**

Beneficial effects of ECT usually are evident after the first several treatments. Since treatments are administered at intervals of 48 hours, these effects are apparent after one week of therapy. Beneficial effects of ECT therapy are usually seen before three weeks. It takes three to four weeks for tricyclic antidepressants to take effect. ECT is indicated in patients with treatment-resistant depression or severe major depression that impairs activities of daily living. The definition of treatment-resistant depression is depression that is unresponsive to multiple antidepressant medication trials.

- **Option B:** ECT is a relatively safe and low-risk procedure that is helpful in the treatment of depression, suicidality, severe psychosis, food refusal secondary to depression, and catatonia. It requires interprofessional care coordination among anesthesiologists, psychiatrists, and nurses. Most patients require several sessions to see a durable effect.
- **Option C:** ECT is indicated in patients with treatment-resistant depression or severe major depression that impairs activities of daily living. The definition of treatment-resistant depression is depression that is unresponsive to multiple antidepressant medication trials. There are also suggestions for ECT as a treatment for suicidality, severe psychosis, food refusal secondary to depression, and catatonia. Bipolar depressive and manic patients can also receive treatment with ECT. ECT may have a safer profile than antidepressants or antipsychotics in debilitated, elderly, pregnant and breastfeeding patients.

- **Option D:** Today ECT is now frequently used to treat a variety of mental health disorders besides depression. The procedure is relatively safe, and does work. However, the delivery of ECT requires an interprofessional team that includes a nurse, anesthesiologist, psychiatrist and neurologist. The benefits of ECT are seen after several sessions and the results are durable. The key is to educate the patient and family about ECT because the procedure has been associated with many false and illogical beliefs.

**44. Nurse Winona educates the family about symptom management for when the schizophrenic client becomes upset or anxious. Which of the following would Nurse Winona state be helpful?**

- A. Call the therapist to request a medication change.
- B. Encourage the use of learned relaxation techniques.
- C. Request that the client be hospitalized until the crisis is over.
- D. Wait before the anxiety worsens before intervening.

**Correct Answer: B. Encourage the use of learned relaxation techniques.**

The client with schizophrenia can learn relaxation techniques, which help reduce anxiety. The family can be supportive and helpful by encouraging the client to use these techniques. When client is ready, introduce strategies that can minimize anxiety and lower voices and “worrying” thoughts, teach client to do the following: focus on meaningful activities; learn to replace negative thoughts with constructive thoughts; perform deep breathing exercise; use a calming visualization or listen to music; or seek support from staff, family, or other supportive people.

- **Option A:** Anxiety is a common experience for everyone, and is no reason to change medication. Handling anxiety is a learned skill that is important to reinforce. Keep the environment calm, quiet and as free of stimuli as possible to keep anxiety from escalating and increasing confusion and hallucinations/delusions.
- **Option C:** There is no indication that the client is in crisis. Use therapeutic techniques (clarifying feelings when speech and thoughts are disorganized) to try to understand the client’s concerns. Even if the words are hard to understand, try getting to the feelings behind them.
- **Option D:** It is much easier to intervene early in anxiety rather than waiting until escalation occurs. Assess and observe clients regularly for signs of increasing anxiety and hostility. Intervene before the client loses control. Use a non-judgmental, respectful, and neutral approach with the client. There is less chance for a suspicious client to misinterpret intent or meaning if the content is neutral and the approach is respectful and non-judgmental.

**45. A 45-year-old male client with leg ulcers and arterial insufficiency is admitted to the hospital. The nurse understands that leg ulcers of this nature are usually caused by:**

- A. Decreased arterial blood flow secondary to vasoconstriction.
- B. Decreased arterial blood flow leading to hyperemia.
- C. Atherosclerotic obstruction of the arteries.
- D. Trauma to the lower extremities.

**Correct Answer: A. Decreased arterial blood flow secondary to vasoconstriction.**

Decreased arterial flow is a result of vasospasm. The etiology is unknown. It is more problematic in colder climates or when the person is under stress. A 50% decrease in vessel diameter corresponds to a 75% loss of cross-sectional area which is usually considered flow limiting. As the narrowing progresses or completely obstructs the artery, blood flow shifts to smaller arteries which parallel the diseased artery. Although this collateral flow preserves distal perfusion, the network of smaller vessels never carries as much blood flow as the main artery.

- **Option B:** Hyperemia occurs when the vasospasm is relieved. Hyperemia occurs when excess blood builds up inside the vascular system, which is the system of blood vessels in the body. When excess blood occurs outside the vascular system, due to a broken blood vessel or injury, this is known as hemorrhage. The buildup of blood may present as a red, warm, painful, swollen area.
- **Option C:** Atherosclerosis (sometimes called “hardening” or “clogging” of the arteries) is the buildup of cholesterol, fatty cells and inflammatory deposits (called plaque) on the inner walls of the arteries that restrict blood flow to the heart. Atherosclerosis can affect the arteries in the heart, legs, brain, kidneys and other organs.
- **Option D:** When the arterial vessel is transected, vascular spasm coupled with low systemic blood pressure appears to promote clotting at the site of injury and to preserve vital organ perfusion better than is the case with ongoing uncontrolled hemorrhage. This partially explains the prehospital finding that in the subset of penetrating trauma, limited or no fluid resuscitation until arrival at the hospital may improve patient survival and outcome.

**46. You are supervising an RN who was pulled from the medical-surgical floor to the emergency department. The nurse is providing care for a patient admitted with anterior epistaxis (nosebleed). Which of these directions would you clearly prove to the RN? Select all that apply.**

- A. Position the patient supine and turned on his side.
- B. Apply direct lateral pressure to the nose for 5 minutes.
- C. Maintain universal body substances precautions.
- D. Apply ice or cool compresses to the nose.
- E. Instruct the patient not to blow the nose for several hours.

**Correct Answers: B, C, D, and E.**

Epistaxis (nasal bleeding) is relatively common but rarely fatal. Anterior bleeding is usually managed by digital pressure, gentle chemical cauterization, or nasal packing. Posterior bleeding, which is less common, is characterized by massive bleeding that's initially bilateral; this bleeding may be more difficult to control.

- **Option A:** Have the patient sit upright with her head tilted forward, and instruct her to apply direct external digital pressure to the nares with her index finger and thumb. The correct position for a patient with an anterior nosebleed is upright and leaning forward to prevent blood from entering the stomach and avoid aspiration. All of the other instructions are appropriate according to best practice for emergency care of a patient with an anterior nosebleed.
- **Option B:** Tell her to breathe through her mouth while she holds firm pressure on the soft flesh of her nose for at least 10 minutes. If bleeding persists, cotton pledgets soaked in a vasoconstrictor and anesthetic will be placed in the anterior nasal cavity, and direct pressure should be applied at both sides of the nose.

- **Option C:** Put on protective gear, including gown, gloves, and face shields. Provide an emesis basin and tissues. Tell her to spit blood into the basin if necessary. This helps prevent nausea and vomiting and lets you estimate the amount of bleeding.
- **Option D:** Cooling the nape of the neck is said to induce reflex constriction of the mucosal vessels of the nose, but there is no general agreement in the literature on the benefit of an ice pack as an adjuvant treatment of epistaxis.
- **Option E:** The nasal packing will be left in place for 3 to 5 days. Instruct the patient to avoid exerting herself, forcefully blowing her nose, or bending over. She should also avoid NSAIDs, alcoholic beverages, and smoking for 5 to 7 days. Tell her to apply water-soluble ointment to her lips and nostrils while packing is in place and to use a cool-mist room humidifier. Advise her to take steps to prevent constipation and straining, which increases the risk of bleeding.

**47. Which of the following is the reason to perform a spinal tap on a client newly diagnosed with leukemia?**

- A. To assess for central nervous system infiltration
- B. To aid in classification of the leukemia
- C. To rule out meningitis
- D. To decrease intracranial pressure

**Correct Answer: A. To assess for central nervous system infiltration**

- **Option A:** A spinal tap is performed to check if leukemia has infiltrated into the central nervous system specifically to the cerebrospinal fluid (CSF).
- **Options B and D:** It wouldn't be done to decrease ICP nor does it aid in the classification of leukemia. Spinal taps can result in brain stem herniation in cases of ICP.
- **Option C:** A spinal tap can be done to rule out meningitis but this isn't the indication for the test on a leukemic client.

**48. Stephen is a 62 y.o. patient that has had a liver biopsy. Which of the following groups of signs alert you to a possible pneumothorax?**

- A. Dyspnea and reduced or absent breath sound over the right lung.
- B. Tachycardia, hypotension, and cool, clammy skin.
- C. Fever, rebound tenderness, and abdominal rigidity.
- D. Redness, warmth, and drainage at the biopsy site.

**Correct Answer: A. Dyspnea and reduced or absent breath sounds over the right lung**

Signs and symptoms of pneumothorax include dyspnea and decreased or absent breath sounds over the affected lung (right lung). A pneumothorax is defined as a collection of air outside the lung but within the pleural cavity. It occurs when air accumulates between the parietal and visceral pleura inside the chest. The air accumulation can apply pressure on the lung and make it collapse.

- **Option B:** The risk of fatal hemorrhage in patients without malignant disease is 0.04%, and the risk of nonfatal hemorrhage is 0.16%. In those with malignancy, the risk of nonfatal hemorrhage is 0.4% and 0.57% for nonfatal hemorrhage.

- **Option C:** This can occur with the inadvertent puncture of the gallbladder or in patients with obstructive jaundice and dilated bile ducts. It usually presents with abdominal pain, fever, leukocytosis. It can also be painless in some patients. Biliary scintigraphy demonstrates the leak. Treatment is usually with fluids and antibiotics. Very rarely, endoscopic procedures like ERCP or surgery may be required.
- **Option D:** This is usually clinically insignificant except in patients with obstructive jaundice like primary sclerosing cholangitis or in the post-transplant setting. Currently, there is no recommendation for treating with prophylactic antibiotics, and treatment can be offered on a case by case basis.

**49. A 4-month-old is diagnosed with atopic dermatitis. Nursing interventions will focus on:**

- A. Preventing infection
- B. Administering antinausea
- C. Keeping the skin free of moisture
- D. Limiting oral fluid intake

**Correct Answer: A. Preventing infection**

- Option A: The nurse should prevent the infant with atopic dermatitis (eczema) from scratching, which can lead to skin infections.
- Option B: Nausea is not associated with atopic dermatitis.
- Options C and D: They increase the dryness of the skin, which worsens the symptoms of atopic dermatitis.

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

- A. Alteration in skin integrity
- B. Alteration in comfort
- C. Alteration in mobility
- D. Alteration in O<sub>2</sub> perfusion

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

- Option C: Retinal detachment occurs when the retina becomes separated from the nerve tissue and blood supply underneath it. The client with a detached retina will have limitations in mobility since the vision is affected.
- Options A and D: These do not apply to the client with a detached retina.
- Option B: A detached retina produces no pain or discomfort.

**51. When the nurse completes the patient's admission nursing database, the patient reports that he does not have any allergies. Which acceptable medical**

***abbreviation can the nurse use to document this finding?***

- A. NA
- B. NDA
- C. NKA
- D. NPO

**Correct Answer: C. NKA**

The nurse can use the medical abbreviation NKA, which means no known allergies, to document this finding. NKA is the abbreviation for “no known allergies,” meaning no known allergies of any sort. By contrast, NKDA stands exclusively for “no known drug allergies.”

- **Option A:** NA is an abbreviation for not applicable.
- **Option B:** NDA is an abbreviation for no known drug allergies.
- **Option D:** NPO is an abbreviation that means nothing by mouth.

***52. Which of the following meal choices is suitable for a 6-month-old infant?***

- A. Pea puree, formula, and orange juice
- B. Honey cereals, carrot stick, apple juice
- C. Rice cereal, mashed sweet potato, formula
- D. Melba toast, banana puree, whole milk

**Correct Answer: C. Rice cereal, mashed sweet potato, formula**

- **Option C:** A 6 month-old baby can now be introduced to solid food other than breast milk. Start offering foods that are easily digested such as rice cereal, apple juice, and formula.
- **Option A:** A 6 month-old infant has a sensitive stomach. Giving an acidic fruit such as orange is not advisable.
- **Option B:** Honey containing products are discouraged due to the risk of botulism.
- **Option D:** Whole milk should be offered after 9 to 12 months of age.

***54. A 3-year old boy with vesicoureteral reflux is scheduled for ureteral reimplantation. His father plans to go home during the surgery to get his favorite toy. When the father left, the boy asked the nurse when will his father be back? The nurse’s best response is:***

- A. “Your daddy will be back later this afternoon”
- B. “Your daddy will be back at 11 am”
- C. “Your daddy will be back after you wake up”
- D. “Your daddy will be back within 2 ½ hours”

**Correct Answer: C. “Your daddy will be back after you wake up.”**

A preschool child understands the concept of time through events and symbols. Following and being involved with a familiar sequence of routines and schedules enhances their time awareness of the present, past, and future. Preschoolers also need to build on these experiences, because time is such an abstract concept for young children. For them, it is rather intangible.

- **Option A:** Between ages 4-5, a child begins to have an understanding of time but it is still vague. Before and after are time concepts understood by preschoolers. Although 3- and 4-year-olds have the ability to describe events that happen in the past and know specific words that describe past events (“last week” or “a few days ago”), they may not always get the duration of the time exactly right.
- **Option B:** Between ages 6 to 8 years old, children learn the concept of minutes in an hour, number of hours in a day, and can compare time. Of course, recognizing the parts of the day is the most basic way children become aware of the passage of time. Their capacity to learn about time increases as they become aware of how events reoccur at specific times during the day.
- **Option D:** Kindergartners want to know what time it is and are beginning to understand that certain things (like the start and end of school) happen at a defined time each day. Make a photographic timeline for the day at school, marking each event with a picture of the clock at that time and the time written numerically.

**55. A male patient needs a percutaneously inserted central catheter (PICC) for prolonged IV therapy. He knows it can be inserted without going to the operating room. He mentions that, “at least the doctor won’t be wearing surgical garb, will he?” How will the nurse answer the patient?**

- A. “You are correct. It is a minor procedure performed on the unit and does not necessitate surgical attire.”
- B. “To decrease the risk of infection, the doctor inserting the PICC will wear a cap, mask, and sterile gown and gloves.”
- C. “It depends on the doctor’s preference.”
- D. “Most doctors only wear sterile gloves, not a cap, mask, or sterile gown.”

**Correct Answer: B. “To decrease the risk of infection, the doctor inserting the PICC will wear a cap, mask, and sterile gown and gloves.”**

Strict aseptic technique including the use of a cap, mask, and sterile gown, and gloves is required when placing a central venous line including a PICC. Options A, C, and D are incorrect statements. They increase the risk of infection. Central line-associated bloodstream infection (CLABSI) continues to be one of the most deadly and costly hospital-associated infections.

- **Option A:** Personal protective equipment should be worn. Insertion is performed using the maximal sterile barrier technique.
- **Option C:** All personnel involved must perform hand hygiene before donning and after doffing PPE (e.g. gloves). A 2% chlorhexidine-based antiseptic must be used for skin preparation. Povidone-iodine may be used if a patient is allergic to chlorhexidine.
- **Option D:** Personal Protective Equipment (PPE) to be worn include sterile gown and gloves as well as a mask with attached visor & cap to be worn by all personnel directly involved in the insertion procedure. Circulating staff need to wear a cap and mask with attached visor within 2 meters of the sterile field. The patient is to be covered with a full-body sterile drape.

**56. A patient with a large stomach tumor that is attached to the liver is scheduled to have a debulking procedure. The nurse explains that the expected outcome of this surgery is**

- A. Control of the tumor growth by removal of malignant tissue
- B. Promotion of better nutrition by relieving the pressure in the stomach
- C. Relief of pain by cutting sensory nerves in the stomach
- D. Reduction of the tumor burden to enhance adjuvant therapy

**Correct Answer: D. Reduction of the tumor burden to enhance adjuvant therapy**

- **Option D:** A debulking surgery reduces the size of the tumor and makes radiation and chemotherapy more effective.
- **Option A:** Debulking surgeries do not control tumor growth.
- **Option B:** The tumor is debulked because it is attached to the liver, a vital organ (not to relieve pressure on the stomach).
- **Option C:** Debulking does not sever the sensory nerves, although pain may be lessened by the reduction in pressure on the abdominal organs.

**57. The lungs participate in acid-base balance by:**

- A. Reabsorbing bicarbonate.
- B. Splitting carbonic acid in two.
- C. Using CO<sub>2</sub> to regulate hydrogen ions.
- D. Sending hydrogen ions to the renal tubules.

**Correct Answer: C. Using CO<sub>2</sub> to regulate hydrogen ions**

The lungs use carbon dioxide to regulate hydrogen ion concentration. The carbon dioxide formed during cellular respiration combines with water to create carbonic acid. Carbonic acid then dissociates into bicarbonate and a hydrogen ion. This reaction is one of the many buffer systems in the human body; it resists dramatic changes in pH to allow a person to remain within the narrow physiological pH range.

- **Option A:** The renal system affects pH by reabsorbing bicarbonate and excreting fixed acids. Whether due to pathology or necessary compensation, the kidney excretes or reabsorbs these substances which affect pH. The nephron is the functional unit of the kidney. Blood vessels called glomeruli transport substances found in the blood to the renal tubules so that some can be filtered out while others are reabsorbed into the blood and recycled.
- **Option B:** This reaction can and does occur without an enzyme; however, carbonic anhydrase is an enzyme that assists with this process. It catalyzes the first reaction above to form carbonic acid which can then freely dissociate into bicarbonate and a hydrogen ion. Carbonic anhydrase is located in red blood cells, renal tubules, gastric mucosa, and pancreatic cells.
- **Option D:** If bicarbonate is reabsorbed and/or acid is secreted into the urine, the pH becomes more alkaline (increases). When bicarbonate is not reabsorbed or acid is not excreted into the urine, pH becomes more acidic (decreases). The metabolic compensation from the renal system takes longer to occur: days rather than minutes or hours.



**58. During a routine physical examination, the nurse palpates the patient's lower back and discusses the anatomy of the renal system. To assess the client's understanding, which connective tissue structure, provides essential support and protection to the kidneys, should the nurse inquire about?**

- A. Hilum
- B. Renal capsule
- C. Calyx
- D. Renal pyramid

**Correct Answer: B. Renal capsule**

The renal capsule serves as the connective tissue that surrounds the kidneys primarily for protection and structural support. It acts as a barrier, safeguarding the delicate renal tissues from potential damage and infections originating from surrounding structures. The renal capsule also helps maintain the kidneys' shape and position within the abdominal cavity, ensuring their proper function in filtering blood and regulating bodily fluids.

- **Option A:** The hilum is a specialized region on the concave side of the kidney where the renal artery enters and the renal vein and ureter exit. Its primary function is to serve as a gateway for blood vessels and the ureter, allowing for the transportation of filtered blood and urine to and from the kidney.
- **Option C:** A funnel-shaped calyx surrounds the tip of each renal pyramid. It collects urine produced by the kidney's nephrons. Its primary function is to channel and transport urine from the renal papillae, where it is initially formed, into the renal pelvis, which is the next stage in the urinary pathway.
- **Option D:** Renal pyramids are triangular-shaped structures within the kidney that contain the nephrons, the functional units responsible for filtering blood and producing urine. The primary function of renal pyramids is to process and concentrate urine by reabsorbing water and essential solutes from the nephrons, helping to maintain the body's fluid and electrolyte balance.

**59. Aldosterone secretion in response to fluid loss will result in which one of the following electrolyte imbalances?**

- A. Hypokalemia
- B. Hyperkalemia
- C. Hyponatremia
- D. Hypernatremia

**Correct Answer: A. Hypokalemia**

Aldosterone is secreted in response to fluid loss. Aldosterone causes sodium reabsorption and potassium elimination, further exacerbating hypokalemia. Aldosterone causes sodium to be absorbed and potassium to be excreted into the lumen by principal cells. In alpha intercalated cells, located in the late distal tubule and collecting duct, hydrogen ions and potassium ions are exchanged. Hydrogen is excreted into the lumen, and the potassium is absorbed.

- **Option B:** The most common cause of hyperkalemia is pseudohyperkalemia, which is not reflective of the true serum potassium levels. Pseudohyperkalemia is most commonly due to hemolysis of the

sample causing intracellular potassium to be measured in the serum. Metabolic acidosis may cause intracellular potassium to shift into the extracellular space without red cell injury. Metabolic acidosis is most frequently caused by decreased, effective, circulating, arterial blood volume.

- **Option C:** Physiological stimuli that cause vasopressin release in adjunct with increased fluid intake can cause hyponatremia. Hypothyroidism and adrenal insufficiency may contribute to an increased release of vasopressin. Physiological stimuli for vasopressin release include loss of intravascular volume (hypovolemic hyponatremia) and the loss of effective intravascular volume (hypervolemic hyponatremia).
- **Option D:** The basic mechanisms of hypernatremia are water deficit and excess solute. Total body water loss relative to solute loss is the most common reason for developing hypernatremia. Hypernatremia is usually associated with hypovolemia, which can occur in conditions that cause combined water and solute loss, where water loss is greater than sodium loss, or free water loss.

**60. Which signs cause the nurse to suspect cardiac tamponade after a client has cardiac surgery? Select all that apply.**

- A. Tachycardia
- B. Hypertension
- C. Increased CVP
- D. Decreased urine output
- E. Jugular vein distention

**Correct Answers: A, C, & D**

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. The diagnosis of cardiac tamponade is a clinical diagnosis that requires prompt recognition and treatment to prevent cardiovascular collapse and cardiac arrest.

- **Option A:** Blood in the pericardial sac compresses the heart so the ventricles cannot fill; this leads to a rapid thready pulse. Normally, a small, physiologic amount of fluid surrounds the heart within the pericardium. When the volume of fluid builds up fast enough, the chambers of the heart are compressed, and tamponade physiology develops rapidly with much smaller volumes.
- **Option B:** Tamponade causes hypotension and a narrowed pulse pressure. The fluid may be hemorrhagic, serosanguineous, or chylous. The underlying pathology behind cardiac tamponade is a decrease in the diastolic filling, which leads to a decreased cardiac output. One of the first compensatory signs is tachycardia to overcome the reduced output.
- **Option C:** As the tamponade increases, pressure on the heart interferes with the ejection of blood from the left ventricle, resulting in increased pressure on the right side of the heart, and systemic circulation. Patients with cardiac tamponade present similar to patients with other forms of cardiogenic or obstructive shock. They may endorse vague symptoms of chest pain, palpitations, shortness of breath, or in more severe cases, dizziness, syncope, and altered mental status.
- **Option D:** As the heart is more inefficient, there is a decrease in kidney perfusion and therefore urine output. When fluid compresses the heart and impairs filling, the interventricular septum bows toward the left ventricle during inspiration due to increased venous return to the right side of the heart. This further decreases the left ventricle leading to decreased left ventricular preload and stroke volume.

- **Option E:** The increased venous pressure caused JVD. The JVP tracing may reveal an absent 'y' descent due to the elevated intrapericardial pressure that prevents the filling of the ventricles. The classic physical findings in cardiac tamponade included in Beck's triad are hypotension, jugular venous distension, and muffled heart sounds.

**61. A patient is admitted to the same-day surgery unit for a liver biopsy. Which of the following laboratory tests assesses coagulation? Select all that apply.**

- A. Partial thromboplastin time
- B. Prothrombin time
- C. Platelet count
- D. Hemoglobin

**Correct Answer: A, B, & C**

Prothrombin time, partial thromboplastin time, and platelet count are all included in coagulation studies.

- **Option A:** The partial thromboplastin time (PTT; also known as activated partial thromboplastin time (aPTT)) is a screening test that helps evaluate a person's ability to appropriately form blood clots. It measures the number of seconds it takes for a clot to form in a sample of blood after substances (reagents) are added.
- **Option B:** Prothrombin time (PT) is a blood test that measures how long it takes blood to clot. A prothrombin time test can be used to check for bleeding problems. PT is also used to check whether medicine to prevent blood clots is working.
- **Option C:** Platelets, also called thrombocytes, are tiny fragments of cells that are essential for normal blood clotting. They are formed from very large cells called megakaryocytes in the bone marrow and are released into the blood to circulate. The platelet count is a test that determines the number of platelets in a sample of blood.
- **Option D:** The hemoglobin level, though important information prior to an invasive procedure such as liver biopsy, does not assess coagulation.

**62. Nurse Kim is teaching a group of parents about otitis media. When discussing why children are predisposed to this disorder, the nurse should mention the significance of which anatomical feature?**

- A. Eustachian tubes
- B. Nasopharynx
- C. Tympanic membrane
- D. External ear canal

**Correct Answer: A. Eustachian tubes**

In a child, Eustachian tubes are short and lie in a horizontal plane, promoting entry of nasopharyngeal secretions into the tubes and thus setting the stage for otitis media. Due to the constricted anatomical space of the middle ear, the edema caused by the inflammatory process obstructs the narrowest part of the Eustachian tube leading to a decrease in ventilation.

- **Option B:** Otitis media begins as an inflammatory process following a viral upper respiratory tract infection involving the mucosa of the nose, nasopharynx, middle ear mucosa, and Eustachian tubes.
- **Option C:** The growth of microbes in the middle ear then leads to suppuration and eventually frank purulence in the middle ear space. This is demonstrated clinically by a bulging or erythematous tympanic membrane and purulent middle ear fluid.
- **Option D:** The external ear canal has no unusual features that would predispose a child to otitis media. Acute otitis media is defined as an infection of the middle ear space. In AOM, the TM may be erythematous or normal, and there may be fluid in the middle ear space.

**63. A nurse is preparing to perform a fundal assessment on a postpartum client. The initial nursing action in performing this assessment is which of the following?**

- A. Ask the client to turn on her side.
- B. Ask the client to lie flat on her back with the knees and legs flat and straight.
- C. Ask the mother to urinate and empty her bladder.
- D. Massage the fundus gently before determining the level of the fundus.

**Correct Answer: C. Ask the mother to urinate and empty her bladder.**

Before starting the fundal assessment, the nurse should ask the mother to empty her bladder so that an accurate assessment can be done. The postpartum recovery period covers the time period from birth until approximately six to eight weeks after delivery. This is a time of healing and rejuvenation as the mother's body returns to prepregnancy states.

- **Option A:** The nurse may place the woman in a supine position or Semi Fowlers position to avoid a decrease in her blood pressure for fundal assessment. Patients or a family member can be taught to assess the firmness of the fundus and to provide massage in the event of a boggy uterus or excessive bleeding. Patients are encouraged to void before palpation of the uterine fundus because a full bladder displaces the uterus and can lead to excessive bleeding.
- **Option B:** When the nurse is performing a fundal assessment, the nurse asks the woman to lie flat on her back with the knees flexed.
- **Option D:** Massaging the fundus is not appropriate unless the fundus is boggy and soft, and then it should be massaged gently until firm. By approximately one hour post-delivery, the fundus is firm and at the level of the umbilicus.

**64. A postpartum nurse is providing instructions to the mother of a newborn infant with hyperbilirubinemia who is being breastfed. The nurse provides which most appropriate instructions to the mother?**

- A. Switch to bottle-feeding the baby for 2 weeks
- B. Stop the breastfeedings and switch to bottle-feeding permanently
- C. Feed the newborn infant less frequently
- D. Continue to breast-feed every 2-4 hours

**Correct Answer: D. Continue to breastfeed every 2-4 hours.**

Hyperbilirubinemia is caused by the accumulation of excess bilirubin in the blood serum. The skin and sclera of the eyes of the newborn may appear noticeably yellow as a result of breakdown of fetal red blood cells.

- **Option D:** Breastfeeding should be initiated within 2 hours after birth and every 2-4 hours thereafter. Early feeding of newborns with hyperbilirubinemia promotes intestinal movement and excretion of meconium which ultimately helps prevent indirect bilirubin buildup. The other options are not necessary.

**65. A 57-year-old librarian with a recent diagnosis of osteoarthritis (OA) in her hands and knees attends a joint protection workshop at a local community health center. During the session, she is introduced to various strategies to minimize joint stress and prevent the exacerbation of symptoms. At the end of the teaching session, the nurse checks for the patient's understanding of the provided instructions. Which statement by the patient indicates a need for further teaching?**

- A. "I will use assistive devices to reduce joint stress when performing tasks."
- B. "I will alternate periods of activity with rest to prevent overuse of my joints."
- C. "I will engage in high-impact exercises to strengthen my joints."
- D. "I will maintain a healthy weight to reduce stress on my joints."

**Correct Answer: C. "I will engage in high-impact exercises to strengthen my joints."**

This statement indicates a misunderstanding. High-impact exercises can exacerbate symptoms of OA and place additional stress on already compromised joints. It's more appropriate to engage in low-impact exercises, such as swimming or walking, to maintain joint function and muscle strength without causing further damage.

- **Option A:** This statement is accurate. Using assistive devices, like jar openers, can be beneficial in reducing strain on joints, especially those in the hands. These tools can help make tasks easier and prevent unnecessary stress and pain.
- **Option B:** This statement is also correct. Alternating between activity and rest can help manage symptoms of OA. It's essential to balance activity to prevent overexertion and allow joints to recover.
- **Option D:** This is a correct understanding. Maintaining a healthy weight can significantly reduce stress, especially on weight-bearing joints like the knees and hips. This can decrease pain and potentially slow the progression of OA.

**66. A 37-year-old male client was admitted to the coronary care unit (CCU) 2 days ago with acute myocardial infarction. Which of the following actions would breach the client's confidentiality?**

- A. The CCU nurse gives a verbal report to the nurse on the telemetry unit before transferring the client to that unit.
- B. The CCU nurse notifies the on-call physician about a change in the client's condition.

- C. The emergency department nurse calls up the latest electrocardiogram results to check the client's progress.
- D. At the client's request, the CCU nurse updates the client's wife on his condition.

**Correct Answer: C. The emergency department nurse calls up the latest electrocardiogram results to check the client's progress**

The emergency department nurse is no longer directly involved with the client's care and thus has no legal right to information about his present condition.

- **Option A:** Anyone directly involved in his care (such as the telemetry nurse) has the right to information about his condition.
- **Option B:** The on-call physician should be updated about the client's condition.
- **Option D:** Because the client requested that the nurse update his wife on his condition, doing so doesn't breach confidentiality.

**67. A nurse is monitoring a client who is taking carvedilol (Coreg CR). Which of the following assessment made by the nurse would warrant a possible complication with the use of this medication?**

- A. Baseline blood pressure of 160/100 mm hg followed by a blood pressure of 120/70 mm hg after 3 doses.
- B. Baseline heart rate of 97 bpm followed by a heart rate of 62 bpm after 3 doses.
- C. Complaints of nightmares and insomnia.
- D. Complaints of dyspnea.

**Correct Answer: D. Complaints of dyspnea.**

A complaint of dyspnea is a sign of bronchospasm which is one of the serious complications of beta-blockers.

- **Options A & B:** The following show a decrease in blood pressure and heart rate which are expected in this therapy.
- **Option C:** Complaints of nightmares and insomnia is a side effect of this medication.

**68. The physician has ordered an intravenous infusion of Pitocin for the induction of labor. When caring for the obstetric client receiving intravenous Pitocin, the nurse should monitor for:**

- A. Maternal hypoglycemia
- B. Fetal bradycardia
- C. Maternal hyperreflexia
- D. Fetal movement

**Correct Answer: B. Fetal bradycardia**

The client receiving Pitocin should be monitored for decelerations. It is essential to monitor patient fluids (both intake and outtake) while administering oxytocin, as well as the frequency of uterine

contractions, patient blood pressure, and heart rate of the unborn fetus.

- **Option A:** Oxytocin is primarily used by the obstetrician and the labor and delivery nurses. Healthcare workers who do prescribe this hormone should be familiar with its side effects. An inappropriate dosage of oxytocin can lead to dangerous tachycardia, arrhythmias, and myocardial ischemia. High dosages of oxytocin can cause uterine rupture, hypertonicity, and spasms.
- **Option C:** If oxytocin is given in doses too large or even slowly during 24 hours, the medication can exhibit an antidiuretic effect resulting in extreme water intoxication. This excessive dosing can result in coma, seizures, and even death in the mother.
- **Option D:** When oxytocin is given to women who are in the first or second stages of labor, or to women to cause induction of labor, uterine rupture, as well as maternal subarachnoid hemorrhages, maternal death, and even fetal death, can result.

**69. Immediately post-op after a prostatectomy, which complications require priority assessment of your patient?**

- A. Pneumonia
- B. Hemorrhage
- C. Urine retention
- D. Deep vein thrombosis

**Correct Answer: B. Hemorrhage**

Hemorrhage is a potential complication. Postoperative hemorrhage is a rare but severe complication in LRP. Bleeding generally originates from injured venous vessels in the prostatectomy area, which is always self-limiting due to tissue compression in the pelvic space. However, it is not easy for slightly larger arteries to stop bleeding automatically.

- **Option A:** Pneumonia may occur if the patient doesn't cough and deep breathe. Postoperative pneumonia is an important cause of morbidity and mortality and represents an important financial burden of \$10.5 billion per year. Patients undergoing surgery, especially complex procedures, are at a greater risk due to intubation, post-surgical atelectasis, and long hospital stays exposing them to hospital-acquired pathogens. It has been estimated that approximately one out of four deaths within six days of surgery is due to its complications.
- **Option C:** Urine retention isn't a problem soon after surgery because a catheter is in place. Although leaving a temporary indwelling catheter is standard practice after radical prostatectomy to allow anastomotic healing, urinary catheterization represents a source of infection, significant discomfort, and anxiety for the patient following radical prostatectomy.
- **Option D:** Thrombosis may occur later if the patient doesn't ambulate. Historically, the reported rate of symptomatic VTEs is low in open prostatectomy series, as well as robot-assisted radical prostatectomy (RARP) series. As a result, it is unclear which patients are at the highest risk of VTEs developing and who would benefit from medical prophylaxis, given the low incidence of VTEs and a possible increase in complications with the use of heparin.

**70. A 53 y.o. patient has undergone a partial gastrectomy for adenocarcinoma of the stomach. An NG tube is in place and is connected to low continuous suction. During the immediate postoperative period, you expect the gastric secretions to be which color?**

- A. Brown
- B. Clear
- C. Red
- D. Yellow

**Correct Answer: C. Red**

Normally, drainage is bloody for the first 24 hours after a partial gastrectomy; then it changes to brown-tinged and then to yellow or clear. Drainage will be bloody for the first 12 hours, and then should clear and turn greenish. Continued or recurrent bleeding suggests complications. A decline in output may reflect the return of GI function.

- **Option A:** This tube will be set to suction and will drain out brownish-colored stomach acid. When it runs from brown to light green to clear, this is an indication that things are moving through the stomach and feedings may be possible.
- **Option B:** Gastric aspirate is usually cloudy and green, tan or off-white, or brown. Intestinal aspirate is generally clear and yellow to bile-colored. Pleural fluid is pale yellow and serous; tracheobronchial secretions are usually tan or off-white mucus.
- **Option D:** Normal color of gastric drainage is light yellow to green in color due to the presence of bile. Bloody drainage may be expected after gastric surgery but must be monitored closely. The presence of coffee-ground type drainage may indicate bleeding.

**71. Nurses are bound by a variety of laws. Which description of a type of law is correct?**

- A. Statutory law is created by an elected legislature, such as the state legislature that defines the Nurse Practice Act (NPA).
- B. Regulatory law includes prevention of harm for the public and punishment for those laws that are broken.
- C. Common law protects the rights of the individual within society for fair and equal treatment.
- D. Criminal law creates boards that pass rules and regulations to control society.

**Correct Answer: A. Statutory law is created by an elected legislature, such as the state legislature that defines the Nurse Practice Act (NPA).**

Statutory law is created by the legislature. It creates statutes such as the NPA, which defines the role of the nurse and expectations of the performance of one's duties and explains what is contraindicated as guidelines for breach of those regulations.

- **Option B:** Federal and state regulations influence everything from the air we breathe to the fine print on credit card agreements. Regulatory law involves creating and/or managing the rules and regulations created by federal and state agencies.
- **Option C:** Common law is a body of unwritten laws based on legal precedents established by the courts. Common law influences the decision-making process in unusual cases where the outcome cannot be determined based on existing statutes or written rules of law.
- **Option D:** Criminal law, as distinguished from civil law, is a system of laws concerned with the punishment of individuals who commit crimes. Thus, wherein a civil case of two individuals dispute their rights, a criminal prosecution involves the government deciding whether to punish an



individual for either an act or an omission.

**72. The community nurse visits the home of George, a child recently diagnosed with autism. The parents express feelings of shame and guilt about having somehow caused this problem. Which statement by the nurse would best help alleviate parental guilt?**

- A. "Autism is a rare disorder. Your other children shouldn't be affected."
- B. "The specific cause of autism is unknown. However, it is known to be associated with problems in the structure of and chemicals in the brain."
- C. "Sometimes a lack of prenatal care can be the cause of autism."
- D. "Although autism is genetically inherited if you didn't have testing you could not have known this would happen."

**Correct Answer: B. "The specific cause of autism is unknown. However, it is known to be associated with problems in the structure of and chemicals in the brain."**

This statement is factual and does not cast blame on anything the parents did or did not do. The cause is still not known. The onset is variable. It develops in days to weeks, while in other cases, it develops slowly. It is not known whether epilepsy causes it, but children that have an autism spectrum disorder have an increased risk of having epilepsy.

- **Option A:** The parents are not questioning whether other children will be affected; their concern is directed to the current situation and their feelings about it. Autism spectrum disorder is becoming increasingly prevalent, and its prevalence is reported to be 1 in 68. Childhood disintegrative disorder is a rare disease, with only 1.7 in 100,000 cases, and the prevalence of this disease is estimated to be 1 to 2 in 100,000.
- **Option C:** Lack of prenatal care may be a risk factor in pervasive developmental disorders, but it is not the cause of autism. There is no clear-cut pathology of the disease, so the causes of childhood disintegrative disorder are still unknown. Regression occurs in children who have achieved normal developmental milestones, and this regression sometimes occurs very rapidly.
- **Option D:** Although it is thought that there is a genetic component in autism, research has not identified specific genes, and there is no diagnostic test for this. The statement is misleading and would not alleviate guilt. This condition develops in days or overtime and is most commonly seen in the fourth year of life, but there can be variation.

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

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

**Correct Answer: D. "I don't think about killing myself as much as I used to."**

The statement "I don't think about killing myself as much as I used to." indicates a lessening of suicidal ideation and improvement in the client's condition. Suicidal ideation is highly linked to completed

suicide. Some inexperienced clinicians have difficulty asking this question. They fear the inquiry may be too intrusive or that they may provide the person with an idea of suicide. In reality, patients appreciate the question as evidence of the clinician's concern. A positive response requires further inquiry.

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

**74. Which route of administration is preferable for administration of daily analgesics (if all body systems are functional)?**

- A. IV
- B. IM or subcutaneous
- C. Oral
- D. Transdermal
- E. PCA

**Correct Answer: C. Oral**

If the gastrointestinal system is functioning, the oral route is preferred for routine analgesics because of lower cost and ease of administration. Oral route is also less painful and less invasive than the IV, IM, subcutaneous, or PCA routes. Although a few drugs taken orally are intended to be dissolved in the mouth, nearly all drugs taken orally are swallowed. Of these, most are taken for the systemic drug effects that result after absorption from the various surfaces along the gastrointestinal tract.

- **Option A:** IV therapy allows a higher concentration of nutrients or medication into the body — and that means the body gets what it needs faster and more effectively without further damage to the GI system.
- **Option B:** Rapid and uniform absorption of the drug especially those of the aqueous solutions. Rapid onset of the action compared to that of the oral and the subcutaneous routes. IM injection bypasses the first-pass metabolism. It also avoids the gastric factors governing drug absorption.
- **Option D:** Transdermal route is slower and medication availability is limited compared to oral forms. Transdermal delivery systems provide continuous administration of drugs through the skin, which maintains constant plasma drug levels and avoids the peaks and troughs that are seen with oral administration.
- **Option E:** Patient-controlled analgesia is used to treat acute, chronic, postoperative, and labor pain. A variety of medications can be used for patient-controlled analgesia and are administered intravenously (IV), through an epidural or peripheral nerve catheter, and transdermally.

**75. Kyle is a client with an anxious, fearful personality who has difficulty accomplishing work assignments because of his fear of failure. He has been referred to the employee assistance program because of repeated absences from work and evidence of an alcohol problem. Which nursing diagnosis would be most appropriate?**

- A. Ineffective coping
- B. Decisional conflict
- C. Disturbed thought process
- D. Risk for self-directed violence

**Correct Answer: A. Ineffective coping**

The client is experiencing difficulty in occupational functioning as well as problems with alcohol; therefore, he meets the criteria for the diagnosis of Ineffective coping. Work with the client on problem-solving skills using a situation that is bothering the client. Client might not know how to articulate the problem. Helping identify alternatives gives the client a sense of control. Evaluating the pros and cons of the alternatives facilitates choosing potential solutions.

- **Option B:** Keep goals very realistic and go in small steps. There are no overnight successes with people with personality disorders. It can take a long time to positively change ingrained, life-long, maladaptive habits; however, change is always possible.
- **Option C:** Identify behavioral limits and behaviors that are expected. Client needs a clear structure. Expect frequent testing of limits initially. Maintaining limits can enhance feelings of safety in the client.
- **Option D:** If the client becomes hostile or projects blame onto you or staff, project a neutral, calm demeanor, and avoid power struggles. Focus on the client's underlying feelings. Defuses tension and opens up productive interaction.

**76. The nurse is caring for an infant following a cleft lip repair. While comforting the infant, the nurse should avoid:**

- A. Offering sterile water
- B. Holding the infant
- C. Offering a pacifier
- D. Providing a mobile

**Correct Answer: C. Offering a pacifier**

- **Option C:** The nurse should avoid giving the infant a pacifier or bottle for 10 days to allow time for healing, and prevent injury to the site. The child can be fed using a cup or the side of a spoon to drop fluids and food into the mouth.
- **Options A, B, and D:** Holding the infant cradled in the arms, providing a mobile, and offering sterile water using a Breck feeder are permitted.

**77. Drugs can cause adverse events in a patient. Bone marrow toxicity is one of the most frequent types of drug-induced toxicity. The most serious form of bone marrow toxicity is:**

- A. Aplastic anemia.
- B. Thrombocytosis.
- C. Leukocytosis.
- D. Granulocytosis.

**Correct Answer: A. Aplastic anemia.**

Aplastic anemia is the result of a hypersensitivity reaction and is often irreversible. It leads to pancytopenia, a severe decrease in all cell types: red blood cells, white blood cells, and platelets. A reduced number of red blood cells causes hemoglobin to drop. A reduced number of white blood cells make the patient susceptible to infection. And, a reduced number of platelets cause the blood not to clot as easily. Treatment for mild cases is supportive. Transfusions may be necessary. Severe cases require a bone marrow transplant.

- **Option B:** Thrombocytosis is a condition in which there is an excessive number of platelets in the blood. Platelets are blood cells in plasma that stop bleeding by sticking together to form a clot. Too many platelets can lead to certain conditions, including stroke, heart attack, or a clot in the blood vessels.
- **Option C:** Leukocytosis refers to an increase in the total number of white blood cells (WBCs) due to any cause. From a practical standpoint, leukocytosis is traditionally classified according to the component of white cells that contribute to an increase in the total number of WBCs. Therefore, leukocytosis may be caused by an increase in (1) neutrophil count (ie, neutrophilia), (2) lymphocyte count (ie, lymphocytosis), (3) monocyte count (ie, monocytosis), (4) eosinophilic granulocyte count (ie, eosinophilia), (5) basophilic granulocyte count (ie, basophilia), or (6) immature cells (eg, blasts). A combination of any of the above may be involved.
- **Option D:** Granulocytosis occurs when there are too many granulocytes in the blood. It's a condition that's closely related to chronic myelogenous leukemia (CML) and other bone marrow disorders. Granulocytes are white blood cells that have small granules or particles.

**78. The most important long-term goal for a client with hypertension would be to:**

- A. Learn how to avoid stress.
- B. Explore a job change or early retirement.
- C. Make a commitment to long-term therapy.
- D. Control high blood pressure.

**Correct Answer: C. Make a commitment to long-term therapy**

Compliance is the most critical element of hypertensive therapy. In most cases, hypertensive clients require lifelong treatment and their hypertension cannot be managed successfully without drug therapy. Stress management and weight management are important components of hypertension therapy, but the priority goal is related to compliance. Response to drug therapy (usually consisting of several drugs, including diuretics, angiotensin-converting enzyme [ACE] inhibitors, vascular smooth muscle relaxants, beta and calcium channel blockers) is dependent on both the individual as well as the synergistic

effects of the drugs.

- **Option A:** Assist the patient to identify specific stressors and possible strategies for coping with them. Recognition of stressors is the first step in altering one's response to the stressor. Include the patient in the planning of care, and encourage maximum participation in the treatment plan.
- **Option B:** Assess the effectiveness of coping strategies by observing behaviors (ability to verbalize feelings and concerns, willingness to participate in the treatment plan). Adaptive mechanisms are necessary to appropriately alter one's lifestyle, deal with the chronicity of hypertension, and integrate prescribed therapies into daily living.
- **Option D:** Monitor response to medications to control blood pressure. Because of side effects, drug interactions, and the patient's motivation for taking antihypertensive medication, it is important to use the smallest number and lowest dosage of medications.

**79. The home health care nurse is caring for a male client with cancer and the client is complaining of acute pain. The appropriate nursing assessment of the client's pain would include which of the following?**

- A. The client's pain rating
- B. The nurse's impression of the client's pain
- C. Nonverbal cues from the client
- D. Pain relief after appropriate nursing intervention

**Correct Answer: A. The client's pain rating**

- **Option A:** The client's self-report is a critical component of pain assessment. The nurse should ask the client about the description of the pain and listen carefully to the client's words used to describe the pain.
- **Option B:** Nonverbal cues from the client are important but are not the most appropriate pain assessment measure.
- **Option C:** The nurse's impression of the client's pain is not appropriate in determining the client's level of pain.
- **Option D:** Assessing pain relief is an important measure, but this option is not related to the subject of the question.

**80. A female client who's paralyzed on the left side has been receiving physical therapy and attending teaching sessions about safety. Which behavior indicates that the client accurately understands safety measures related to paralysis?**

- A. The client leaves the side rails down.
- B. The client uses a mirror to inspect the skin.
- C. The client repositions only after being reminded to do so.
- D. The client hangs the left arm over the side of the wheelchair.

**Correct Answer: B. The client uses a mirror to inspect the skin.**

Using a mirror enables the client to inspect all areas of the skin for signs of breakdown without the help of staff or family members. Inspect skin daily. Observe for pressure areas, and provide meticulous skincare. Teach the patient to inspect skin surfaces and to use a mirror to look at hard-to-see-areas. Altered circulation, loss of sensation, and paralysis potentiate pressure sore formation. This is a lifelong consideration.

- **Option A:** The client should keep the side rails up to help with repositioning and to prevent falls. Perform and assist with full ROM exercises on all extremities and joints, using slow, smooth movements. Hyperextend hips periodically. Enhances circulation, restores and maintains muscle tone and joint mobility, and prevents disuse contractures and muscle atrophy.
- **Option C:** The paralyzed client should take responsibility for repositioning or for reminding the staff to assist with it if needed. Reposition periodically even when sitting in a chair. Teach the patient how to use weight-shifting techniques. Reduces pressure areas, promotes peripheral circulation.
- **Option D:** A client with left-side paralysis may not realize that the left arm is hanging over the side of the wheelchair. However, the nurse should call this to the client's attention because the arm can get caught in the wheel spokes or develop impaired circulation from being in a dependent position for too long.

**81. Warning signs and symptoms of lung cancer include persistent cough, bloody sputum, dyspnea, and which of the other following symptoms?**

- A. Generalized weakness
- B. Recurrent pleural effusion
- C. Dizziness
- D. Hypotension

**Correct Answer: B. Recurrent pleural effusion**

- **Option B:** If cancer is suspected in the lungs, it can cause fluid accumulation in the pleura called pleural effusion. This fluid build-up takes up space and fills the pleural cavity resulting in the compression of the lungs making it hard for the client to breathe properly.
- **Options A, C, and D:** Dizziness, generalized weakness, and hypotension aren't typically considered warning signals, but may occur in advanced stages of cancer.

**82. To ensure that the baby will breathe as soon as the head is delivered, the nurse's priority action is to**

- A. Slap the baby's buttocks to make the baby cry.
- B. Suction the nose and mouth to remove mucous secretions.
- C. Clamp the cord about 6 inches from the base.
- D. Check the baby's color to make sure it is not cyanotic.

**Correct Answer: B. Suction the nose and mouth to remove mucous secretions.**

Suctioning the nose and mouth of the fetus as soon as the head is delivered will remove any obstruction that may be present allowing for better breathing. Also, if mucus is in the nose and mouth, aspiration of the mucus is possible which can lead to aspiration pneumonia. (Remember that only the baby's head has come out as given in the situation.)

- **Option A:** Earlier, many doctors would hold the baby upside down firmly around his legs and then slap the butt gently. This not only causes slight pain to the child, but the motion also helps loosen any residues that might be obstructing the airways. Constantly doing so can irritate the child enough to begin crying.
- **Option C:** Late cord clamping (performed approximately 1–3 min after birth) is recommended for all births while initiating simultaneous essential neonatal care. Early umbilical cord clamping (less than 1 min after birth) is not recommended unless the neonate is asphyxiated and needs to be moved immediately for resuscitation.
- **Option D:** When a baby is first born, the skin is a dark red to purple color. As the baby starts to breathe air, the color changes to red. This redness normally starts to fade on the first day. A baby's hands and feet may stay bluish in color for several days. This is a normal response to a baby's underdeveloped blood circulation. But blue coloring of other parts of the body isn't normal.

**83. A nurse is assessing a newborn infant following circumcision and notes that the circumcised area is red with a small amount of bloody drainage. Which of the following nursing actions would be most appropriate?**

- A. Document the findings
- B. Contact the physician
- C. Circle the amount of bloody drainage on the dressing and reassess in 30 minutes
- D. Reinforce the dressing

**Correct Answer: A. Document the findings. The penis is normally red during the healing process.**

- **Option A:** Close observation of the circumcision site during the first few hours is necessary to determine if there is a complication. A yellow exudate may be noted after 24 hours, and this is a part of normal healing. This should not be washed away because it serves a protective function. The nurse would expect that the area would be red with a small amount of bloody drainage. Because the findings identified in the question are normal, the nurse would document the assessment. Additionally, document if the infant is voiding after the procedure to ascertain that the urethra is not occluded. Instruct the parents to keep the site free from feces and covered in petrolatum until healing is complete. If the infant cries constantly and if there is redness or tenderness due to pain, it should be reported to the physician.
- **Option B:** Hemorrhage, infection, and urethral fistula formation are rare complications that can occur from circumcision. If bleeding is not controlled, then the blood vessel may need to be ligated, and the nurse would contact the physician.
- **Option C:** A circumcision site that appears red is normal as long as it does not have a strong odor or strong discharge.
- **Option D:** If the bleeding is excessive, the nurse would apply gentle pressure with sterile gauze.

**84. Which of the following should be included in the health teachings among clients receiving Valium:**

- A. Avoid taking CNS depressants like alcohol.
- B. There are no restrictions in activities.

- C. Limit fluid intake.
- D. Any beverage like coffee may be taken.

**Correct Answer: A. Avoid taking CNS depressants like alcohol.**

Valium is a CNS depressant. Taking it with other CNS depressants like alcohol; potentiates its effect. The toxic-to-therapeutic ratio of benzodiazepines is very high, making them relatively safe medications. However, the potential of overdose from diverted diazepam always exists when combined with opioids, alcohol, or other centrally acting agents. Overdose in adults frequently involves the co-ingestion of other CNS depressants, which work synergistically to increase toxicity.

- **Option B:** The client should be taught to avoid activities that require alertness. In mild cases, lethargy, drowsiness, and confusion are common symptoms. In cases of severe overdose, symptoms manifest as ataxia, diminished reflexes, hypotonia, hypotension, respiratory depression, coma (rarely), and death (very rarely).
- **Option C:** Valium causes dry mouth so the client must increase her fluid intake. It is crucial to monitor respiratory and cardiovascular status, blood pressure, heart rate, and symptoms of anxiety in patients taking diazepam. With long-term use, monitor liver enzymes, CBC, and for signs of propylene glycol toxicity, including serum creatinine, BUN, serum lactate, and osmolality gap. With critically ill patients, monitor the depth of sedation.
- **Option D:** Stimulants must not be taken by the client because it can decrease the effect of Valium. Potent inhibition of the 2C19 enzyme by certain drugs (fluoxetine and chloramphenicol) and 3A4 enzymes by certain medications (ketoconazole, protease inhibitors, erythromycin) may cause increased levels of diazepam, while inducers of 2C19 (rifampicin and prednisone) and 3A4 (carbamazepine, topiramate, phenytoin, St. John's wort, rifampin, or barbiturates) may cause lower levels. Metabolites of diazepam are conjugated with glucuronide and excreted almost entirely in the urine.

**85. A nurse is preparing to assess the uterine fundus of a client in the immediate postpartum period. When the nurse locates the fundus, she notes that the uterus feels soft and boggy. Which of the following nursing interventions would be most appropriate initially?**

- A. Massage the fundus until it is firm.
- B. Elevate the mother's legs.
- C. Push on the uterus to assist in expressing clots.
- D. Encourage the mother to void.

**Correct Answer: A. Massage the fundus until it is firm.**

If the uterus is not contracted firmly, the first intervention is to massage the fundus until it is firm and to express clots that may have accumulated in the uterus. Uterine atony refers to the corpus uteri myometrial cells inadequate contraction in response to endogenous oxytocin that is released in the course of delivery. Risk factors for uterine atony include prolonged labor, precipitous labor, uterine distension (multi-fetal gestation, polyhydramnios, fetal macrosomia), fibroid uterus, chorioamnionitis, indicated magnesium sulfate infusions, and prolonged use of oxytocin.

- **Option B:** Elevating the mother's legs will not manage the uterine atony. Ineffective uterine contraction, either focally or diffusely, is additionally associated with a diverse range of etiologies including retained placental tissue, placental disorders (such as morbidly adherent placenta,



placenta previa, and abruptio placentae), coagulopathy (increased fibrin degradation products) and uterine inversion.

- **Option C:** Pushing on an uncontracted uterus can invert the uterus and cause massive hemorrhage. 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. Uterine atony is a principal cause of postpartum hemorrhage, an obstetric emergency. Globally, this is one of the top 5 causes of maternal mortality.
- **Option D:** Encouraging the client to void will not assist in managing uterine atony. If the uterus does not remain contracted as a result of the uterine massage, the problem may be distended bladder and the nurse should assist the mother to urinate, but this would not be the initial action. Contraction of the myometrium that mechanically compresses the blood vessels supplying the placental bed provides the principal mechanism uterine hemostasis after delivery of the fetus, and the placenta is concluded. The process is complemented by local decidual hemostatic factors such as tissue factor type-1 plasminogen activator inhibitor as well as by systemic coagulation factors such as platelets, circulating clotting factors.

**86. Which statement indicates that a client with facial burns understands the need to wear a facial pressure garment?**

- A. "My facial scars should be less severe with the use of this mask."
- B. "The mask will help protect my skin from sun damage."
- C. "This treatment will help prevent infection."
- D. "Using this mask will prevent scars from being permanent."

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

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

- **Option B:** Although the mask does provide protection of sensitive, newly healed skin and grafts from sun exposure, this is not the purpose of wearing the mask. A widespread modality of prevention and treatment of hypertrophic scarring is the utilization of pressure garment therapy (PGT).
- **Option C:** The pressure garment will not alter the risk of infection. At present, PGT is the standard first-line therapy for hypertrophic burn scars in many centers due to its non-invasive characteristics and presumed desirable treatment effects with few associated complications.
- **Option D:** Scars will still be present. This treatment modality continues to be a clinically accepted practice. It is the most common therapy used for the treatment and prevention of abnormal scars after burn injury particularly in North America, Europe, and Scandinavia where it is considered routine practice and regarded as the preferred conservative management with reported thinning and better pliability ranging from 60% to 85%.

**87. Which phase of the employment process includes getting on the payroll and completing documentary requirements?**

- A. Orientation

- B. Induction
- C. Selection
- D. Recruitment

**Correct Answer: B. Induction**

This step in the recruitment process gives time for the staff to submit all the documentary requirements for employment. Induction means the introduction of a new employee to the job and the organization. It is the process of receiving and welcoming an employee when he first joins a company and giving him the basic information he needs to settle down quickly and happily and start work.

- **Option A:** In this stage, new hires are given job- or task-specific orientation, typically by their immediate supervisor. New employees learn details about their specific department or team, including information about breaks, absences, parking facilities, personal phone calls, email and internet policy, as well as the standards of performance for their work.
- **Option C:** Screening of applications can be regarded as an integral part of the recruiting process, though many view it as the first step in the selection process. Even the definition of recruitment excludes screening from its scope.
- **Option D:** Recruitment is a process of finding and attracting the potential resources for filling up vacant positions in an organization. It sources the candidates with the abilities and attitudes, which are required for achieving the objectives of an organization.

**88. The client is admitted to the unit. A vaginal exam reveals that she is 2cm dilated. Which of the following statements would the nurse expect her to make?**

- A. "We have a name picked out for the baby."
- B. "I need to push when I have a contraction."
- C. "I can't concentrate if anyone is touching me."
- D. "When can I get my epidural?"

**Correct Answer: D. "When can I get my epidural?"**

Dilation of 2 cm marks the end of the latent phase of labor. During the latent phase, the cervix dilates slowly to approximately 6 centimeters. The latent phase is generally considerably longer and less predictable with regard to the rate of cervical change than is observed in the active phase. A normal latent phase can last up to 20 hours and 14 hours in nulliparous and multiparous women respectively, without being considered prolonged.

- **Option A:** This is a vague answer. The latent phase is commonly defined as the 0 to 6 cm, while the active phase commences from 6 cm to full cervical dilation. The presenting fetal part also begins the process of engagement into the pelvis during the first stage. Throughout the first stage of labor, serial cervical exams are done to determine the position of the fetus, cervical dilation, and cervical effacement. Cervical effacement refers to the cervical length in the anterior-posterior plane. When the cervix is completely thinned out and no length is left, this is referred to as 100 percent effacement.
- **Option B:** This indicates the end of the first stage of labor. The first stage of labor begins when labor starts and ends with full cervical dilation to 10 centimeters. Labor often begins spontaneously or may be induced medically for a variety of maternal or fetal indications.

- **Option C:** This indicates the transition phase. The second stage of labor commences with complete cervical dilation to 10 centimeters and ends with the delivery of the neonate. This was also defined as the pelvic division phase by Friedman. After cervical dilation is complete, the fetus descends into the vaginal canal with or without maternal pushing efforts.

**89. Which of the following may be used for bowel preparation and is not recommended for the treatment of constipation?**

- A. Correctol
- B. Fiberall
- C. Mineral oil
- D. Castor oil

**Correct Answer: D. castor oil**

Castor oil is not recommended for treatment of constipation because it causes such severe abdominal pain. Castor oil can be used as an irritant/stimulative laxative. Castor oil is a natural emollient and a few drops may also be used to remedy dry skin, as a massage oil, and may benefit hair as a treatment. Castor oil contains ricinoleic acid, a fatty acid that comprises about 90% of the oil.

- **Option A:** Bisacodyl is used to treat constipation. It may also be used to clean out the intestines before a bowel examination/surgery. Bisacodyl is known as a stimulant laxative. It works by increasing the movement of the intestines, helping the stool to come out.
- **Option B:** This medication is used to treat constipation. It increases the bulk in your stool, an effect that helps to cause movement of the intestines. It also works by increasing the amount of water in the stool, making the stool softer and easier to pass. Psyllium, one type of bulk-forming laxative, has also been used along with a proper diet to treat high cholesterol.
- **Option C:** Mineral oil is used to treat constipation. It is known as a lubricant laxative. It works by keeping water in the stool and intestines. This helps to soften the stool and also makes it easier for stool to pass through the intestines.

**90. The registered nurse is making assignments for the day. Which client should be assigned to the pregnant nurse?**

- A. The client receiving linear accelerator radiation therapy for lung cancer
- B. The client with a radium implant for cervical cancer
- C. The client who has just been administered soluble brachytherapy for thyroid cancer
- D. The client who returned from placement of iridium seeds for prostate cancer

**Correct Answer: A. The client receiving linear accelerator radiation therapy for lung cancer**

The pregnant nurse should not be assigned to any client with radioactivity present. The client receiving linear accelerator therapy travels to the radium department for therapy. The radiation stays in the department, so the client is not radioactive. These clients are radioactive in very small doses, especially upon returning from the procedures. For approximately 72 hours, the clients should dispose of urine and feces in special containers and use plastic spoons and forks.

- **Option B:** When brachytherapy is used to treat cervical cancer, the radioactive substance is usually put inside a special hollow applicator. This applicator is called an intracavitary implant

because it is placed inside the vagina, or through the vagina and cervix into the uterus, or both.

- **Option C:** Brachytherapy is a type of internal radiation. It uses a radioactive material called a radioactive isotope. The material is placed right into the tumor or very close to it or in the area where the tumor was removed.
- **Option D:** Radioactive seed implants are a form of radiation therapy for prostate cancer. Permanent radioactive seed implants are a form of radiation therapy for prostate cancer. The terms “brachytherapy” or “internal radiation therapy” might also be used to describe this procedure. During the procedure, radioactive (iodine-125 or I-125) seeds are implanted into the prostate gland using ultrasound guidance.

**91. A 22-year-old client suffered from his first tonic-clonic seizure. Upon awakening, the client asks the nurse, “What caused me to have a seizure? Which of the following would the nurse include in the primary cause of tonic-clonic seizures in adults more than 20 years?”**

- A. Electrolyte imbalance
- B. Head trauma
- C. Epilepsy
- D. Congenital defect

**Correct Answer: B. Head trauma**

Trauma is one of the primary causes of brain damage and seizure activity in adults. Other common causes of seizure activity in adults include neoplasms, withdrawal from drugs and alcohol, and vascular disease. Common causes of emergency department visits after seizures are alcohol and drugs, head injury, and epilepsy.

- **Option A:** Decreased sodium in the blood is a rare cause of seizures, especially among adults. Acute symptomatic seizures- secondary to ischemic or hemorrhagic strokes, extra-axial hemorrhage, traumatic brain injury, hypoxic-ischemic injury, acute medical illness, metabolic derangements, substance abuse- can manifest as tonic-clonic seizures without the inherent tendency to recurrent seizures, whereas epileptic seizures recur without proximate provoking factors.
- **Option C:** The most common cause of seizure is epilepsy. However, not every person who has a seizure has epilepsy. The etiology of most of the generalized tonic-clonic seizures is underlying epilepsy from genetic causes (previously categorized as idiopathic). Besides genetic generalized epilepsy, tonic-clonic seizures can be secondary to epilepsy due to structural, infectious, metabolic, or immune-related pathologies.
- **Option D:** Congenital defects do not cause seizures among adults. Seizures account for 1 to 2 percent of all emergency visits in the U.S. Seizures are reported to occur about 11% of people in the United States during their lifetime. Acute symptomatic seizures tend to occur more frequently in males than females in a ratio of 1.85 to 1, with a lifetime risk of 5.0% in males and 2.7% in females.

**92. Atherosclerosis impedes coronary blood flow by which of the following mechanisms?**

- A. Plaques obstruct the vein

- B. Plaques obstruct the artery
- C. Blood clots form outside the vessel wall
- D. Hardened vessels dilate to allow the blood to flow through

**Correct Answer: B. Plaques obstruct the artery.**

Arteries, not veins, supply the coronary arteries with oxygen and other nutrients. Atherosclerosis is a lipoprotein-driven disease that leads to plaque formation at specific sites of the arterial tree through intimal inflammation, necrosis, fibrosis, and calcification.

- **Option A:** Atherosclerosis is a direct result of plaque formation in the artery. Most often, the culprit morphology is plaque rupture with exposure of highly thrombogenic, red cell-rich necrotic core material. The permissive structural requirement for this to occur is an extremely thin fibrous cap, and thus, ruptures occur mainly among lesions defined as thin-cap fibroatheromas.
- **Option C:** Blood clots form inside the vessel wall and impede circulation. Also common are thrombi forming on lesions without rupture (plaque erosion), most often on pathological intimal thickening or fibroatheromas. However, the mechanisms involved in plaque erosion remain largely unknown, although coronary spasm is suspected.
- **Option D:** Hardened vessels can't dilate properly and, therefore, constrict blood flow. During atherogenesis, the local vessel segment tends to remodel in such a way that the lumen area is usually not compromised until plaques are large (expansive remodeling). Thereafter stenosis formation may occur through continued plaque growth or shrinkage of the local vessel segment (constrictive remodeling) or a combination of the 2 processes.

**93. A practitioner orders a return flow enema (Harris flush drip) for an adult patient with flatulence. When preparing to administer this enema the nurse compares the steps of a return flow enema with cleansing enemas. What should the nurse do that is unique to a return flow enema?**

- A. Lubricate the last 2 inches of the rectal tube.
- B. Insert the rectal tube about 4 inches into the anus.
- C. Raise the solution container about 12 inches above the anus.
- D. Lower the solution container after instilling about 150 mL of solution.

**Correct Answer: D. Lower the solution container after instilling about 150 mL of solution.**

Lowering the container of solution creates a siphon effect that pulls the instilled fluid back out through the rectal tube into the solution container. The return flow promotes the evacuation of gas from the intestines. This technique is used only with a return flow enema. This action is appropriate for all types of enemas.

- **Option A:** All rectal tubes should be lubricated to facilitate entry of the tube into the anus and rectum and prevent mucosal trauma. Use a solution at a temperature of 105o to 110oF in adults and 100oF in children. Cool solutions will increase the incidence of cramping.
- **Option B:** The anal canal is 1 to 2 inches long. Inserting the rectal tube 3 to 4 inches ensures that the tip of the tube is beyond the anal sphincter. The recommended position for the patient during enema administration is lying in the left lateral position with their right leg flexed as much as possible.

- **Option C:** The solution container should be raised no higher than 12 inches for all enemas; this allows the solution to instill slowly, which limits discomfort and intestinal spasms. Alternately, raise the enema container 12-18 inches above the rectum for an adult and administer approximately 200 ml of fluid, then lower the container 12-18 inches below the patient's rectum until no further flatus is seen.

**94. The type of fluid used to manipulate fluid shifts among compartments states is:**

- A. Whole blood
- B. TPN
- C. Albumin
- D. Ensure

**Correct Answer: C. Albumin**

Albumin is a colloid that is used to manipulate fluid shifts among compartments. Albumin is also a colloid fluid administered to patients in need of fluid resuscitation, especially in the setting of trauma (i.e. hypovolemic shock) or in the setting of large-volume paracentesis. Strength albumin has over crystalloids is that it leads to an increase in intravascular oncotic pressure. There are some situations in which a patient needs improved oncotic pressure, and this characteristic can be advantageous.

- **Option A:** Whole blood is used to replace blood volume. Whole Blood is the simplest, most common type of blood donation. It's also the most flexible because it can be transfused in its original form, or used to help multiple people when separated into its specific components of red cells, plasma, and platelets.
- **Option B:** TPN is used for patients who are unable to take in food or fluid. Total parenteral nutrition (TPN) supplies all daily nutritional requirements. TPN can be used in the hospital or at home. Because TPN solutions are concentrated and can cause thrombosis of peripheral veins, a central venous catheter is usually required.
- **Option D:** Ensure is a high-calorie nutritional supplement; it is not used to manipulate fluid shifts. It contains well-balanced proportions of macronutrients that conform to guidelines for Dietary Reference Intake and the latest American Heart Association Guidelines for healthy diets.

**95. Nursing interventions that can help the patient to relax and sleep restfully include all of the following except:**

- A. Have the patient take a 30- to 60-minute nap in the afternoon.
- B. Turn on the television in the patient's room.
- C. Provide quiet music and interesting reading material.
- D. Massage the patient's back with long strokes.

**Correct Answer: A. Have the patient take a 30- to 60-minute nap in the afternoon.**

Napping in the afternoon is not conducive to nighttime sleeping. There are few considerations about naps. For example, a short daytime nap of 15-30 minutes can be restorative for elders and will not interfere with nighttime sleep. On the other hand, insomniacs are cautioned to avoid naps. Quiet music, watching television, reading, and massage usually will relax the patient, helping him to fall asleep.

- **Option B:** For patients in the hospital, factors that can prevent sound sleep include staff noise during a shift, telephones and call lights, doors, paging systems, and even carts wheeled through corridors. Safety and comfort can be promoted by raising side rails, placing the bed in a low position, and using night-lights.
- **Option C:** For individuals who are unable to sleep, they must get out of bed and spend some time in another room. There, they can start some relaxing activities like reading and listening to soft music. They should continue the activity till they feel drowsy.
- **Option D:** Rituals can be supported in institutionalized patients by assisting them with a hand and face wash, massage, pillow plumping, and even talking about today's accomplishments and enjoyable events. These can promote relaxation and peace of mind.

**96. Which of the following nursing diagnoses would be appropriate for a client with heart failure? Select all that apply.**

- A. Ineffective tissue perfusion related to decreased peripheral blood flow secondary to decreased cardiac output.
- B. Activity intolerance related to increased cardiac output.
- C. Decreased cardiac output related to structural and functional changes.
- D. Impaired gas exchange related to decreased sympathetic nervous system activity.
- E. Acute pain related to inability to meet the oxygen demands.

**Correct Answer: A, C & E.**

HF is a result of structural and functional abnormalities of the heart tissue muscle. The heart muscle becomes weak and does not adequately pump the blood out of the chambers. As a result, blood pools in the left ventricle and backs up into the left atrium, and eventually into the lungs. Therefore, greater amounts of blood remain in the ventricle after contraction thereby decreasing cardiac output. In addition, this pooling leads to thrombus formation and ineffective tissue perfusion because of the decrease in blood flow to the other organs and tissues of the body. Typically, these clients have an ejection fraction of less than 50% and poorly tolerate activity.

- **Option A:** Due to decreased cardiac output, there is decreased preload and stroke volume thus there is decreased blood pumped out from the blood. Decrease in stroke volume decreases perfusion throughout the body.
- **Option B:** Activity intolerance is related to a decrease, not increase, in cardiac output. As heart failure becomes more severe, the heart is unable to pump the amount of blood required to meet all of the body's needs. To compensate, blood is diverted away from less-crucial areas, including the arms and legs, to supply the heart and brain. As a result, people with heart failure often feel weak (especially in their arms and legs), tired and have difficulty performing ordinary activities such as walking, climbing stairs or carrying groceries
- **Option C:** The heart fails to pump enough blood to meet the metabolic needs of the body. The blood flow that supplies the heart is also decreased therefore decrease in cardiac output occurs, blood then is insufficient and making it difficult to circulate the blood to all parts of the body thus may cause altered heart rate and rhythm, weakness, and paleness.
- **Option D:** Gas exchange is impaired. However, the decrease in cardiac output triggers compensatory mechanisms, such as an increase in sympathetic nervous system activity. The exchange in oxygenation and carbon dioxide gases is impeded due to the obstruction caused by the accumulation of bronchial secretions in the alveoli. Oxygen cannot diffuse easily.

- **Option E:** When a coronary artery is blocked, blood flow to the area of the heart supplied by that artery is reduced. If the remaining blood flow is inadequate to meet the oxygen demands of the heart, the area may become ischemic and injured and myocardial infarction may result. Neural pain receptors are stimulated by local mechanical stress resulting from abnormal myocardial contraction.

**97. *Tranylcypromine sulfate (Parnate) is prescribed for a depressed client who has not responded to the tricyclic antidepressants. After teaching the client about the medication, Nurse Marian evaluates that learning has occurred when the client states, "I will avoid:***

- A. Citrus fruit, tuna, and yellow vegetables."
- B. Chocolate milk, aged cheese, and yogurt"
- C. Green leafy vegetables, chicken, and milk."
- D. Whole grains, red meats, and carbonated soda."

**Correct Answer: B. Chocolate milk, aged cheese, and yogurt"**

These high-tyramine foods, when ingested in the presence of an MAO inhibitor, cause a severe hypertensive response. MAOIs prevent the breakdown of tyramine found in the body as well as certain foods, drinks, and other medications. Patients that take MAOIs and consume tyramine-containing foods or drinks will exhibit high serum tyramine level. A high level of tyramine can cause a sudden increase in blood pressure, called the tyramine pressor response. Even though it is rare, a high tyramine level can trigger a cerebral hemorrhage, which can even result in death.

- **Option A:** Also, certain fruits can contain tyramine like overripe fruits, avocados, bananas, raisins, or figs. Further examples are cheeses, alcohol, and fava beans; all of these should be avoided even after two weeks of stopping MAOIs. Anyone taking MAOIs is at risk for an adverse hypertensive reaction, with accompanying morbidity.
- **Option C:** Tyramine occurs naturally in small amounts in protein-containing foods. As these foods age, the tyramine levels increase. Tyramine amounts can vary among foods due to different processing, storage, and preparation methods. You can't reduce the amount of tyramine in food by cooking it.
- **Option D:** Eating foods with high tyramine can trigger a reaction that can have serious consequences. Patients should know that tyramine can increase with the aging of food; they should be encouraged to have foods that are fresh instead of leftovers or food prepared hours earlier. Examples of high levels of tyramine in food are types of fish, as well as types of meat, including sausage, turkey, liver, and salami.

**98. *A nurse is giving discharge instructions to a client who will be taking phenobarbital (Luminal). The nurse would educate the client in which of the following directly correlates with the safety of the client?***

- A. Take the medication at the same time each day.
- B. Take the medication with meals only.
- C. Avoid using sleep aids while taking the medication.
- D. Decrease the dosage once with symptoms of dizziness and lightheadedness.



**Correct Answer: C. Avoid using sleep aids while taking the medication.**

Phenobarbital (Luminal) is an anticonvulsant and hypnotic drug. The client should avoid drinking alcohol or use medicines that may cause drowsiness (eg, sleep aids, muscle relaxers).

- **Option A:** Taking the medication at the same time daily improves compliance and maintains more stable blood levels of the medication.
- **Option B:** The medication is taken without regard to meals.
- **Option D:** Decreasing the dosage is not done without the approval of the physician.

**99. A female client is admitted to the emergency department with complaints of chest pain and shortness of breath. The nurse's assessment reveals jugular vein distention. The nurse knows that when a client has jugular vein distention, it's typically due to:**

- A. A neck tumor
- B. An electrolyte imbalance
- C. Dehydration
- D. Fluid overload

**Correct Answer: D. Fluid overload**

Fluid overload causes the volume of blood within the vascular system to increase. This increase causes the vein to distend, which can be seen most obviously in the neck veins. JVD is a sign of increased central venous pressure (CVP). That's a measurement of the pressure inside the vena cava. CVP indicates how much blood is flowing back into the heart and how well the heart can move that blood into the lungs and the rest of the body.

- **Option A:** A neck tumor doesn't typically cause jugular vein distention. Right-sided heart failure is a common cause. Right-sided heart failure usually develops after a left-sided heart failure. The left ventricle pumps blood out through the aorta to most of the body. The right ventricle pumps blood to the lungs. When the left ventricle's pumping power weakens, fluid can back up into the lungs. This eventually weakens the right ventricle.
- **Option B:** An electrolyte imbalance may result in fluid overload, but it doesn't directly contribute to jugular vein distention. The pericardium is a thin, fluid-filled sac that surrounds the heart. An infection of the pericardium, called constrictive pericarditis, can restrict the volume of the heart. As a result, the chambers can't fill with blood properly, so blood can back up into veins, including the jugular veins.
- **Option C:** Dehydration does not cause JVD. Another common cause is pulmonary hypertension. Pulmonary hypertension occurs when the pressure in your lungs increases, sometimes as a result of changes to the lining of the artery walls. This can also lead to right-sided heart failure.

**100. A neurological consult has been ordered for a pediatric client with suspected petit mal seizures. The client with petit mal seizures can be expected to have:**

- A. Short, abrupt muscle contraction
- B. Quick, bilateral severe jerking movements

C. Abrupt loss of muscle tone

D. A brief lapse in consciousness

**Correct Answer: D. A brief lapse in consciousness**

- Option D: Absence seizures, formerly known as petit mal seizures, are characterized by a brief lapse in consciousness accompanied by rapid eye blinking, lip-smacking, and minor myoclonus of the upper extremities.
- Option A: This refers to myoclonic seizure.
- Option B: This refers to tonic-clonic, formerly known as grand mal, seizures.
- Option C: This refers to atonic seizures.