

Kevin's Review - 100 NCLEX Practice Questions

1. Which of the following statements about intravenous administration of steroids is true?

- A. Steroids administered intravenously must be diluted.
- B. Steroids administered intravenously can be either in diluted or undiluted form.
- C. Steroids should be given IV push only.
- D. Intravenous administration of steroids is contraindicated in acutely ill clients.

Correct Answer: B. Steroids administered intravenously can be either in diluted or undiluted form.

IV steroids can either be diluted or given without dilution. The route of administration for corticosteroids depends on many factors, primarily being the disorder treated. The route can be parenteral, oral, inhaled, topical, injected (intramuscular, intraarticular, intralesional, intradermal, etc.), and rectal. The clinician must keep many factors in mind upon deciding to initiate corticosteroid therapy, including the route of administration, preparation, dosing, frequency, and duration of treatment.

- **Option A:** Parenteral administration is often used in more emergent therapy as well as in those unable to tolerate medication by mouth. Oral administration is more common for chronic treatment. Patients should receive non-systemic therapy whenever possible, to minimize systemic exposure.
- **Option C:** When administering Methylprednisolone sodium succinate in high doses intravenously it should be given over a period of at least 30 minutes. Doses up to 250 mg should be given intravenously over a period of at least five minutes.
- **Option D:** The toxicity of corticosteroids accounts for one of the most common causes of iatrogenic illness in patients on chronic therapy. No specific reversal agent exists for corticosteroids. Their effect in excess is manageable by gradual taper and addressing the particular complication (e.g., hyperglycemia, infection, hypertension).

2. A client is taking Cyclophosphamide (Cytosan) for the treatment of lymphoma. The nurse is very cautious in administering the medication because this drug poses the fatal side effect of:

- A. Sterility
- B. Hemorrhagic cystitis
- C. Myeloma
- D. Alopecia

Correct Answer: B. Hemorrhagic cystitis

- **Option B:** Cyclophosphamide when broken down by the body into a substance called acrolein which is excreted into the urine causing irritation in the lining of the bladder (hemorrhagic cystitis).
- **Options A and D:** Sterility and alopecia are common side effects of the drug but is only temporary.
- **Option C:** Myeloma is an indication for giving this medication.

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

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

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

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

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

4. Which of the following applies to the defect emerging from residual peritoneal fluid confined within the lower segment of the processus vaginalis?

- A. Inguinal hernia
- B. Incarcerated hernia
- C. Communicating hydrocele
- D. Noncommunicating hydrocele

Correct Answer: D. Noncommunicating hydrocele

With a noncommunicating hydrocele, most commonly seen at birth, residual peritoneal fluid is trapped within the lower segment of the processus vaginalis (the tunica vaginalis). There is no communication with the peritoneal cavity and the fluid usually is absorbed during the first months after birth.

- **Option A:** An inguinal hernia arises from the incomplete closure of the processus vaginalis leading to the descent of an intestinal portion. An inguinal hernia is an opening in the myofascial plain of the oblique and transversalis muscles that can allow for herniation of intra abdominal or extraperitoneal organs.
- **Option B:** Incarceration occurs when the hernia becomes tightly caught in the hernia sac. At times an inguinal hernia can present with severe pain or obstructive symptoms caused by incarceration or strangulation of the hernia sac contents. Femoral hernias should always be repaired as they have a high risk of incarceration.
- **Option C:** A communicating hydrocele usually is associated with an inguinal hernia because the processus vaginalis remains open from the scrotum to the abdominal cavity. The tunica vaginalis is a potential space for fluid to accumulate, provided the proximal portion of processus vaginalis remains patent and results in free communication with the peritoneal cavity, leading to congenital hydrocele.

5. Damage to the VII cranial nerve results in:

- A. Facial pain
- B. Absence of ability to smell
- C. Absence of eye movement
- D. Tinnitus

Correct Answer: A. Facial pain

The facial nerve is cranial nerve VII. If damage occurs, the client will experience facial pain. The sensory portion, or intermediate nerve, has the following components: (1) taste to the anterior two-thirds of the tongue; (2) secretory and vasomotor fibers to the lacrimal gland, the mucous membranes of the nose and mouth, and the submandibular and sublingual salivary glands; (3) cutaneous sensory impulses from the external auditory meatus and region back of the ear.

- **Option B:** Olfactory nerve controls smell, and it is cranial nerve I. The olfactory nerve is the first cranial nerve and is instrumental in our sense of smell. The olfactory nerve contains only afferent sensory nerve fibers and, like all cranial nerves, is paired. The olfactory nerve is the shortest cranial nerve, and along with the optic nerve is one of the only two cranial nerves that do not converge with the brainstem.
- **Option C:** Eye movement is controlled by the Trochlear or C IV. The trochlear nerve is the fourth cranial nerve (CN IV) and one of the ocular motor nerves that controls eye movement. The trochlear nerve, while the smallest of the cranial nerves, has the longest intracranial course as it is the only nerve to have a dorsal exit from the brainstem. It originates in the midbrain and extends laterally and anteriorly to the superior oblique muscle.
- **Option D:** The vestibulocochlear nerve or CN VIII is responsible for hearing loss and tinnitus. The vestibulocochlear nerve, also known as cranial nerve eight (CN VIII), consists of the vestibular and cochlear nerves. Each nerve has distinct nuclei within the brainstem. The vestibular nerve is primarily responsible for maintaining body balance and eye movements, while the cochlear nerve is responsible for hearing.

6. A 34-year-old mother of three joins a nursing class to pursue her dream of becoming a nurse. Recalling her own childbirth experiences, she's particularly interested when the discussion shifts to hormones that play pivotal roles during labor. As the class delves deeper into the endocrine system, the instructor throws a question to the class to test their understanding. She asks, "Can anyone pinpoint where the antidiuretic hormone (ADH) and oxytocin, which are crucial in water balance and inducing uterine contractions, are primarily synthesized and stored before they fulfill their vital functions?"

- A. Adrenal cortex
- B. Posterior pituitary gland
- C. Thyroid gland
- D. Pineal gland

Correct Answer: B. Posterior pituitary gland

The posterior pituitary gland, also known as the neurohypophysis, serves as a storage and release site for two important hormones: antidiuretic hormone (ADH) and oxytocin. These hormones are produced by specialized neurons in the hypothalamus, located in the brain. They are then transported and stored in the posterior pituitary until they are needed.

- **Option A:** The adrenal cortex produces a variety of steroid hormones including glucocorticoids (like cortisol), mineralocorticoids (like aldosterone), and androgens. It does not produce or store ADH or oxytocin.
- **Option C:** The thyroid gland produces thyroid hormones, including thyroxine (T4) and triiodothyronine (T3), and also calcitonin. It does not synthesize or store ADH or oxytocin.
- **Option D:** The pineal gland produces and secretes melatonin, a hormone that regulates sleep-wake cycles. It does not have a role in the production or storage of ADH or oxytocin.

7. A nonimmunized child appears at the clinic with a visible rash. Which of the following observations indicates the child may have rubeola (measles)?

- A. Small blue-white spots are visible on the oral mucosa.
- B. The rash begins on the trunk and spreads outward.
- C. There is low-grade fever.
- D. The lesions have a "teardrop on a rose petal" appearance.

Correct Answer: A. Small blue-white spots are visible on the oral mucosa.

Koplik's spots are small blue-white spots visible on the oral mucosa and are characteristic of measles infection. Most cases show the characteristic Koplik spots of the disease, located in the buccal mucosa at the height of the second molar, and appear two to three days before the rash and disappear on the third day.

- **Option B:** The body rash typically begins on the face and travels downward. The second phase, the eruptive, is characterized by the appearance of a maculopapular rash, initially fine that subsequently becomes confluent. The rash begins behind the auricle and along the hair implantation line, and extends downward to the face, trunk, and extremities.
- **Option C:** High fever is often present. The primary or prodromal phase lasts four to six days and is characterized by the presence of high fever, malaise, coryza, conjunctivitis, palpebral edema, and dry cough.
- **Option D:** "Teardrop on a rose petal" refers to the lesions found in varicella (chickenpox). The characteristic chickenpox vesicle, surrounded by an erythematous halo, is described as a dewdrop on a rose petal. Chickenpox is clinically characterized by the presence of active and healing lesions in all stages of development within affected locations. Lesions characteristically heal without scarring, although excoriation or secondary bacterial superinfection predisposes to scar formation.

8. Nurse Walter should expect a 3-year-old child to be able to perform which action?

- A. Ride a tricycle
- B. Tie the shoelaces

- C. Roller-skates
- D. Jump rope

Correct Answer: A. Ride a tricycle

At age 3, gross motor development and refinement in eye-hand coordination enable a child to ride a tricycle. Most 3-year-olds are able to walk a line, balance on a low balance beam, skip or gallop, and walk backward. They can usually pedal a tricycle, catch a large ball, and jump with two feet.

- **Option B:** The fine motor skills required to tie shoelaces develop around age 5. By age 3, kids can usually wash and dry their hands, dress themselves with a little assistance, and turn pages in a book. Most preschoolers can hold a writing instrument with their fingers, not their fists.
- **Option C:** The gross motor skills required for roller-skating develop around age 5. Most children by age 3 develop more large muscle movements (gross motor skills). These generally include running, climbing, jumping in place, kicking a ball, and bending over easily.
- **Option D:** The gross motor skills required for jumping rope develop around age 5. Give the child time outdoors. Let them run and play. Climbing in and out of boxes is a favorite game. Remember to watch them closely when outside—they can move pretty fast when they want to.

9. Walter, a teenage patient is admitted to the hospital because of acetaminophen (Tylenol) overdose. Overdoses of acetaminophen can precipitate life-threatening abnormalities in which of the following organs?

- A. Lungs
- B. Liver
- C. Kidney
- D. Adrenal Glands

Correct Answer: B. Liver

Acetaminophen is extensively metabolized by pathways in the liver. Toxic doses of acetaminophen deplete hepatic glutathione, resulting in accumulation of the intermediate agent, quinone, which leads to hepatic necrosis. Prolonged use of acetaminophen may result in an increased risk of renal dysfunction, but a single overdose does not precipitate life-threatening problems in the respiratory system, renal system, or adrenal glands.

- **Option A:** Acetaminophen is rapidly absorbed from the gastrointestinal (GI) tract and reaches therapeutic levels in 30 minutes to 2 hours. Overdose levels peak at 4 hours unless other factors could delay gastric emptying, such as a co-ingestion of an agent that slows gastric motility, or if the acetaminophen is in an extended-release form.
- **Option C:** In the third stage (72 hours to 96 hours), liver dysfunction is significant with renal failure, coagulopathies, metabolic acidosis, and encephalopathy. Acetaminophen has an elimination half-life of 2 hours, but can be as long as 17 hours in patients with hepatic dysfunction. It is metabolized by the liver, where it is conjugated to nontoxic, water-soluble metabolites that are excreted in the urine.
- **Option D:** Metabolism primarily occurs through glucuronidation and sulfation, both of which occur in the liver. In an overdose, these pathways are saturated, and more acetaminophen is subsequently metabolized to NAPQI by cytochrome P450. NAPQI is a toxic substance that is safely reduced by glutathione to nontoxic mercaptate and cysteine compounds, which are then renally excreted. An overdose depletes the stores of glutathione, and once they reach less than 30% of

normal, NAPQI levels increase and subsequently bind to hepatic macromolecules causing hepatic necrosis. This is irreversible.

10. A client is prescribed with guaifenesin (Mucinex). The nurse determines that the client understands the proper administration of this medication if the client states that he or she will:

- A. Limit oral fluid intake
- B. Take the medication with meals only
- C. Take an additional dose once fever and cough persist
- D. Drink extra fluids while taking this medication

Correct Answer: D. Drink extra fluids while taking this medication

Guaifenesin is an expectorant. Drink extra fluids to help loosen the congestion and lubricate the throat while taking this medication.

- **Option A:** Fluids are needed to loosen the secretions.
- **Option B:** The medication does not have to be taken with meals.
- **Option C:** Additional doses should not be taken without the prescription of the doctor.

11. Ansherina who is receiving a traditional antipsychotic agent complains that she is gaining weight. The nurse would:

- A. Be aware that this is probably delusional thinking because these agents cause weight loss.
- B. Encourage the client to follow a healthy diet and use diet soda to help stabilize her weight.
- C. Discuss a switch to a high-potency agent so the weight gain will not be a problem.
- D. Establish a contract with the client to carefully follow her high-calorie diet.

Correct Answer: B. Encourage the client to follow a healthy diet and use diet soda to help stabilize her weight.

These agents have a known side effect of weight gain. Managing dietary intake can assist in the management of the potentially distressing effect. Olanzapine has been associated most frequently with weight gain, increased appetite, and somnolence. Quetiapine is the least likely to cause extrapyramidal side effects. The most common side effects of quetiapine are somnolence, orthostatic hypotension, and dizziness. Ziprasidone has almost no weight gain but can cause prolongation of QTc.

- **Option A:** First-generation antipsychotics are indicated in the treatment of delusional disorder as well as paranoia associated with personality disorders. Newer medications — called atypical antipsychotic drugs — appear to be more effective in treating the symptoms of delusional disorder. These medications work by blocking dopamine and serotonin receptors in the brain. Serotonin is another neurotransmitter believed to be involved in delusional disorder.
- **Option C:** Second-generation antipsychotics carry the FDA boxed warning of increased incidence of stroke in elderly patients with dementia. The recommendation is to avoid the use of second-generation antipsychotics along with other drugs that prolong the QTc interval.

- **Option D:** Wherever possible use drugs with a lower risk of weight gain. Monitor weight and Body Mass Index (BMI) during antipsychotic treatment. More regular measurements are needed in the first few months of treatment as this is when the risk of weight gain is highest.

12. The client is having fetal heart rates of 90–110 bpm during the contractions. The first action the nurse should take is:

- A. Reposition the monitor
- B. Turn the client to her left side
- C. Ask the client to ambulate
- D. Prepare the client for delivery

Correct Answer: B. Turn the client to her left side

The normal fetal heart rate is 120–160 bpm; 100–110bpm is bradycardia. The first action would be to turn the client to the left side and apply oxygen. A slow heart rate, or bradycardia, may indicate the baby is not getting enough oxygen delivery to the brain. A fast heart rate, or tachycardia, may indicate oxygen deprivation. There is an acceptable range of acceleration and deceleration – or speeding up and slowing down – of fetal heart rates during contractions and labor.

- **Option A:** Repositioning the monitor is not indicated at this time. Obstetricians and nurses must carefully review fetal monitor strips throughout labor and delivery to ensure fetal heart tones are reassuring and the baby is getting enough oxygen. If non-reassuring conditions occur, appropriate and timely actions must be taken.
- **Option C:** Asking the client to ambulate is not the best action for clients experiencing bradycardia. Generally, nursing interventions are attempted first to restore normal oxygenation to the baby. These include the administration of supplemental oxygen, changes in maternal position, increasing intravenous fluids, and the administration of medications that subdue contractions and maximize placental blood flow.
- **Option D:** There is no data to indicate the need to move the client to the delivery room at this time. If fetal heart tones remain non-reassuring despite nursing interventions, the fetus should be delivered by emergency cesarean section. Emergency cesarean section should be performed within 5 to 30 minutes depending on the circumstances.

13. Mr. Domingo with a history of hypertension is diagnosed with primary hyperaldosteronism. This diagnosis indicates that the client's hypertension is caused by excessive hormone secretion from which of the following glands?

- A. Adrenal cortex
- B. Pancreas
- C. Adrenal medulla
- D. Parathyroid

Correct Answer: A. Adrenal cortex

Excessive secretion of aldosterone in the adrenal cortex is responsible for the client's hypertension. This hormone acts on the renal tubule, where it promotes reabsorption of sodium and excretion of potassium and hydrogen ions.

- **Option B:** The pancreas mainly secretes hormones involved in fuel metabolism.
- **Option C:** The adrenal medulla secretes the catecholamines — epinephrine and norepinephrine.
- **Option D:** The parathyroids secrete parathyroid hormone.

14. An 85-year-old male patient has been bedridden for two weeks. Which of the following complaints by the patient indicates to the nurse that he is developing a complication of immobility?

- A. Stiffness of the right ankle joint.
- B. Soreness of the gums.
- C. Short-term memory loss.
- D. Decreased appetite.

Correct Answer: A. Stiffness of the right ankle joint.

Stiffness of a joint may indicate the beginning of contracture and/or early muscle atrophy. In the development of joint contractures that result from long-term immobilization, shortening of the joint capsule, synovial adhesions and arthrofibrosis play decisive roles and may present as a generalized joint stiffness

- **Option B:** Soreness of the gums is not related to immobility. Brushing too hard, improper flossing techniques, infection, or gum disease can cause sore and sensitive gums. Other causes unrelated to oral hygiene could include Vitamin K deficiency, hormonal changes during pregnancy, leukemia, or blood disorders.
- **Option C:** Short-term memory loss is not related to immobility. Short-term memory loss is when one forgets things they heard, saw, or did recently. It's a normal part of getting older for many people. But it can also be a sign of a deeper problem, such as dementia, a brain injury, or a mental health issue.
- **Option D:** Decreased appetite is unlikely to be related to immobility. People can experience a loss of appetite for a wide range of reasons. Some of these are short-term, including colds, food poisoning, other infections, or the side effects of medication. Others are to do with long-term medical conditions, such as diabetes, cancer, or life-limiting illnesses.

15. Among the following components thorough pain assessment, which is the most significant?

- A. Effect
- B. Cause
- C. Causing factors
- D. Intensity

Correct Answer: D. Intensity

Intensity is the major indicative of severity of pain and it is important for the evaluation of the treatment. Severity of pain may include the intensity graded by the patient or the impact pain has on function. Intensity may be assessed with certain scales that will be reviewed below. The impact on function may include changes with activities of daily living, activity level, and work-related duties. Pain may have an

impact on sleep, mood, appetite, or social relationships.

- **Option A:** The effect of pain is an important factor during assessment, especially on the activities of daily living, but it is not the most significant. Factors that relieve pain should be assessed not only to aid in diagnosis, but also with determining what has been attempted and what helps or does not help with their pain. Determining how the patient alleviates pain may also assess for healthy coping behaviors.
- **Option B:** Various stimuli may exacerbate pain, and determining these factors can aid in establishing the pathophysiologic mechanisms of pain. The history of pain or “pain history” is the physician’s initial tool to assess a patient in pain. A detailed history and physical examination is essential, not only to narrow the diagnoses but also to guide further diagnostic studies, if appropriate.
- **Option C:** Causing factors are not a part of the components in assessing pain. Different disease processes may present with similar pain characteristics. Vascular and neurogenic claudication symptoms are a classic example. However, patients with similar pathology may describe different types of pain or may have no pain at all (eg, spinal cord lesions, diabetic neuropathy).

16. A client is scheduled for a myelogram, and the nurse provides a list of instructions to the client regarding preparation for the procedure. Which instructions should the nurse place on the list? Select all that apply.

- A. Jewelry will need to be removed.
- B. An informed consent will need to be signed.
- C. A trained x-ray technician performs the procedure.
- D. The procedure will take approximately 45 minutes.
- E. A liquid diet can be consumed on the day of the procedure.
- F. Solid food intake needs to be restricted only on the day of the procedure.

Correct Answer: A, B, & D.

A myelogram is an X-ray exam in which a contrast agent (X-ray dye) is injected into the spinal canal to visualize the bones, discs, muscles, and nerves. A myelogram is used to detect abnormalities of the spine such as disc problems, tumors, and bone spurs, narrowing of the spinal canal, or malformations of the spine.

- **Option A:** The client will need to remove jewelry and metal objects from the chest area. Try to wear non-restrictive, comfortable clothing and slip on shoes if possible. Remove all piercings and leave all jewelry and valuables at home.
- **Option B:** An informed consent is required because the procedure is invasive. A myelogram may be done to assess the spinal cord, subarachnoid space, or other structures for changes or abnormalities.
- **Option C:** The procedure is performed by the healthcare provider. The technologist will verify identification and exam requests. The technologist and radiologist will be available to answer any questions.
- **Option D:** The client is told that the procedure takes about 45 minutes. The patient will lie on the stomach on the X-ray table. If the patient cannot tolerate lying on the stomach for at least 30 minutes, notify the doctor.

- **Option E:** If not on a fluid restriction, drink at least 6-8 glasses of fluid the day before the procedure. Do not eat or drink anything for 4 hours before the exam.
- **Option F:** Client preparation for a myelogram includes instructing the client to restrict food and fluids for 4 to 8 hours before the procedure. The client is also told that pretest medications may be prescribed for relaxation.

17. Emily is talking to her 6 year-old sister Julia. She asks why the sun shines so bright? Julia answered that “it always keeps her warm. What stage in the cognitive theory of development explains this?

- A. Formal operational
- B. Concrete operational
- C. Sensorimotor
- D. Preoperational

Correct Answer: D. Preoperational

Children in this stage tend to be egocentric and have difficulty taking the viewpoint of others. At this stage, kids learn through pretend play but still struggle with logic and taking the point of view of other people. They also often struggle with understanding the idea of constancy.

- **Option A:** Children in this stage can think logically about abstract propositions and test hypotheses systematically. Teens begin to think more about moral, philosophical, ethical, social, and political issues that require theoretical and abstract reasoning.
- **Option B:** Children in this stage can think logically about objects and events. Their thinking becomes more logical and organized, but still very concrete. While children are still very concrete and literal in their thinking at this point in development, they become much more adept at using logic.
- **Option C:** Children in this stage obtain knowledge about the environment through the use of senses and reflexes. A child’s entire experience at the earliest period of this stage occurs through basic reflexes, senses, and motor responses.

18. A licensed practical nurse is attending an agency orientation meeting about the nursing model of practice implemented in the facility. The nurse is told that the nursing model is a team nursing approach. The nurse understands that which of the following is a characteristic of this type of nursing model of practice? Select all that apply.

- A. A task approach method is used to provide care to clients.
- B. Managed care concepts and tools are used when providing client care.
- C. Nursing staff are led by a nurse when providing care to a group of clients.
- D. A single registered nurse is responsible for providing nursing care to a group of clients.
- E. This model utilizes the diversity of skills, education, and qualification level of the entire staff.

Correct Answer: C & E.

The team nursing approach allows our nurses to move from caring about “my” patients to teams caring for a group of “our patients.” Team Nursing reduces the stress of one RN trying to care for a group of assigned patients by themselves, with the goal of each member of the team sharing the workload.

- **Option A:** This identifies functional nursing. Functional nursing revolves around team ethics, and it produces a catalog of processes, which are undertaken by different individuals to ensure efficient patient care delivery.
- **Option B:** This identifies a component of case management. Case management is a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual’s and family’s comprehensive health needs.
- **Option C:** The team nursing model of care involves pairing nurses who work as a team to deliver patient care. In team nursing, nursing personnel are led by a nurse when providing care to a group of clients.
- **Option D:** This identifies primary nursing. This model favors a more holistic approach to patient care, as it involves a single senior nurse taking responsibility for the patient throughout their hospital stay.
- **Option E:** This model utilizes the diversity of skills, education, and qualification level of the entire staff. Team members work collaboratively and share responsibility. In the team nursing model, an experienced nurse for the unit or floor oversees the work of a team of clinicians and support staff for a group of patients.

19. While teaching a 10-year-old child about their impending heart surgery, the nurse should

- A. Explain the surgery using a model of the heart
- B. Provide a verbal explanation just prior to the surgery
- C. Introduce the child to another child who had heart surgery three days ago
- D. Provide the child with a booklet to read about the surgery

Correct Answer: A. Explain the surgery using a model of the heart.

Based on Piaget’s theory, the school-age child is in the concrete operations stage of cognitive development. During this stage, children begin to think logically about concrete events. Using something concrete, like a model will help the child understand the explanation of heart surgery.

- **Option B:** This refers to the formal operational stage where the child has the ability to think logically and understand abstract concepts. The ability to think about abstract ideas and situations is the key hallmark of the formal operational stage of cognitive development. The nurse uses a book or provides a verbal explanation about the surgery.
- **Option C:** This refers to the preoperational stage (2-7 years old). It is characterized by egocentric and concrete thinking. While they are getting better with language and thinking, they still tend to think about things in very concrete terms.
- **Option D:** The final stage of Piaget’s theory, the formal operational stage, involves an increase in logic, the ability to use deductive reasoning, and an understanding of abstract ideas. At this point, people become capable of seeing multiple potential solutions to problems and think more scientifically about the world around them.

20. Mr. Patel, a 55-year-old chef renowned for his spicy seafood dishes, is in the clinic for a follow-up appointment related to his chronic gout. His physician has decided to prescribe probenecid as part of his management plan, considering the recurring nature of his gout attacks and uric acid levels. When educating Mr. Patel about his new medication, which crucial instruction should the nurse emphasize to ensure his safety and optimal response to the drug?

- A. "Increase your fluid intake to prevent kidney stone formation."
- B. "Take the medication on an empty stomach for optimal absorption."
- C. "Avoid consuming alcohol while taking this medication."
- D. "Expect an immediate reduction in pain and swelling."

Correct Answer: A. "Increase your fluid intake to prevent kidney stone formation."

Probenecid works by increasing the excretion of uric acid in the urine. Increasing fluid intake can help facilitate this excretion and reduce the risk of kidney stone formation, a potential complication of the drug.

- **Option B:** While some medications require an empty stomach for best absorption, probenecid does not have this specific requirement. Additionally, taking it with food can help reduce stomach upset, a potential side effect.
- **Option C:** Alcohol can increase uric acid production and exacerbate gout symptoms. While it's generally a good idea for patients with gout to limit alcohol, this isn't specific to probenecid. The primary concern with probenecid is ensuring adequate fluid intake to assist with uric acid excretion and prevent kidney stones.
- **Option D:** Probenecid is a uricosuric agent, meaning it helps with the excretion of uric acid. It does not directly address the symptoms of an acute gout attack (like pain and swelling). Instead, its primary role is in the long-term management of gout to prevent recurrent attacks by lowering uric acid levels. Immediate symptom relief is not expected with this medication.

21. While providing care to a married client, the nurse notes multiple blue, purple, and yellow ecchymotic areas on the arms and trunk. When the nurse asks about these bruises, the client responds, "I tripped." What actions should the nurse take? Select all that apply.

- A. Document the client's statement and complete a body map indicating the size, color, shape, location, and type of injuries.
- B. Contact the local authorities to report suspicions of abuse.
- C. Assist the client in developing a safety plan for times of increased violence.
- D. Call the client's spouse to arrange a meeting to discuss the situation.
- E. Instruct the client to leave the abusive situation as soon as possible.
- F. Provide the client with telephone numbers of local shelters and safe houses.

Correct Answer: A, C, & F.

Family and domestic violence is a common problem in the United States, affecting an estimated 10 million people every year; as many as one in four women and one in nine men are victims of domestic

violence.

- **Option A:** The nurse should objectively document the assessment findings. A detailed description of physical findings of abuse in the medical record is essential if legal action is pursued.
- **Option B:** The nurse should not report this suspicion of abuse because the client is a competent adult who has the right to self-determination. The healthcare provider needs to assure the patient that the decision is voluntary and that the provider will help regardless of the decision. The goal is to make resources accessible, safe, and enhance support.
- **Options C and F:** All individuals, men or women, suspected of being abuse victims should be counseled on a safety plan, which consists of recognizing escalating violence within the family, formulating a plan to exit quickly, and knowing the telephone numbers of local shelters and safe houses.
- **Option D:** Contacting the client's spouse without consent violates confidentiality. If the patient elects to leave their current situation, information for referral to a local domestic violence shelter to assist the victim should be given.
- **Option E:** The nurse should respond to the client in a nonthreatening manner that promotes trust, rather than ordering the client to break off the relationship. During the initial assessment, a practitioner must be sensitive to the patient's cultural beliefs. Incorporating a cultural sensitivity assessment with a history of being victim of domestic violence may allow more effective treatment.

22. Claire, a 33 y.o. is on your floor with a possible bowel obstruction. Which intervention is a priority for her?

- A. Obtain daily weights.
- B. Measure abdominal girth.
- C. Keep strict intake and output.
- D. Encourage her to increase fluids.

Correct Answer: B. Measure abdominal girth.

Measuring abdominal girth provides quantitative information about increases or decreases in the amount of distention. Abdominal girths should be measured daily. Use the same measuring tape each time. Place the patient in the same position each time. Ensure that the tape measure is placed in the same position each time. This can be done by drawing small tick marks on the patient's abdomen to indicate the position of the tape. Measure the patient at the same time each day.

- **Option A:** Weigh daily; provides information about dietary needs and effectiveness of therapy. Avoid or limit foods that might cause or exacerbate abdominal cramping, flatulence (milk products, foods high in fiber or fat, alcohol, caffeinated beverages, chocolate, peppermint, tomatoes, orange juice).
- **Option C:** Monitor I&O; closely. Fluid and electrolyte losses must be replaced. Record intake and changes in symptomatology. Useful in identifying specific deficiencies and determining GI response to foods. Monitor I&O.; Note number, character, and amount of stools; estimate insensible fluid losses (diaphoresis). Measure urine specific gravity; observe for oliguria.
- **Option D:** Administer parenteral fluids, blood transfusions as indicated. Maintenance of bowel rest requires alternative fluid replacement to correct losses and anemia. Fluids containing sodium may be restricted in presence of regional enteritis.

23. A client is admitted with a spinal cord injury at the level of T12. He has limited movement of his upper extremities. Which of the following medications would be used to control edema of the spinal cord?

- A. acetazolamide (Diamox)
- B. furosemide (Lasix)
- C. methylprednisolone (Solu-Medrol)
- D. sodium bicarbonate

Correct Answer: C. Methylprednisolone (Solu-Medrol)

High doses of Solu-Medrol are used within 24 hours of spinal injury to reduce cord swelling and limit neurological deficit. The other drugs aren't indicated in this circumstance. Methylprednisolone and its derivatives, methylprednisolone acetate succinate, and methylprednisolone sodium, are intermediate-acting, synthetic glucocorticoids used mainly as anti-inflammatory or immunosuppressive agents. Methylprednisolone is five times more potent in its anti-inflammatory properties relative to hydrocortisone (cortisol), with minimal mineralocorticoid activities compared to the latter.

- **Option A:** Acetazolamide is a diuretic and carbonic anhydrase inhibitor medication that is used to treat several illnesses. Acetazolamide is a classic treatment option for glaucoma as it causes a reduction in the aqueous humor. As well, it is useful for the treatment of altitude sickness, because of its underlying mechanism of action. The medication works to excrete bicarbonate.
- **Option B:** The Food and Drug Administration (FDA) has approved the use of furosemide in the treatment of conditions with volume overload and edema secondary to congestive heart failure exacerbation, liver failure, or renal failure including the nephrotic syndrome.
- **Option D:** The main therapeutic effect of sodium bicarbonate administration is in increasing plasma bicarbonate levels, which are known to buffer excess hydrogen ion concentration, thereby raising solution pH to combat clinical manifestations of acidosis.

24. The nurse is giving medication teachings to a client receiving theophylline. The nurse instructed the client to limit the intake of which of the following?

- A. Apple and banana
- B. Yogurt and cheese
- C. Tuna and oysters
- D. Cola and chocolate

Correct Answer: D. Cola and chocolate

Theophylline is a methylxanthine bronchodilator. The nurse instructs the client to limit the intake of xanthine-containing foods such as chocolate, cola, and coffee.

- **Options A, B, & C:** These food items can be eaten by a client taking theophylline.

25. Magnesium performs all of the following functions except:

- A. Contributing to vasoconstriction.

- B. Assisting in cardiac muscle contraction.
- C. Facilitating sodium transport.
- D. Assisting in protein metabolism.

Correct Answer: A. Contributing to vasoconstriction.

Magnesium contributes to vasodilation, not vasoconstriction. Magnesium plays a vital role in over 300 reactions involving metabolism. It is involved with hormone receptor binding, muscle contraction, neural activity, neurotransmitter release, vasomotor tone, and cardiac excitability.

- **Option B:** Magnesium acts as a natural calcium channel blocker, and it is a cofactor of the Na-K-ATP pump. Magnesium helps control atrioventricular node conduction. Therefore, hypomagnesemia can cause myocardial excitability resulting in arrhythmias such as ventricular tachycardia and torsades de pointes.
- **Option C:** It is necessary for the active transport of potassium and calcium across the cell membrane. ATP is dependent on magnesium for proper functioning. Roughly 50% of magnesium is located within the bone, 25% is within the muscle, and the remainder is in soft tissue, serum, and red blood cells (RBC).
- **Option D:** The intestine, bone, and kidney maintain magnesium homeostasis. Similar to calcium, magnesium is absorbed via the intestine, stored in the bone, excreted via the kidneys. Absorption of magnesium is inversely proportional to the concentration within the body; if there are low magnesium levels within the body, more magnesium will be absorbed.

26. Which phase of hepatitis would the nurse incur strict precautionary measures at?

- A. Icteric
- B. Non-icteric
- C. Post-icteric
- D. Pre-icteric

Correct Answer: D. Pre-icteric

Pre-icteric is the infective phase and precautionary measures should be strictly enforced. However, most patients are not always diagnosed during this phase. Nonspecific symptoms occur; they include profound anorexia, malaise, nausea and vomiting, a newly developed distaste for cigarettes (in smokers), and often fever or right upper quadrant abdominal pain. Urticaria and arthralgias occasionally occur, especially in HBV infection.

- **Option A:** During the icteric phase, precautionary measures should already be in place. After 3 to 10 days, the urine darkens, followed by jaundice. Systemic symptoms often regress, and patients feel better despite worsening jaundice. The liver is usually enlarged and tender, but the edge of the liver remains soft and smooth. Mild splenomegaly occurs in 15 to 20% of patients. Jaundice usually peaks within 1 to 2 weeks.
- **Option B:** There is no non-icteric phase. Some manifestations of acute hepatitis are virus-specific, but in general, acute infection tends to develop in predictable phases. Acute viral hepatitis is a common, worldwide disease that has different causes; each type shares clinical, biochemical, and morphologic features. The term acute viral hepatitis often refers to infection of the liver by one of the hepatitis viruses.

- **Option C:** During the post-icteric phase, precautionary measures should already be in place. During this 2- to 4-week period, jaundice fades. Appetite usually returns after the first week of symptoms. Acute viral hepatitis usually resolves spontaneously 4 to 8 weeks after symptom onset.

27. A male client with psoriasis visits the dermatology clinic. When inspecting the affected areas, the nurse expects to see which type of secondary lesion?

- A. Scale
- B. Crust
- C. Ulcer
- D. Scar

Correct Answer: A. Scale

A scale is the characteristic secondary lesion occurring in psoriasis. Although crusts, ulcers, and scars also are secondary lesions in skin disorders, they don't accompany psoriasis. Psoriasis is a chronic proliferative and inflammatory condition of the skin. It is characterized by erythematous plaques covered with silvery scales particularly over the extensor surfaces, scalp, and lumbosacral region.

- **Option B:** Impetigo is a common infection of the superficial layers of the epidermis that is highly contagious and most commonly caused by gram-positive bacteria. It most commonly presents as erythematous plaques with a yellow crust and may be itchy or painful. The lesions are highly contagious and spread easily.
- **Option C:** Decubitus ulcers are skin or soft tissue injuries that form due to prolonged pressure exerted over specific areas of the body. They should receive prompt treatment; otherwise, complications associated with these injuries can be fatal. The cornerstone of treatment is to reduce the pressure exerted at the site of the lesion.
- **Option D:** Hypertrophic scarring represents an undesirable variant in the wound healing process. In hypertrophic scars, excess connective tissue is deposited in the area of the original tissue wound. Hypertrophic scarring presents as an area of increased induration and often dyspigmentation over the site of a wound, especially in areas of increased wound tension.

28. A 68-year-old patient with a long history of smoking is admitted to the respiratory unit due to increased shortness of breath and suspected pleural effusion. A chest X-ray has been ordered to assess the lungs and pleural spaces. As the nurse and the student nurse review the X-ray image together, the student nurse observes a thin, hazy line surrounding the lung tissue. Seizing the educational moment, the nurse, aiming to assess the student's comprehension of the anatomical structures of the thoracic cavity, asks, "The pleura that directly covers the surface of the lungs is called...?"

- A. Diaphragmatic pleura
- B. Mediastinal pleura
- C. Visceral Pleura
- D. Parietal Pleura

Correct Answer: C. Visceral Pleura

The pleura that covers the lung surface is known as the visceral pleura. It is a serous membrane that directly adheres to the lung tissue, providing a protective and lubricated surface that facilitates the smooth movement of the lungs within the thoracic cavity during respiration.

- **Options A:** The diaphragmatic pleura refers to the part of the parietal pleura that lines the diaphragm. While it is adjacent to the lungs, it does not directly cover the surface of the lungs.
- **Option B:** The mediastinal pleura is another section of the parietal pleura that lines the mediastinum, the central compartment of the thoracic cavity between the lungs. It does not cover the surface of the lungs directly.
- **Option D:** The parietal pleura lines the inside of the chest wall, diaphragm, and mediastinum but does not directly cover the lung tissue itself. The visceral pleura, which is continuous with the parietal pleura at the hilum of each lung, covers the lung surface.

29. The mother of a three (3)-year-old is concerned because her child still is insisting on a bottle at nap time and bedtime. Which of the following is the most appropriate suggestion to the mother?

- A. Do not allow the child to have the bottle
- B. Allow the bottle during naps but not at bedtime
- C. Allow the bottle if it contains juice
- D. Allow the bottle if it contains water

Correct Answer: D. Allow the bottle if it contains water

It is recommended that parents should wean their children off the bottle at 15-18 months of age. But if a bottle is still attached to the child at 3 years of age during naptime or bedtime, it should contain only water to prevent the risk of dental caries.

- **Option A:** Generally, the last bottle to stop should be the nighttime bottle. That bottle tends to be a part of the bedtime routine and is the one that most provides comfort to babies. If you keep getting asked for a bottle, find out what the child really needs or wants and offer that instead.
- **Option B:** As the parent weans the baby from the bottle, try diluting the milk in the bottle with water. For the first few days, fill half of it with water and half of it with milk. Then slowly add more water until the entire bottle is water. By that time, it's likely that the child will lose interest and be asking for the milk that comes in a cup.
- **Option C:** A toddler should never be allowed to fall asleep with a bottle containing milk, juice, soda, or sweetened water because frequent and long exposure to drinks containing sugar may cause tooth decay and cavities.

30. A client comes into the E.R. with acute shortness of breath and a cough that produces pink, frothy sputum. Admission assessment reveals crackles and wheezes, a BP of 85/46, a HR of 122 BPM, and a respiratory rate of 38 breaths/minute. The client's medical history included DM, HTN, and heart failure. Which of the following disorders should the nurse suspect?

- A. Pulmonary edema

- B. Pneumothorax
- C. Cardiac tamponade
- D. Pulmonary embolism

Correct Answer: A. Pulmonary edema

SOB, tachypnea, low BP, tachycardia, crackles, and a cough producing pink, frothy sputum are late signs of pulmonary edema. Progressively worsening dyspnea, tachypnea, and rales (or crackles) on examination with associated hypoxia are the clinical features common to both cardiogenic and noncardiogenic pulmonary edema. Cough with pink frothy sputum noted due to hypoxemia from alveolar flooding and auscultation of an S3 gallop could suggest cardiogenic edema. Similarly, the presence of murmurs, elevated jugular venous pressure, peripheral edema may point towards a cardiac etiology.

- **Option B:** In primary spontaneous pneumothorax, the patient is minimally symptomatic as otherwise healthy individuals tolerate physiologic consequences well. The most common symptoms are chest pain and shortness of breath. The chest pain is pleuritic, sharp, severe, and radiates to the ipsilateral shoulder. In SSP, dyspnea is more severe because of decreased underlying lung reserve.
- **Option C:** The classic physical findings in cardiac tamponade included in Beck's triad are hypotension, jugular venous distension, and muffled heart sounds. Pulsus paradoxus, which is a decrease in systolic blood pressure by more than 10 mm Hg with inspiration is an important physical exam finding that suggests a pericardial effusion is causing cardiac tamponade.
- **Option D:** The most common symptoms of PE include the following: dyspnea, pleuritic chest pain, cough, hemoptysis, presyncope, or syncope. Dyspnea may be acute and severe in central PE, whereas it is often mild and transient in small peripheral PE. In patients with preexisting heart failure or pulmonary disease, worsening dyspnea may be the only symptom.

31. 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.

32. When administering amphotericin B, which of the following must be used?

- A. A brown bag to protect the infusion from the light
- B. A diluent of 5% dextrose with no preservatives
- C. A diluent of normal saline with alcohol
- D. A micron filter of above 1 micron

Correct Answer: B. A diluent of 5% dextrose with no preservatives

Amphotericin B must be mixed with a solution with no preservatives. Amphotericin B is amphoteric (can act as both an acid and a base) and virtually water-insoluble. It is not absorbable via oral or intramuscular administration.

- **Option A:** The solution is sensitive to light but does not require the infusion to be covered. Amphotericin B acts by binding to ergosterol in the cell membrane of most fungi. After binding with ergosterol, it causes the formation of ion channels leading to loss of protons and monovalent cations, which results in depolarization and concentration-dependent cell killing.
- **Option C:** Amphotericin B, which is more commonly administered in a liposomal formulation and exhibits increased tolerability and a reduced toxicity profile. These lipid formulations permit a higher daily dose, provide better delivery to organs within the reticuloendothelial system such as the lungs, liver, and spleen, have similar efficacy when compared to conventional amphotericin B, and are less nephrotoxic.

- **Option D:** A micron filter should not be used; if unavoidable, it must be less than 1 μ m. Additionally, amphotericin B also produces oxidative damage to the cells with the formation of free radicals and subsequently increased membrane permeability. Additionally, amphotericin B has a stimulatory effect on phagocytic cells, which assists in fungal infection clearance.

33. At what stage of labor and delivery does a primigravida differ mainly from a multigravida?

- A. Stage 1
- B. Stage 2
- C. Stage 3
- D. Stage 4

Correct Answer: A. Stage 1

In stage 1 during normal vaginal delivery of a vertex presentation, the multigravida may have about 8 hours of labor while the primigravida may have up to 12 hours labor.

- **Option B:** The second stage of labor commences with complete cervical dilation to 10 centimeters and ends with the delivery of the neonate. In women who have delivered vaginally previously, whose bodies have acclimated to delivering a fetus, the second stage may only require a brief trial, whereas a longer duration may be required for a nulliparous female.
- **Option C:** The third stage of labor commences when the fetus is delivered and concludes with the delivery of the placenta. Separation of the placenta from the uterine interface is hallmarked by three cardinal signs including a gush of blood at the vagina, lengthening of the umbilical cord, and a globular shaped uterine fundus on palpation.
- **Option D:** During the fourth stage of labor, the baby is born, the placenta has delivered, and the woman and her partner will probably feel joy, relief, and fatigue. Most babies are ready to nurse within a short period after birth. Others wait a little longer. If the woman is planning to breastfeed, it is strongly encouraged to try to nurse as soon as possible after the baby is born. Nursing right after birth will help the uterus to contract and will decrease the amount of bleeding.

34. Nurse Jonel is providing information to a community group about violence in the family. Which statement by a group member would indicate a need to provide additional information?

- A. "Abuse occurs more in low-income families".
- B. "Abusers are often jealous or self-centered".
- C. "Abusers use fear and intimidation".
- D. "Abusers usually have poor self-esteem".

Correct Answer: A. "Abuse occurs more in low-income families"

Personal characteristics of an abuser include low self-esteem, immaturity, dependence, insecurity, and jealousy. Risk factors for domestic and family violence include individual, relationship, community, and societal issues. There is an inverse relationship between education and domestic violence. Lower education levels correlate with more likely domestic violence. Childhood abuse is commonly associated with becoming a perpetrator of domestic violence as an adult. Perpetrators of domestic violence

commonly repeated acts of violence with new partners. Drug and alcohol abuse greatly increases the incidence of domestic violence.

- **Option B:** Children who are victims or witness domestic and family violence may believe that violence is a reasonable way to resolve a conflict. Males who learn that females are not equally respected are more likely to abuse females in adulthood. Females who witness domestic violence as children are more likely to be victimized by their spouses. While females are often the victim of domestic violence, gender roles can be reversed.
- **Option C:** Domination may include emotional, physical, or sexual abuse that may be caused by an interaction of situational and individual factors. This means the abuser learns violent behavior from their family, community, or culture. They see violence and are victims of violence.
- **Option D:** Domestic and family violence has no boundaries. This violence occurs in intimate relationships regardless of culture, race, religion, or socioeconomic status. All healthcare professionals must understand that domestic violence, whether in the form of emotional, psychological, sexual, or physical violence, is common in our society and should develop the ability to recognize it and make the appropriate referral.

35. After assertiveness training, a formerly passive client appropriately confronts a peer in group therapy. The group leader states, "I'm so proud of you for being assertive. You are so good!" Which communication technique has the leader employed?

- A. The non-therapeutic technique of giving approval
- B. The non-therapeutic technique of interpreting
- C. The therapeutic technique of presenting reality
- D. The therapeutic technique of making observations

Correct Answer: A. The non-therapeutic technique of giving approval.

The group leader has employed the non-therapeutic technique of giving approval. Giving approval implies that the nurse has the right to pass judgment on whether the client's ideas or behaviors are "good" or "bad." This creates a conditional acceptance of the client.

- **Option B:** Interpreting is making conscious that which is unconscious to the client; telling the client the meaning of his or her experience. The client's thoughts and feelings are his own, not to be interpreted by the nurse or for hidden meaning.
- **Option C:** Presenting reality refers to offering for consideration that which is real. When it is obvious that the client is misinterpreting reality, the nurse can indicate what is real. The nurse does this by calmly and quietly expressing the nurse's perceptions or the facts not by way of arguing with the client or belittling his experience.
- **Option D:** Making observations refers to verbalizing what the nurse perceives. Sometimes clients cannot verbalize or make themselves understood. Or the client may not be ready to talk.

36. The client with urolithiasis has a history of chronic urinary tract infections. The nurse concludes that this client most likely has which of the following types of urinary stones?

- A. Calcium oxalate

- B. Uric acid
- C. Struvite
- D. Cystine

Correct Answer: C. Struvite

Struvite stones commonly are referred to as infection stones because they form in urine that is alkaline and rich in ammonia, such as with a urinary tract infection. Struvite stones are also known as triple-phosphate (3 cations associated with 1 anion), infection (or infection-induced), phosphatic, and urease stones.

- **Option A:** Calcium oxalate stones result from increased calcium intake or conditions that raise serum calcium concentrations. Other, less common staghorn calculi can be composed of mixtures of calcium oxalate and calcium phosphate.
- **Option B:** Uric acid stones occur in clients with gout. Uric acid stones form when the levels of uric acid in the urine is too high, and/or the urine is too acidic (pH level below 5.5) on a regular basis. Uric acid can result from a diet high in purines, which are found especially in animal proteins such as beef, poultry, pork, eggs, and fish. The highest levels of purines are found in organ meats, such as liver and fish.
- **Option D:** Cystine stones are rare and occur in clients with a genetic defect that results in decreased renal absorption of the amino acid cystine. Cystine stones are caused by a rare disorder called "cystinuria." The disorder causes a natural substance called "cystine" to leak into the urine. When there is too much cystine in the urine, kidney stones can form.

37. Joseph who had a history of long-term smoking and alcoholism is diagnosed with oropharyngeal cancer. He is admitted into the chemo unit for the initiation of chemotherapy. Which of the following tests is performed before the infusion of chemotherapeutic agents?

- A. Complete blood count (CBC)
- B. Peripheral blood smear
- C. Lumbar puncture
- D. Liver function test

Correct Answer: D. Liver function test

- **Option D:** Liver and kidney function studies are done before the initiation of chemotherapy to evaluate the client's ability to metabolize the chemotherapeutic agents.
- **Option A:** A CBC is performed to assess for anemia and white blood cell count.
- **Option B:** A peripheral blood smear is done to assess the maturity and morphology of red blood cells.
- **Option C:** A lumbar puncture is performed to assess for central nervous system infiltration.

38. A 64-year-old male client with a long history of cardiovascular problems including hypertension and angina is to be scheduled for cardiac catheterization. During pre-cardiac catheterization teaching, Nurse Cherry should inform the client that the primary purpose of the procedure is:

- A. To determine the existence of CHD.
- B. To visualize the disease process in the coronary arteries.
- C. To obtain the heart chambers pressure.
- D. To measure oxygen content of different heart chambers.

Correct Answer: B. To visualize the disease process in the coronary arteries.

The lumen of the arteries can be assessed by cardiac catheterization. Angina is usually caused by narrowing of the coronary arteries. Left heart catheterization has a diagnostic as well as therapeutic role. Although it is used for cardiac hemodynamics and assessment of valvular lesions, its main diagnostic role is the assessment of coronary artery disease. In the contemporary era, left heart catheterization, especially selective coronary angiogram, is considered the gold standard test for coronary artery disease diagnosis.

- **Option A:** Determining the existence of coronary heart disease includes tests and procedures such as echocardiogram, coronary angiography, blood tests, ECG, and MRI scans. Echocardiography is an ultrasound of the heart. It is a useful and non-invasive mode of testing that is performed in both acute and chronic and inpatient and outpatient settings. In acute settings, it could tell about wall motion, valvular regurgitation and stenosis, infective or autoimmune lesions, and chamber sizes.
- **Option C:** Heart chamber pressure can be checked through cardiac catheterization but it is not the primary purpose. In non ACS settings, patients with intermediate pretest probability for CAD are usually the right candidates for it. In the ACS setting, all STEMI patients and selected NSTEMI patients get an emergent cardiac catheterization. This procedure is done in a cardiac catheterization lab, is expertise dependent, and is done under moderate sedation. There is contrast exposure in the procedure which could cause serious allergic reactions and kidney injury.
- **Option D:** The oxygen saturation of the blood can be checked through a pulse oximeter. A pulse oximeter can measure oxygen saturation. It is a noninvasive device placed over a person's finger. It measures light wavelengths to determine the ratio of the current levels of oxygenated hemoglobin to deoxygenated hemoglobin. The use of pulse oximetry has become a standard of care in medicine. It is often regarded as a fifth vital sign.

39. A male client is having a lumbar puncture performed. The nurse would plan to place the client in which position?

- A. Side-lying, with a pillow under the hip.
- B. Prone, with a pillow under the abdomen.
- C. Prone, in slight-Trendelenburg's position.
- D. Side-lying, with the legs, pulled up and head bent down onto the chest.

Correct Answer: D. Side-lying, with the legs, pulled up and head bent down onto the chest.

The client undergoing lumbar puncture is positioned lying on the side, with the legs pulled up to the abdomen and the head bent down onto the chest. This position helps open the spaces between the vertebrae.

- **Option A:** The positioning of the patient in either a lateral recumbent position or sitting position may be used. The lateral recumbent position is preferred as it will allow an accurate measurement of opening pressure, and it also reduces the risk of post-lumbar puncture headache.

- **Option B:** To help keep the needle at the midline during insertion, the lumbar spine should be perpendicular to the table in the sitting position and parallel to the table if in the recumbent position.
- **Option C:** The patient should be instructed to assume the fetal position, which involves the flexion of the spine. It may be helpful to instruct the patient to flex their back “like a cat.” By doing so, the space between the spinous processes increases, allowing for easier needle insertion.

40. During the first 4 hours after a male circumcision, assessing for which of the following is the priority?

- A. Infection
- B. Hemorrhage
- C. Discomfort
- D. Dehydration

Correct Answer: B. Hemorrhage

Hemorrhage is a potential risk following any surgical procedure. Although the infant has been given vitamin K to facilitate clotting, the prophylactic dose is often not sufficient to prevent bleeding.

- **Option A:** Although infection is a possibility, signs will not appear within 4 hours after the surgical procedure.
- **Option C:** The primary discomfort of circumcision occurs during the surgical procedure, not afterward.
- **Option D:** Although feedings are withheld prior to the circumcision, the chances of dehydration are minimal.

41. Nurse Nancy is assessing a child with pyloric stenosis; she is likely to note which of the following?

- A. "Currant jelly" stools
- B. Regurgitation
- C. Steatorrhea
- D. Projectile vomiting

Correct Answer: D. Projectile vomiting

Projectile vomiting is a key sign of pyloric stenosis. Pyloric stenosis, also known as infantile hypertrophic pyloric stenosis (IHPS), is an uncommon condition in infants characterized by abnormal thickening of the pylorus muscles in the stomach leading to gastric outlet obstruction. Clinically infants are well at birth. Then, at 3 to 6 weeks of age, the infants present with “projectile” vomiting, potentially leading to dehydration and weight loss.

- **Option A:** “Currant jelly” stools are characteristic of intussusception. Intussusception is a condition in which part of the intestine folds into the section next to it. Intussusception usually involves the small bowel and rarely the large bowel. Later signs include rectal bleeding, often with “red currant jelly” stool, and lethargy. Physical examination may reveal a “sausage-shaped” mass.
- **Option B:** Regurgitation is seen more commonly with gastroesophageal reflux. Gastroesophageal reflux disease (GERD) is a condition that develops when there is a retrograde flow of stomach

contents back into the esophagus. It can present as a non-erosive reflux disease or erosive esophagitis.

- **Option C:** Steatorrhea occurs in malabsorption disorders such as celiac disease. Steatorrhea is one of the clinical features of fat malabsorption and is noted in many conditions such as exocrine pancreatic insufficiency (EPI), celiac disease, and tropical sprue. An increase in the fat content of stools results in the production of pale, large volume, malodorous, loose stools.

42. Arthur has a family history of colon cancer and is scheduled to have a sigmoidoscopy. He is crying as he tells you, “I know that I have colon cancer, too.” Which response is most therapeutic?

- A. “I know just how you feel.”
- B. “You seem upset.”
- C. “Oh, don’t worry about it, everything will be just fine.”
- D. “Why do you think you have cancer?”

Correct Answer: B. “You seem upset.”

Making observations about what you see or hear is a useful therapeutic technique. This way, you acknowledge that you are interested in what the patient is saying and feeling. Observations about the appearance, demeanor, or behavior of patients can help draw attention to areas that might pose a problem for them.

- **Option A:** Giving one’s own opinion, evaluating, moralizing, or implying one’s values by using words such as “nice”, “bad”, “right”, “wrong”, “should” and “ought” is not appropriate. Advanced levels of emotional support include sitting with patients and “providing opportunities for them to feel accompanied in their struggles,” directly answering questions, making the patient feel special, and making supportive gestures such as, when appropriate, holding the patient’s hand.
- **Option C:** Giving the patient false reassurance is inappropriate. False reassurance is something a nurse might give to a patient in an effort to comfort or encourage them, but in reality, is not based on fact either.
- **Option D:** Probing is inappropriate in this situation. Nontherapeutic communication also includes probing, or the continuous questioning of the client about something, that may, in turn, discourage proper communication between the nurse and patient.

43. The nurse instructs a primipara about safety considerations for the neonate. The nurse determines that the client does not understand the instructions when she says:

- A. “All neonates should be in an approved car seat when in an automobile.”
- B. “It’s acceptable to prop the infant’s bottle once in a while.”
- C. “Pillows should not be used in the infant’s crib.”
- D. “Infants should never be left unattended on an unguarded surface.”

Correct Answer: B. “It’s acceptable to prop the infant’s bottle once in a while.”

- **Option B:** It is not advisable to prop or leave the bottle in the baby's mouth. This can increase the baby's risk of choking, ear infections, and tooth decay. There is also the very real risk that babies simply end up consuming too much milk if it keeps flowing.

44. Anna is 45 y.o. and has a bleeding ulcer. Despite multiple blood transfusions, her HGB is 7.5g/dl and HCT is 27%. Her doctor determines that surgical intervention is necessary and she undergoes partial gastrectomy. Postoperative nursing care includes:

- A. Giving pain medication Q6H.
- B. Flushing the NG tube with sterile water.
- C. Positioning her in high Fowler's position.
- D. Keeping her NPO until the return of peristalsis.

Correct Answer: D. Keeping her NPO until the return of peristalsis.

After surgery, she remains NPO until peristaltic activity returns. This decreases the risk for abdominal distention and obstruction. Caution the patient to limit the intake of ice chips. Excessive intake of ice produces nausea and can wash out electrolytes via the NG tube.

- **Option A:** Monitor tolerance to fluid and food intake, noting abdominal distension, reports of increased pain, cramping, nausea, and vomiting. Complications of paralytic ileus, obstruction, delayed gastric emptying, and gastric dilation may occur, possibly requiring reinsertion of the NG tube.
- **Option B:** Maintain patency of NG tube. Notify the physician if the tube becomes dislodged. Provides rest for GI tract during the acute postoperative phase until the return of normal function. The physician or surgeon may need to reposition the tube endoscopically to prevent injury to the operative area.
- **Option C:** Auscultate for resumption of bowel sounds and note passage of flatus. Peristalsis can be expected to return about the third postoperative day, signaling readiness to resume oral intake.

45. All of the following are important in the immediate care of the premature neonate. Which nursing activity should have the highest priority?

- A. Neurological assessment to determine gestational age.
- B. Placement in a warm environment.
- C. Identification by bracelet and footprints.
- D. Instillation of antibiotics in the eyes.

Correct Answer: B. Placement in a warm environment.

Babies can't adjust to temperature changes as well as adults. Babies can lose heat rapidly, nearly 4 times faster than an adult. Premature and low-birthweight babies don't have much body fat. Their bodies may not be ready to control their own temperature, even in a warm environment. Even full-term and healthy newborns may not be able to keep their body warm if the environment is too cold. Wet skin can cause the baby to lose heat quickly by evaporation. He or she can quickly lose 2° to 3°F. It is important to warm and dry the baby right away using warm blankets and skin-to-skin contact. Another source of warmth such as a heat lamp or over-bed warmer may also be used.

- **Option A:** Health assessments of the new baby start right away. One of the first checks is the Apgar test. The Apgar test is a scoring system to evaluate the condition of the newborn at 1 minute and 5 minutes after birth. The healthcare provider or midwife and nurses will evaluate these signs and give a point value. A score of 7 to 10 is considered normal. A score of 4 to 6 may mean that the baby needs some rescue breathing measures (oxygen) and careful monitoring. A score of 3 or below means that the baby needs rescue breathing and lifesaving techniques.
- **Option C:** Footprints are often taken and recorded in the medical record. Before a baby leaves the delivery area, ID bracelets with matching numbers are placed on the baby and on you. Babies often have 2, on the wrist and ankle. These should be checked each time the baby comes or goes from your room.
- **Option D:** The baby's eyes start to grow around 16 weeks. The most rapid growth happens in the last 12 weeks of pregnancy. Experts think premature birth interrupts this later growth, leading to ROP. Other risk factors include anemia, breathing problems, blood transfusions, and poor health. ROP causes blood vessels in the eye to grow abnormally and spread through the retina. These new blood vessels are fragile, and they leak blood into the eye. Scar tissue can form and pull the retina away from the back of the eye, causing vision loss.

46. A client is subjected to undergo a chest x-ray to confirm the endotracheal tube placement. The tube should be how many centimeters above the carina?

- A. 2-4 cm.
- B. 1.5-3 cm.
- C. 1-2 cm.
- D. 0.5-1 cm.

Correct Answer: C. 1-2 cm.

Placement of an endotracheal tube is confirmed by a chest x-ray and the correct placement is 1 to 2 cm above the carina. Check patient's chest x-ray for tube placement and presence of CO₂ per ET CO₂ detector after any new intubation; auscultate chest for equal breath sounds bilaterally, and adjust E.T. tube for proper placement.

- **Option A:** Check tube placement with each ventilator assessment. The optimal placement for the endotracheal tube is 2-3cm above the carina in adults. If repositioning of the endotracheal tube is warranted, suction the tube and then suction the oropharynx.
- **Option B:** Positioning the ET tip 4 cm above carina as recommended will result in placement of tube cuff inside cricoid ring with currently available tubes. Optimal depth of ET placement can be estimated by the formula "(Height in cm/7)-2.5."
- **Option D:** It is suggested that the tip of ET should be at least 4 cm from the carina, or the proximal part of the cuff should be 1.5 to 2.5 cm from the vocal cords. Considering that the length of trachea, as well as the distance from teeth to vocal cords, is variable, securing ET at a fixed length will result in endobronchial intubation or endolaryngeal placement of the ET cuff in some patients.

47. Lab tests revealed that patient Z's [Na⁺] is 170 mEq/L. Which clinical manifestation would nurse Natty expect to assess?

- A. Tented skin turgor and thirst

- B. Muscle twitching and tetany
- C. Fruity breath and Kussmaul's respirations
- D. Muscle weakness and paresthesia

Correct Answer: A. Tented skin turgor and thirst

Hypernatremia refers to elevated serum sodium levels, usually above 145 mEq/L. Typically, the client exhibits tented skin turgor and thirst in conjunction with dry, sticky mucous membranes, lethargy, and restlessness. Most patients present with symptoms suggestive of fluid loss and clinical signs of dehydration. Symptoms and signs of hypernatremia are secondary to central nervous system dysfunction and are seen when serum sodium rises rapidly or is greater than 160 meq/L.

- **Option B:** Muscle twitching and tetany may be seen with hypercalcemia or hyperphosphatemia. CNS features include delirium, coma, seizures, neuromuscular hyperexcitability, (Chvostek's sign and Trousseau's phenomenon), hyperreflexia, muscle cramping (e.g., carpopedal spasm), or tetany.
- **Option C:** Fruity breath and Kussmaul's respirations are associated with diabetic ketoacidosis. Kussmaul breathing, which is labored, deep, and tachypneic, may occur. Some providers may appreciate a fruity scent to the patient's breath, indicative of the presence of acetone. Patients may have signs of dehydration, including poor capillary refill, skin turgor, and dry mucous membranes.
- **Option D:** Muscle weakness and paresthesia are associated with hypokalemia. Significant muscle weakness occurs at serum potassium levels below 2.5 mmol/L but can occur at higher levels if the onset is acute. Similar to the weakness associated with hyperkalemia, the pattern is ascending in nature affecting the lower extremities, progressing to involve the trunk and upper extremities, and potentially advancing to paralysis.

48. To prevent postoperative complications, Nurse Kim assists the client with coughing and deep breathing exercises. This is best accomplished by implementing which of the following?

- A. Coughing exercises one hour before meals and deep breathing one hour after meals.
- B. Forceful coughing as many times as tolerated.
- C. Huff coughing every two hours or as needed.
- D. Diaphragmatic and pursed lip breathing 5 to 10 times, four times a day.

Correct Answer: C. Huff coughing every two hours or as needed.

Huff coughing helps keep the airways open and secretions mobilized. Huff coughing is an alternative for clients who are unable to perform a normal forceful cough (such as postoperatively) deep breathing and coughing should be performed at the same time.

- **Option A:** Only at mealtimes is not sufficient. Deep breathing and coughing exercises can decrease the risk of lung complications following surgery. Not only can they prevent pneumonia, deep breathing helps to get more oxygen to the body's cells. These exercises can also be beneficial to individuals who are susceptible to pulmonary or respiratory problems. Coughing and deep breathing work to clear mucus and allow moist air to enter the airways.
- **Option B:** Extended forceful coughing fatigues the client, especially postoperatively. If you are lying in bed and need to cough, it may be more comfortable to bend your knees up. Lean forward when you cough, if you are sitting in a chair. Place a pillow over your surgical incision and apply pressure to the area while coughing. This can help to alleviate any discomfort you feel. It's more

comfortable to sit upright if you can when doing coughing exercises.

- **Option D:** Diaphragmatic and pursed-lip breathing are techniques used for clients with obstructive airway disease. You can perform breathing exercises by relaxing your shoulders and upper chest. Take a deep breath in through your nose. Hold the breath for three seconds. Breathe out slowly through your mouth. Repeat three times. Taking too many breaths can make you dizzy or light-headed. Perform breathing exercises every hour.

49. A female client who's at high risk for suicide needs close supervision. To best ensure the client's safety, Nurse Mary should:

- A. Check the client frequently at irregular intervals throughout the night.
- B. Assure the client that the nurse will hold in confidence anything the client says.
- C. Repeatedly discuss previous suicide attempts with the client.
- D. Disregard decreased communication by the client because this is common with suicidal clients.

Correct Answer: A. Check the client frequently at irregular intervals throughout the night

Checking the client frequently but at irregular intervals prevents the client from predicting when observation will take place and altering behavior in a misleading way at these times. Once the patient is deemed to be at risk for suicide, then intervention steps must be initiated right away. The individual must not be left alone. Enlist the help of a support person while at home. The suicidal individual must be treated in a safe and secure place. In addition, the place has to be monitored.

- **Option B:** This may encourage the client to try to manipulate the nurse or seek attention for having a secret suicide plan. Assessing the individual's judgment is critical. One should try and determine how the individual can handle stress. Does he or she have an impairment in decision making? Does the individual know that jumping in front of a train is dangerous? Reflect empathy and concern. Offer a hand to help. Provide the patient with confidence that he or she can overcome the issues.
- **Option C:** This may reinforce suicidal ideas. Help develop internal coping strategies (e.g., exercise, journaling, reading, developing a hobby). Utilize the help of healthcare professionals to follow up on therapy. Once the individual is safe as an inpatient or outpatient, a formal treatment plan should be established. The next step is to refer all patients deemed to be at higher risk for suicide to a mental health counselor as soon as possible. Every state has laws and procedures regarding this process which must be incorporated into the clinical practice when addressing individuals at high suicide risk.
- **Option D:** Decreased communication is a sign of withdrawal that may indicate the client has decided to commit suicide; the nurse shouldn't disregard it. In some cases, assessment of the mental status may provide a clue to the individual's potential for self-harm. Depressed patients will often tend to appear unclean and unkempt. The clothing may not be ironed or dirty. The risk of suicide is often high in people who appear very anxious or depressed. The patient may exhibit a flat affect or no emotions at all. Some depressed patients may develop hallucinations that may be telling him or her to kill themselves. The majority of these hallucinations are auditory.

50. A client has a mid pelvic contracture from a previous pelvic injury due to a motor vehicle accident as a teenager. The nurse is aware that this could prevent a fetus from passing through or around which structure during childbirth?

- A. Symphysis pubis
- B. Sacral promontory
- C. Ischial spines
- D. Pubic arch

Correct Answer: C. Ischial spines

The ischial spines are located in the mid-pelvic region and could be narrowed due to the previous pelvic injury.

- **Option A:** The pubic symphysis is a secondary cartilaginous joint (a joint made of hyaline cartilage and fibrocartilage) located between the left and right pubic bones near the midline of the body. More specifically, it is located above any external genitalia and in front of the bladder.
- **Option B:** Superiorly, there is an anterior projection of bone, known as the sacral promontory. It forms the posterior margin of the pelvic inlet and as a result, it is serially continuous with the margin of the ala of the sacrum, arcuate line of the ilium, and the pecten pubis and pubic crest of the pubic bone.
- **Option D:** The pubic arch, also referred to as the ischiopubic arch, is part of the pelvis. It is formed by the convergence of the inferior rami of the ischium and pubis on either side, below the pubic symphysis. The angle at which they converge is known as the subpubic angle.

51. The parents of a young man with schizophrenia express feelings of responsibility and guilt for their son's problems. How can the nurse best educate the family?

- A. Acknowledge the parent's responsibility.
- B. Explain the biological nature of schizophrenia.
- C. Refer the family to a support group.
- D. Teach the parents various ways they must change.

Correct Answer: B. Explain the biological nature of schizophrenia.

The parents are feeling responsible and this inappropriate self-blame can be limited by supplying them with the facts about the biological basis of schizophrenia. Schizophrenia is a psychiatric disorder, which is characterized by slow functional deterioration and episodes of relapse or acute exacerbation of psychotic symptoms. The mean age of onset in early adulthood, deterioration in patients' activities of daily living and ability to sustain employment, and the propensity of the disorder to affect insight leave many patients requiring assistance and care for an extended period of time.

- **Option A:** Acknowledging the patient's responsibility is neither accurate nor helpful to the parents and would only reinforce their feelings of guilt. Caregivers of patients with childhood-onset chronic psychiatric disorders such as autism spectrum disorders, who are usually the parents, realize at an early stage that there will be a responsibility for them to care for their child for the rest of their lives in most cases. They, therefore, tend to adapt accordingly as the child grows up and experience a comparatively slow change to their lives and expectations regarding their ill child.
- **Option C:** Support groups are useful; however, the nurse needs to handle the parents' self-blame directly instead of making a referral for this problem. Patients with schizophrenia can often have a normal childhood and adolescence before suddenly, unexpectedly, and often dramatically becoming ill. Because of the age of onset, care responsibilities are suddenly thrust upon mostly

parents, even before they have come to terms with the shock of the sudden, dramatic onset of the illness. It often comes at a time when they would expect their child to gain independence and when they themselves are at an age when retirement could have been considered. The lowering of expectation for the future of their child, along with the new, long-term care responsibilities, tends to weigh heavily on these parents, requiring a dramatic adjustment to their lives and subjecting them to unique symptoms and behaviors, which become increasingly difficult to manage, especially for people of their age.

- **Option D:** Teaching the parents various ways to change would reinforce the parental assumption of blame; although parents can learn about schizophrenia and what is helpful and not helpful, the approach suggested in this option implies the parents' behavior is at fault. Caring for family members with schizophrenia subjects caregivers to mostly negative experiences, which in turn negatively impact the caregivers themselves. These negative aspects experienced by patients' relatives as a consequence of their caregiving role are collectively known as 'burden'. Attempts have been made in the literature to better define 'burden' as the existence of serious psychosocial and emotional problems, difficulties or negative events, stressful situations or significant life changes that influence the family member of an ill relative.

52. Which of the following conditions most commonly causes acute glomerulonephritis?

- A. A congenital condition leading to renal dysfunction.
- B. Prior infection with group A Streptococcus within the past 10-14 days.
- C. Viral infection of the glomeruli.
- D. Nephrotic syndrome.

Correct Answer: B. Prior infection with group A Streptococcus within the past 10-14 days.

Acute glomerulonephritis is most commonly caused by the immune response to a prior upper respiratory infection with group A Streptococcus. PSGN most commonly presents in children 1 to 2 weeks after a streptococcal throat infection, or within 6 weeks following a streptococcal skin infection. Group A Streptococcus (GAS) has been subtyped depending on the surface M protein and opacity factor, which are known to be nephrogenic and can cause PSGN.

- **Option A:** Glomerulonephritis is not a congenital condition. Nephrogenic streptococci infection precedes PSGN, which initially affects skin or oropharynx. More recently, PSGN is associated with skin infections (impetigo) more frequently than throat infections (pharyngitis).
- **Option C:** Glomerular lesions in acute GN are the result of glomerular deposition or in situ formation of immune complexes. Poor hygiene, overcrowding, and low socioeconomic status are important risk factors for streptococci outbreaks, and this explains the higher incidence of PSGN in impoverished countries. Genetic factors are expected to predispose to the condition since almost 40% of patients with PSGN gave a positive family history. There is no specific gene found to cause PSGN.
- **Option D:** Nephrotic syndrome is the combination of nephrotic-range proteinuria with a low serum albumin level and edema. It is caused by increased permeability through the damaged basement membrane in the renal glomerulus, especially infectious or thrombo-embolic. It is the result of an abnormality of glomerular permeability that may be primary with a disease-specific to the kidneys or secondary to congenital infections, diabetes, systemic lupus erythematosus, neoplasia, or certain drug use.

53. Which of the following factors can cause blood pressure to drop to normal levels?

- A. Kidneys' excretion of sodium only.
- B. Kidneys' retention of sodium and water.
- C. Kidneys' excretion of sodium and water.
- D. Kidneys' retention of sodium and excretion of water

Correct Answer: C. Kidneys' excretion of sodium and water

The kidneys respond to a rise in blood pressure by excreting sodium and excess water. This response ultimately affects systolic pressure by regulating blood volume. The renin-angiotensin-aldosterone system is an essential regulator of arterial blood pressure. The system relies on several hormones that act to increase blood volume and peripheral resistance.

- **Option A:** In response to acute changes in blood pressure, the body responds through the baroreceptors located within blood vessels. Baroreceptors are a form of mechanoreceptor that become activated by the stretching of the vessel. This sensory information is conveyed to the central nervous system and used to influence peripheral vascular resistance and cardiac output.
- **Option B:** The antidiuretic hormone produced in the hypothalamus makes its way down the pituitary stalk to the posterior pituitary where it is kept in reserve for release in response to the above-listed triggers. ADH mainly functions to increase free water reabsorption in the collecting duct of the nephrons within the kidney, causing an increase in plasma volume and arterial pressure.
- **Option D:** Angiotensin II has many functions to increase arterial pressure, including increased sodium reabsorption within the kidney tubules. The increased sodium reabsorption from the kidney tubules results in passive reabsorption of water through osmosis; this causes an increase in blood volume and arterial pressure.

54. A male client is being admitted to the substance abuse unit for alcohol detoxification. As part of the intake interview, the nurse asks him when he had his last alcoholic drink. He says that he had his last drink six (6) hours before admission. Based on this response, nurse Lorena should expect early withdrawal symptoms to:

- A. Begin after seven (7) days.
- B. Not occur at all because the time period for their occurrence has passed.
- C. Begin anytime within the next one (1) to two (2) days.
- D. Begin within two (2) to seven (7) days.

Correct Answer: C. Begin anytime within the next one (1) to two (2) days

Acute withdrawal symptoms from alcohol may begin 6 hours after the client has stopped drinking and peak 1 to 2 days later. Delirium tremens may occur 2 to 4 days — even up to 7 days — after the last drink. Moderate symptoms include alcohol withdrawal seizures (rum fits) that can occur 12 to 24 hours after cessation of alcohol and are typically generalized in nature. There is a 3% incidence of status epilepticus in these patients. About 50% of patients who have had a withdrawal seizure will progress to delirium tremens.

- **Option A:** Mild signs/symptoms can arise within six hours of alcohol cessation. If symptoms do not progress to more severe symptoms within 24 to 48 hours, the patient will likely recover. However, the time to presentation and range of symptoms can vary greatly depending on the patient, their duration of alcohol dependence, and volume typically ingested.
- **Option B:** Most cases should be described by their severity of symptoms, not the time since their last drink. Noting the time of their last drink is essential in any patient with an alcohol dependence history who may be presenting with other complaints. Mild symptoms can be insomnia, tremulousness, hyperreflexia, anxiety, gastrointestinal upset, headache, palpitations.
- **Option D:** Delirium tremens is the most severe form of alcohol withdrawal, and its hallmark is that of an altered sensorium with significant autonomic dysfunction and vital sign abnormalities. It includes visual hallucinations, tachycardia, hypertension, hyperthermia, agitation, and diaphoresis. Symptoms of delirium tremens can last up to seven days after alcohol cessation and may last even longer.

55. As a well-rounded health care provider, you know that corticosteroid therapy is indicated in all of the following conditions except:

- A. Osteoarthritis
- B. Rheumatoid arthritis
- C. Systemic lupus erythematosus
- D. Acute spinal cord injury

Correct Answer: A. Osteoarthritis

Osteoarthritis is not an indication for corticosteroid therapy. It has an inflammatory component, but the disease is not severe enough to suppress the immune system. Lupus, spinal injury, and rheumatoid arthritis are conditions that require suppression of the immune system in order for the client to survive.

- **Option B:** The desired immune-suppressing and anti-inflammatory effects of corticosteroids can also predispose patients to infection. A meta-analysis of 2000 patients found that the infection rate is significantly higher in patients using systemic corticosteroids when the daily dose was 10 mg/day. The immunosuppressive effect is impacted not just by the dosage but also by the patient's age, underlying disorders, and any concomitant use of biologic or non-biologic disease-modifying anti-rheumatic drugs. In particular, patients on corticosteroids are susceptible to invasive fungal and viral infections.
- **Option C:** The genomic mechanism of action is the classically understood mechanism mediated through the glucocorticoid receptor, which leads to most of the anti-inflammatory and immunosuppressive effects. The glucocorticoid receptor is located intracellularly within the cytoplasm and upon binding trans-locates rapidly into the nucleus where it affects gene transcription and causes inhibition of gene expression and translation for inflammatory leukocytes and structural cells such as epithelium. This action leads to a reduction in proinflammatory cytokines, chemokines, and cell adhesion molecules, as well as other enzymes involved in the inflammatory response.
- **Option D:** The non-genomic mechanism occurs more rapidly and is mediated through interactions between the intracellular glucocorticoid receptor or a membrane-bound glucocorticoid receptor. Within seconds to minutes of receptor activation, a cascade of effects is set off, including inhibition of phospholipase A2, which is critical for the production of inflammatory cytokines, impaired release of arachidonic acid, and regulation of apoptosis in thymocytes. Corticosteroids at high concentrations will also inhibit the production of B cells and T cells.

56. It is considered as the bluntly rounded portion of the heart.

- A. Base
- B. Pericardium
- C. Aorta
- D. Apex

Correct Answer: D. Apex

The blunt, rounded point of the heart is the apex. The apex (the most inferior, anterior, and lateral part as the heart lies in situ) is located on the midclavicular line, in the fifth intercostal space. It is formed by the left ventricle. The general structure of the heart is quite uniform in healthy individuals. However, some variations do occur.

- **Option A:** The larger, flat portion at the opposite is the base. The base of the heart, the posterior part, is formed by both atria, but mainly the left. The heart is arranged more horizontally in the chest in short and obese individuals, while it is more vertical in tall and thin people. An athlete's heart may be physically larger.
- **Option B:** The pericardium is also called the pericardial sac. It has a fibrous outer layer and a thin inner layer that surrounds the heart. The pericardium is a fibrous sac that encloses the heart and great vessels. It keeps the heart in a stable location in the mediastinum, facilitates its movements, and separates it from the lungs and other mediastinal structures. It also supports physiological cardiac function.
- **Option C:** The aorta is the largest artery that carries blood from the left ventricle to the body. The aorta is the largest vessel within the human body. It originates from the left ventricle of the heart anterior to the pulmonary artery before arching posteriorly and descending along the posterior mediastinum.

57. When discharging a client from the ER after An interval when the client's speech is garbled. head trauma, the nurse teaches the guardian to observe for a lucid interval. Which of the following statements best describes a lucid interval?

- A. An interval when the client's speech is garbled.
- B. An interval when the client is alert but can't recall recent events.
- C. An interval when the client is oriented but then becomes somnolent.
- D. An interval when the client has a "warning" symptom, such as an odor or visual disturbance.

Correct Answer: C. An interval when the client is oriented but then becomes somnolent.

A lucid interval is described as a brief period of unconsciousness followed by alertness; after several hours, the client again loses consciousness. The lucid interval following head trauma and unconsciousness is described classically in epidural hematomas. The historic emphasis placed on the lucid interval in cases of extradural hematoma has made this one of the best-remembered signs of the syndrome. Initial unconsciousness is thought to be due to the concussive effect of the blow to the head. The lucid period is the time required for the clot to grow to proportions great enough to produce compression of the brain.

- **Option A:** Garbled speech is known as dysarthria. Dysarthria is a motor speech disorder in which the muscles that are used to produce speech are damaged, paralyzed, or weakened. The person with dysarthria cannot control their tongue or voice box and may slur words.
- **Option B:** An interval in which the client is alert but can't recall recent events is known as amnesia. Amnesia is a dramatic form of memory loss. If you have amnesia you may be unable to recall past information (retrograde amnesia) and/or hold onto new information (anterograde amnesia).
- **Option D:** Warning symptoms or auras typically occur before seizures. Focal aware seizures (FAS) are sometimes called 'warnings' or 'auras' because, for some people, a FAS develops into another type of seizure. The FAS is therefore sometimes a warning that another seizure will happen (see focal to bilateral tonic-clonic seizures).

58. The nurse is monitoring a female client with a diagnosis of peptic ulcer. Which assessment findings would most likely indicate perforation of the ulcer?

- A. Bradycardia
- B. Numbness in the legs
- C. Nausea and vomiting
- D. A rigid, board-like abdomen

Correct Answer: D. A rigid, board-like abdomen

Perforation of an ulcer is a surgical emergency and is characterized by sudden, sharp, intolerable severe pain beginning in the mid epigastric area and spreading over the abdomen, which becomes rigid and board-like. Perforated peptic ulcer (PPU) is a serious complication of PUD and patients with PPU often present with an acute abdomen that carries a high risk for morbidity and mortality. The lifetime prevalence of perforation in patients with PUD is about 5%. PPU carries mortality ranging from 1.3% to 20%.

- **Option A:** Tachycardia may occur as hypovolemic shock develops. The classic triad of sudden onset of abdominal pain, tachycardia, and abdominal rigidity is the hallmark of perforated peptic ulcers. Early diagnosis, prompt resuscitation, and urgent surgical intervention are essential to improve outcomes.
- **Option B:** Numbness in the legs is not an associated finding. Symptoms of PUD include abdominal pain, upper abdominal discomfort, bloatedness, and feeling of fullness. When PUD worsens and eventually perforates, gastric juice and gas enter the peritoneal cavity leading to chemical peritonitis.
- **Option C:** Nausea and vomiting may occur. Sudden onset of abdominal pain or acute deterioration of the ongoing abdominal pain is typical of PPU. Typically the pain never completely subsides despite usual premedical remedies and forces the patient to seek medical attention.

59. When teaching the family of a client with schizophrenia, the nurse should provide which information?

- A. Relapse can be prevented if the client takes the medication.
- B. Support is available to help family members meet their own needs.
- C. Improvement should occur if the client has a stimulating environment.

D. Stressful family situations can precipitate a relapse in the client.

Correct Answer: B. Support is available to help family members meet their own needs.

Because family members of a client with schizophrenia face difficult situations and great stress, the nurse should inform them of support services that can help them cope with such problems. Provide information on client and family community resources for the client and family after discharge: day hospitals, support groups, organizations, psychoeducational programs, community respite centers (small homes), etc. Schizophrenia is an overwhelming disease for both the client and the family. Groups, support groups, and psychoeducational centers can help

- **Option A:** Assess the family members' current level of knowledge about the disease and medications used to treat the disease. Family might have misconceptions and misinformation about schizophrenia and treatment, or no knowledge at all. Teach the client's and family's level of understanding and readiness to learn. Teach the client and family the warning symptoms of relapse. Rapid recognition of early warning symptoms can help ward off potential relapse when immediate medical attention is sought.
- **Option C:** The nurse should also teach them that environmental stimuli may precipitate symptoms. Inform the client family in clear, simple terms about psychopharmacologic therapy: dose, duration, indication, side effects, and toxic effects. Written information should be given to the client and family members as well. Understanding of the disease and the treatment of the disease encourages greater family support and client adherence.
- **Option D:** Although stress can trigger symptoms, the nurse shouldn't make the family feel responsible for relapses. Identify the family's ability to cope (e.g. experience of loss, caregiver burden, needed supports). Family's needs must be addressed to stabilize the family unit. Provide information on disease and treatment strategies at the family's level of understanding. Meet family members' needs for information.

60. A cyanotic client with an unknown diagnosis is admitted to the E.R. In relation to oxygen, the first nursing action would be to:

- A. Wait until the client's lab work is done.
- B. Not administer oxygen unless ordered by the physician.
- C. Administer oxygen at 2 L flow per minute.
- D. Administer oxygen at 10 L flow per minute and check the client's nail beds.

Correct Answer: C. Administer oxygen at 2 L flow per minute.

Administer oxygen at 2 L/minute and no more, for if the client is emphysemic and receives too high a level of oxygen, he will develop CO₂ narcosis and the respiratory system will cease to function. With prolonged oxygen therapy there is an increase in blood oxygen level, which suppresses peripheral chemoreceptors; depresses ventilator drive and increase in PCO₂. high blood oxygen level may also disrupt the ventilation: perfusion balance (V/Q) and cause an increase in dead space to tidal volume ratio and increase in PCO₂.

- **Option A:** This is the 'gold standard' monitor of ventilation. Arterial blood gases are needed to obtain accurate data, in particular, evidence of hypoventilation (raised PaCO₂) as a reason for hypoxemia. Arterial blood gases may also give an indication of the metabolic effects of clinically important hypoxemia.
- **Option B:** Although history taking and clinical examination may clarify the diagnosis, oxygen at 40%–60% should be continued until blood gas results are available unless the patient is drowsy or

is known to have had previous episodes of Hypercapnic respiratory failure.

- **Option D:** Low intravascular volume either due to acute blood loss as in trauma can result in poor oxygen transport and tissue hypoxia. So, these patients should be given high concentration oxygen to maintain oxygen saturation above 90% until arrival at an emergency department. This can be achieved in most cases by the use of approximately 40%–60% oxygen via a medium concentration mask at a flow rate of 4–10 l/ min.

61. 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.

62. A nurse instructs a female client to use the pursed-lip method of breathing and the client asks the nurse about the purpose of this type of breathing. The nurse responds, knowing that the primary purpose of pursed-lip breathing is to:

- A. Promote oxygen intake.
- B. Strengthen the diaphragm.
- C. Strengthen the intercostal muscles.
- D. Promote carbon dioxide elimination.

Correct Answer: D. Promote carbon dioxide elimination.

Pursed-lip breathing facilitates maximal expiration for clients with obstructive lung disease. This type of breathing allows better expiration by increasing airway pressure that keeps air passages open during exhalation. Pursed-lip breathing is a technique that allows people to control their oxygenation and ventilation. The technique requires a person to inspire through the nose and exhale through the mouth at a slow controlled flow.

- **Option A:** Deep breathing prevents air from getting trapped in the lungs, which can cause the client to feel short of breath. As a result, he can breathe in more fresh air. It's best to do this exercise with other daily breathing exercises that can be performed for 10 minutes at a time, 3 to 4 times per day.
- **Option B:** Diaphragmatic breathing, or "belly breathing," engages the diaphragm, which is supposed to do most of the heavy lifting when it comes to breathing. This technique is particularly helpful in people with COPD, as the diaphragm isn't as effective in these individuals and could be strengthened. The technique best used when feeling rested.
- **Option C:** Breathing exercises which slowly fill the lungs with air to expand the chest and work the intercostal muscles. To do this exercise, it is typically recommended to sit or stand with the back straight, then take a full breath from the bottom of the lungs. It can help to think of breathing from the diaphragm, by slowly expanding the abdominal muscles while inhaling, then pushing air from the lungs using these same muscles.

63. Ms. Valencia is responsible for the number of personnel reporting to her. This principle refers to:

- A. Span of control
- B. Unity of command
- C. Carrot and stick principle
- D. Esprit d' corps

Correct Answer: A. Span of control

The span of control refers to the number of workers who report directly to a manager. The span of control determines the level of interactions and responsibilities associated with employees and managers. The process is used to determine the management style and it also defines roles within the organization.

- **Option B:** Unity of command means an employee should have only one boss and follow his command. If an employee has to follow more than one boss, there begins a conflict of interest and can create confusion.
- **Option C:** The carrot and stick approach of motivation is a traditional motivation theory that asserts, in motivating people to elicit desired behaviors, sometimes the rewards are given in the form of money, promotion, and any other financial or non-financial benefits, and sometimes the punishments are exerted to push an individual towards the desired behavior.
- **Option D:** According to the principle of esprit d' corps, it is the responsibility of the management to motivate their employees and be supportive of each other regularly. Developing trust and mutual understanding will lead to a positive outcome and work environment.

64. Which of the following individuals is least likely to be at risk of developing psoriasis?

- A. A 32 year-old-African American.
- B. A woman experiencing menopause.
- C. A client with a family history of the disorder
- D. An individual who has experienced a significant amount of emotional distress.

Correct Answer: A. A 32 year-old-African American.

Psoriasis occurs equally among women and men, although the incidence is lower in darker-skinned races and ethnic groups. Psoriasis has a prevalence ranging from 0.2% to 4.8%. The exact etiology is unknown, but it is considered to be an autoimmune disease mediated by T lymphocytes. There is an association of HLA antigens seen in many psoriatic patients particularly in various racial and ethnic groups.

- **Option B:** Psoriasis can present at any age. A bimodal age of onset has been recognized. The mean age of onset for the first presentation of psoriasis can range from 15 to 20 years of age, with a second peak occurring at 55 to 60 years.
- **Option C:** A genetic predisposition has been recognized in some cases. Familial occurrence suggests its genetic predisposition. Psoriasis occurs worldwide, and its prevalence varies. In the United States, about 2% of the population is affected. High rates of psoriasis have been reported in the Faroe Islands. The prevalence of psoriasis is low in Japan and may be absent in Aboriginal Australians and Indians from South America.
- **Option D:** Emotional distress, trauma, systemic illness, seasonal changes, and hormonal changes are linked to exacerbations. Generally, summer improves psoriasis while winter aggravates it. Apart from the above factors, infections, psychological stress, alcohol, smoking, obesity, and hypocalcemia are other triggering factors for psoriasis.

65. Kate, who has undergone mitral valve replacement, suddenly experiences continuous bleeding from the surgical incision during the postoperative period. Which of the following pharmaceutical agents should Nurse Aiza prepare to administer to Kate?

- A. Protamine Sulfate
- B. Quinidine Sulfate
- C. Vitamin C
- D. Coumadin

Correct Answer: A. Protamine Sulfate

Protamine Sulfate is used to prevent continuous bleeding in a client who has undergone open heart surgery. 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 B:** Quinidine sulfate is used to treat or prevent many types of irregular heartbeats such as atrial fibrillation. Quinidine can greatly improve the ability to perform normal activities by decreasing the number of irregular heartbeats. However, it may not stop all irregular heartbeats completely. It works by blocking abnormal heartbeat signals.
- **Option C:** Vitamin C, or ascorbic acid, has several important functions: helping to protect cells and keeping them healthy, maintaining healthy skin, blood vessels, bones, and cartilage, and helping with wound healing.
- **Option D:** Coumadin is used to treat blood clots and/or prevent new clots from forming in the body. Preventing harmful blood clots helps to reduce the risk of a stroke or heart attack. Conditions that increase the risk of developing blood clots include a certain type of irregular heart rhythm (atrial

fibrillation), heart valve replacement, recent heart attack, and certain surgeries (such as hip/knee replacement).

66. The glycosylated hemoglobin of a 40-year-old client with diabetes mellitus is 2.5%. The nurse understands that:

- A. The client has good control of her diabetes
- B. The client has poor control of her diabetes
- C. The client can have a higher-calorie diet
- D. The client requires adjustment in her insulin dose

Correct Answer: A. The client has good control of her diabetes

- Option A: Glycosylated hemoglobin test or hemoglobin A1c measures the average blood glucose over the past 3 months. The normal range for people with diabetes with poor glucose control is less than 7% hence, a result of 2.5% means that the client's diabetes is well under control.
- Option B: The desired range for glycosylated hemoglobin in an adult client with poor glucose control is less than 7%
- Option C: A high caloric diet will lead to elevated glycosylated hemoglobin.
- Option D: The diet and insulin dose is appropriate for the client.

67. For a client with Graves' disease, which nursing intervention promotes comfort?

- A. Restricting intake of oral fluids.
- B. Placing extra blankets on the client's bed.
- C. Limiting intake of high-carbohydrate foods.
- D. Maintaining room temperature in the low-normal range.

Correct Answer: D. Maintaining room temperature in the low-normal range.

Graves' disease causes signs and symptoms of hypermetabolism, such as heat intolerance, diaphoresis, excessive thirst and appetite, and weight loss. To reduce heat intolerance and diaphoresis, the nurse should keep the client's room temperature in the low-normal range.

- **Option A:** To replace fluids lost via diaphoresis, the nurse should encourage, not restrict, intake of oral fluids.
- **Option B:** Placing extra blankets on the bed of a client with heat intolerance would cause discomfort.
- **Option C:** To provide needed energy and calories, the nurse should encourage the client to eat high-carbohydrate foods.

68. Nurse Mickey is caring for a client diagnosed with bulimia. The most appropriate initial goal for a client diagnosed with bulimia is to:

- A. Avoid shopping for large amounts of food.
- B. Control eating impulses.
- C. Identify anxiety-causing situations.
- D. Eat only three meals per day.

Correct Answer: C. Identify anxiety-causing situations

Bulimic behavior is generally a maladaptive coping response to stress and underlying issues. The client must identify anxiety-causing situations that stimulate the bulimic behavior and then learn new ways of coping with the anxiety. Be mindful of the patient's distorted thinking ability. This allows the caregiver to have more realistic expectations of the patient and provide appropriate information and support. Listen to or avoid challenging irrational, illogical thinking. Present reality concisely and briefly. It is difficult to respond logically when thinking ability is physiologically impaired. The patient needs to hear reality, but challenging the patient leads to distrust and frustration. Even though the patient may gain weight, she or he may continue to struggle with attitudes or behaviors typical of eating disorders, major depression, or alcohol dependence for a number of years.

- **Option A:** Make a selective menu available, and allow the patient to control choices as much as possible. Patient who gains confidence in herself and feels in control of the environment is more likely to eat preferred foods. Involve the patient in setting up or carrying out a program of behavior modification. Provide a reward for weight gain as individually determined; ignore the loss. Provides structured eating situations while allowing the patient some control in choices. Behavior modification may be effective in mild cases or for short-term weight gain.
- **Option B:** Supervise the patient during mealtimes and for a specified period after meals (usually one hour). This prevents vomiting during or after eating. Use a consistent approach. Sit with the patient while eating; present and remove food without persuasion and comment. Promote a pleasant environment and record intake. Patient detects urgency and may react to pressure. Any comment that might be seen as coercion provides focus on food. When staff responds in a consistent manner, the patient can begin to trust staff responses. The single area in which the patient has exercised power and control is food or eating, and he or she may experience guilt or rebellion if forced to eat. Structuring meals and decreasing discussions about food will decrease power struggles with the patient and avoid manipulative games.
- **Option D:** Provide smaller meals and supplemental snacks, as appropriate. Gastric dilation may occur if refeeding is too rapid following a period of starvation dieting. Note: The patient may feel bloated for 3–6 weeks while the body adjusts to food intake. Be alert to choices of low-calorie foods and beverages; hoarding food; disposing of food in various places, such as pockets or wastebaskets. The patient will try to avoid taking in what is viewed as excessive calories and may go to great lengths to avoid eating.

69. The process of endocrine regulation of electrolytes involves:

- A. Sodium reabsorption and chloride excretion
- B. Chloride reabsorption and sodium excretion
- C. Potassium reabsorption and sodium excretion
- D. Sodium reabsorption and potassium excretion

Correct Answer: D. Sodium reabsorption and potassium excretion

ACTH stimulates the release of aldosterone, which in turn acts on the tubules to reabsorb sodium. When this occurs, the cation potassium is excreted. Because “water follows salt,” this may also lead to water retention when ADH is present. Another action of aldosterone is to increase the secretion of potassium by the kidney resulting in its decrease in the blood and increase in the urine.

- **Option A:** Aldosterone is a hormone that regulates blood sodium levels. Aldosterone specifically increases sodium reabsorption in the distal convoluted tubule and collecting duct of the nephrons in the kidneys. The result of this mechanism is to conserve sodium.
- **Option B:** Aldosterone release from the adrenal cortex is triggered directly by an increase in potassium (primarily) or a decrease in sodium in the blood reaching the adrenal cortex. Aldosterone release is also stimulated by the activation of the renin-angiotensin system.
- **Option C:** In this mechanism, the juxtaglomerular cells of the kidneys release renin in response to a decrease in blood volume, a reduction in blood pressure, or stimulation by the sympathetic nervous system. Renin is an enzyme that converts a plasma protein called angiotensinogen to angiotensin I. Angiotensin I is in turn acted upon by angiotensin-converting enzyme (ACE) to form Angiotensin II.

70. Most litigation in the hospital comes from the:

- A. Nurse abandoning the clients when going to lunch.
- B. Nurse following an order that is incomplete or incorrect.
- C. Nurse documenting blame on the physician when a mistake is made.
- D. Supervisor watching a new employee check his or her skills level.

Correct Answer: B. Nurse following an order that is incomplete or incorrect

The nurse is responsible for clarifying all orders that are illegible, unreasonable, unsafe, or incorrect. The failure of the nurse to question the physician about an order creates an area of liability on the nurse’s part because this is perceived as a medical action and not the role of the nurse to write orders. Some RNs do have prescriptive privileges based upon advanced degrees and certification. Therefore the nurse who cannot correct the order must document that the physician was called and clarification or a new order was given to correct the unclear or illegible one that was currently on the chart. Contact of the staff’s chain of command should also be specifically stated for the proof of the responsibilities being followed according to hospital policy.

- **Option A:** North Dakota Board of Nursing defines “abandonment” as accepting the client assignment and disengaging the nurse and client relationship without giving notice to a qualified person. Behavior that demonstrates professional misconduct includes abandoning a client who is in need of or receiving nursing care and may be grounds for disciplinary action.
- **Option C:** Phone calls, follow-up, and lack of follow-up by the physician should also be documented if there is a problem with getting the information in a timely manner. The nurse must show the sequence of events of a situation in a clear manner if there is any conflict or question about any orders or procedures that were not appropriate. Assessments and documentation of the client’s status should also be included if there is a potential risk for harm present.
- **Option D:** The competence of new RN graduates, both at the point of joining the workforce on graduation and as they gain experience, is an important dimension of quality and safety. Thus each nursing school and prospective employer has a vested interest in ensuring that the initial skills and competency of the new graduate and the conditions for the transition and the ongoing development of the new graduate RN are optimized.

71. A client diagnosed with chronic cirrhosis who has ascites and pitting peripheral edema also has hepatic encephalopathy. Which of the following nursing interventions are appropriate to prevent skin breakdown? Select all that apply.

- A. Range of motion every 4 hours
- B. Turn and reposition every 2 hours
- C. Abdominal and foot massages every 2 hours
- D. Alternating air pressure mattress
- E. Sit in chair for 30 minutes each shift

Correct Answers: B & D

Edematous tissue must receive meticulous care to prevent tissue breakdown. An air pressure mattress, careful repositioning can prevent skin breakdown. Inspect pressure points and skin surfaces closely and routinely. Gently massage bony prominences or areas of continued stress. Use of emollient lotions and limiting use of soap for bathing may help.

- **Option A:** Range of motion exercises preserve joint function but do not prevent skin breakdown. Encourage and assist the patient with reposition on a regular schedule. Assist with active and passive ROM exercises as appropriate.
- **Option B:** Repositioning reduces pressure on edematous tissues to improve circulation. Exercises enhance circulation and improve and/or maintain joint mobility. Edematous tissues are more prone to breakdown and to the formation of decubitus. Ascites may stretch the skin to the point of tearing in severe cirrhosis.
- **Option C:** Abdominal or foot massage will not prevent skin breakdown but must be cleaned carefully to prevent breaks in skin integrity. Keep linens dry and free of wrinkles. Moisture aggravates pruritus and increases the risk of skin breakdown.
- **Option D:** Use an alternating pressure mattress, egg-crate mattress, waterbed, sheepskins, as indicated. Reduces dermal pressure, increases circulation, and diminishes the risk of tissue ischemia.
- **Option E:** The feet should be kept at the level of the heart or higher so Fowler's position should not be employed. Recommend elevating lower extremities. Enhances venous return and reduces edema formation in extremities.

72. A client who is recovering from surgery has been ordered a change from a clear liquid diet to a full liquid diet. The nurse would offer which full liquid item to the client?

- A. Popsicle
- B. Carbonated beverages
- C. Gelatin
- D. Custard

Correct Answer: D. Custard

Full liquid food items include items such as plain ice cream, sherbet, breakfast drinks, milk, pudding, and custard, soups that are strained, refined cooked cereals, and strained vegetable juices. A full liquid diet is made up only of fluids and foods that are normally liquid and foods that turn to liquid when they are at room temperature, like ice cream.

- **Option A:** A clear liquid diet is a specific dietary plan that only includes liquids that are fully transparent at room temperature. Some items that may be allowed include water, ice, fruit juices without pulp, sports drinks, carbonated drinks, gelatin, tea, coffee, clear broths, and clear ice pops.
- **Option B:** Carbonated beverages are part of a clear liquid diet. Items can have color as long as they are transparent. Items such as milk and orange juice are not considered clear liquids because they are not fully transparent and may take more effort for the digestive system to break down, whereas grape juice is allowed (it is pigmented, but fully transparent).
- **Option C:** Gelatin is a clear liquid diet. The clear liquid diet assists in maintaining hydration, provides electrolytes and calories, and offers some level of satiety when a full diet is not appropriate, but may struggle to provide adequate caloric needs if employed for more than five days.

73. You are preparing to admit a patient with a seizure disorder. Which of the following actions can you delegate to LPN/LVN?

- A. Complete admission assessment
- B. Set up oxygen and suction equipment
- C. Place a padded tongue blade at the bedside
- D. Pad the side rails before the patient arrives

Correct Answer: B. Set up oxygen and suction equipment

The LPN/LVN can set up the equipment for oxygen and suction.

- **Option A:** The RN should perform the complete initial assessment.
- **Option C:** Tongue blades should not be at the bedside and should never be inserted into the patient's mouth after a seizure begins.
- **Option D:** Padded side rails are controversial in terms of whether they actually provide safety and may embarrass the patient and family.

74. A nurse is assessing a client diagnosed with a dependent personality disorder. Which of the following characteristics is a major component of this disorder?

- A. Abrasive to others
- B. Indifferent to others
- C. Manipulative of others
- D. Over-reliance on others

Correct Answer: D. Over-reliance on others.

Clients with dependent personality disorder are extremely over-reliant on others; they aren't abrasive or assertive. They're clinging and demanding of others; they don't manipulate. Dependent personality disorder (DPD) is a type of anxious personality disorder. People with DPD often feel helpless, submissive or incapable of taking care of themselves. They may have trouble making simple decisions. But, with help, someone with a dependent personality can learn self-confidence and self-reliance.

- **Option A:** People with DPD have an overwhelming need to have others take care of them. Often, a person with DPD relies on people close to them for their emotional or physical needs. Others may describe them as needy or clingy.
- **Option B:** People with DPD may believe they can't take care of themselves. They may have trouble making everyday decisions, such as what to wear, without others' reassurance.
- **Option C:** In patients with dependent personality disorder, the need to be taken care of results in loss of their autonomy and interests. Because they are intensely anxious about taking care of themselves, they become excessively dependent and submissive.

75. Nurse Amy is providing care for a male client undergoing opiate withdrawal. Opiate withdrawal causes severe physical discomfort and can be life-threatening. To minimize these effects, opiate users are commonly detoxified with:

- A. Barbiturates
- B. Amphetamines
- C. Methadone
- D. Benzodiazepines

Correct Answer: C. Methadone

Methadone is used to detoxify opiate users because it binds with opioid receptors at many sites in the central nervous system but doesn't have the same deleterious effects as other opiates, such as cocaine, heroin, and morphine. Methadone and buprenorphine are FDA approved to treat opioid use disorder as part of federally regulated opioid treatment programs. Methadone prescriptions are for detoxification and maintenance therapy. Methadone is a useful agent for opioid withdrawal symptoms such as tachycardia, diaphoresis, nausea, vomiting, diarrhea, etc.

- **Option A:** Acute barbiturate toxicity may occur as the result of an intentional or unintentional overdose. Barbiturates have a history of abuse, New York City Health Department data showed 8469 cases of barbiturate poisoning in the period between 1957 through 1963. Overdose of phenobarbital symptoms includes CNS depression, respiratory failure, and hemodynamic instability. No antidote exists. Treatment of an overdose includes supportive care, activated charcoal (if taken orally), and urinary alkalization.
- **Option B:** Methamphetamine (METH) and its derivative, 3,4-methylenedioxymethamphetamine (MDMA), are extensively abused drugs, and the acute effects of these drugs include increased alertness, hyperthermia, decreased appetite, and euphoria. However, long-term abuse can result in neurotoxicity and psychosis. Amphetamines increase neurotransmission of dopamine (DA), serotonin (5-HT), and norepinephrine (NE) by entering neurons via the 5-HT and DA transporters and displacing storage vesicles.
- **Option D:** Benzodiazepines taken in toxic doses without other coingestants rarely cause a significant toxidrome. The classic presentation in patients with isolated benzodiazepine overdose will include central nervous system (CNS) depression with normal or near-normal vital signs. Many

patients will still be arousable and even provide a reliable history. Classic symptoms include slurred speech, ataxia, and altered mental status. Respiratory compromise is uncommon in isolated benzodiazepine ingestions, but if taken with coingestants such as ethanol or other drugs/medications, respiratory depression can be noted.

76. The nurse asks a newly admitted client, “What can we do to help you?” What is the purpose of this therapeutic communication technique?

- A. To reframe the client's thoughts about mental health treatment
- B. To put the client at ease
- C. To explore a subject, idea, experience, or relationship
- D. To communicate that the nurse is listening to the conversation

Correct Answer: C. To explore a subject, idea, experience, or relationship

This is an example of the therapeutic communication technique of exploring. The purpose of exploring is to delve further into the subject, idea, experience, or relationship. This technique is especially helpful with clients who tend to remain on a superficial level of communication.

- **Option A:** The statement is not used to reframe the client's thoughts. A helpful therapeutic technique can be theme identification. It allows the nurse to best promote the client's exploration and understanding of important problems.
- **Option B:** This statement will not put the client at ease. When clients deal with topics superficially, exploring can help them examine the issue more fully. If the client expresses an unwillingness to explore a subject, however, the nurse must respect his wishes.
- **Option D:** Providing general leads indicates that the nurse is listening and following what the client is saying without taking away the initiative for the interaction. They also encourage the client to continue if he is hesitant or uncomfortable about the topic.

77. Chad, a 5-year-old preschooler, is brought to the clinic due to an ear problem. Which assessment data would cause the nurse to suspect serous otitis media?

- A. Bright red, bulging, or retracted tympanic membrane and fever.
- B. Inflammation of the external ear and crust formation on the auditory canal.
- C. Sensorineural hearing loss and complaints of tinnitus.
- D. Plugged feeling in the ear and reverberation of the client's own voice.

Correct Answer: D. Plugged feeling in the ear and reverberation of the client's own voice.

Serous otitis media is manifested by a plugged feeling in the ear, reverberation of the client's own voice, and hearing loss. In many instances, they will have the symptom of aural fullness or a sensation that the ear is popping. In adults, serous otitis media or otitis media with effusion is more often unilateral. Adult patients may report tinnitus and the sensation of a foreign body in the external auditory canal.

- **Option A:** A bright red, bulging, or retracted tympanic membrane and fever suggest suppurative otitis media. By inspecting the ears, the degree of tympanic membrane mobility in response to

negative or positive pressure can be evaluated to assess for fluid in the middle ear, a hallmark of otitis media. Other abnormalities in the tympanic membrane found are erythema, bulging or fullness, or extreme retraction.

- **Option B:** Inflammation of the external ear and crust formation on the auditory canal suggest external otitis media. Otoscopy will reveal an erythematous and edematous ear canal with associated debris (yellow, white, or gray). In some cases, the tympanic membrane is erythematous or partially visualized due to edema of the external auditory canal.
- **Option C:** Sensorineural hearing loss and tinnitus indicate otosclerosis. Otosclerosis, also called otospongiosis, is an abnormal bone remodeling in the middle ear in which a normal dense endochondral layer of bony otic capsule in the bony labyrinth is replaced by one or more foci of irregularly laid spongy bone and most commonly involves the stapes region.

78. Mrs. Jones will have to change the dressing on her injured right leg twice a day. The dressing will be a sterile dressing, using 4 X 4s, normal saline irrigant, and abdominal pads. Which statement best indicates that Mrs. Jones understands the importance of maintaining asepsis?

- A. "If I drop the 4 X 4s on the floor, I can use them as long as they are not soiled."
- B. "If I drop the 4 X 4s on the floor, I can use them if I rinse them with sterile normal saline."
- C. "If I question the sterility of any dressing material, I should not use it."
- D. "I should put on my sterile gloves, then open the bottle of saline to soak the 4 X 4s."

Correct Answer: C. "If I question the sterility of any dressing material, I should not use it."

If there is ever any doubt about the sterility of an instrument or dressing, it should not be used. Sterile technique is essential to help prevent surgical site infections (SSI), an unintended and oftentimes preventable complication arising from surgery. SSI is defined as an "infection that occurs after surgery in the area of surgery" (CDC, 2010, p. 2).

- **Option A:** Anything dropped on the floor is no longer sterile and should not be used. The statement indicates lack of understanding. Preventing and reducing SSI are the most important reasons for using sterile technique during invasive procedures and surgeries.
- **Option B:** The 4 X 4s should be soaked prior to donning the sterile gloves. Normal saline would not keep the gauze sterile after being dropped on the floor. The client would need to replace the unsterile gauze with a new, sterile pack.
- **Option D:** Once the sterile gloves touch the bottle of normal saline they are no longer sterile. This statement indicates a need for further instruction. Sterile objects must only be touched by sterile equipment or sterile gloves.

79. A client has been taking isoniazid (INH). The client went to the health care facility with complaints of numbness and tingling sensation in the extremities. The nurse determines that the client is most likely suffering from?

- A. Impaired peripheral circulation
- B. Hypercalcemia
- C. Peripheral neuritis

D. Guillain Barre syndrome

Correct Answer: C. Peripheral neuritis

Isoniazid (INH) causes peripheral neuritis characterized by numbness, tingling, and paresthesias in the extremities.

- **Options A & B:** These are not related to the use of the medication.
- **Option D:** Guillain-Barre syndrome is a rare condition in which your immune system attacks your nerves, leading to muscle weakness and even paralysis.

80. Upon assessment, the nurse got the following findings: two (2) perineal pads highly saturated with blood within 2 hours postpartum, PR= 80 bpm, fundus soft, and boundaries not well defined. The appropriate nursing diagnosis is:

- A. Normal blood loss
- B. Blood volume deficiency
- C. Inadequate tissue perfusion related to hemorrhage
- D. Hemorrhage secondary to uterine atony

Correct Answer: D. Hemorrhage secondary to uterine atony

All the signs in the stem of the question are signs of hemorrhage. If the fundus is soft and boundaries not well defined, the cause of the hemorrhage could be uterine atony.

- **Option A:** It is normal to lose some blood after giving birth. Women usually lose about half a quart (500 milliliters) during vaginal birth or about 1 quart (1,000 milliliters) after a cesarean birth.
- **Option B:** Trauma is among the most frequent causes of hypovolemia, with its often profuse attendant blood loss. The consequences of hypovolemia include reduction in circulating blood volume, lower venous return, and in profound cases, arterial hypotension.
- **Option C:** Insufficient arterial blood flow causes decreased nutrition and oxygenation at the cellular level. Decreased tissue perfusion can be temporary, with few or minimal consequences to the health of the patient, or it can be more acute or protracted, with potentially destructive effects on the patient.

81. While performing a neurodevelopmental assessment on a 3-month-old infant, which of the following characteristics would be expected?

- A. A strong Moro reflex.
- B. A strong parachute reflex.
- C. Rolling from front to back.
- D. Lifting of head and chest when prone.

Correct Answer: D. Lifting of head and chest when prone

A 3-month-old infant should be able to lift the head and chest when prone.

- **Option A:** The Moro reflex typically diminishes or subsides by 3 months. The Moro reflex is a normal primitive, infantile reflex. The Moro reflex is an involuntary protective motor response against abrupt disruption of body balance or extremely sudden stimulation.
- **Option B:** The parachute reflex appears at 9 months. This reflex occurs in slightly older infants when the child is held upright and the baby's body is rotated quickly to face forward (as in falling). The baby will extend his arms forward as if to break a fall, even though this reflex appears long before the baby walks.
- **Option C:** Rolling from front to back usually is accomplished at about 5 months.

82. All of the following are common signs and symptoms of phlebitis except:

- A. Pain or discomfort at the IV insertion site
- B. Edema and warmth at the IV insertion site
- C. A red streak exiting the IV insertion site
- D. Frank bleeding at the insertion site

Correct Answer: D. Frank bleeding at the insertion site

Phlebitis, the inflammation of a vein, can be caused by chemical irritants (I.V. solutions or medications), mechanical irritants (the needle or catheter used during venipuncture or cannulation), or a localized allergic reaction to the needle or catheter. It usually affects lower limbs, particularly the great saphenous vein (60% to 80%) or the small/short saphenous vein (10% to 20%). However, it can occur at other sites (10% to 20%) and may occur bilaterally (5% to 10%).

- **Option A:** When there is venous turbulence or stasis, vessel wall injuries, abnormal coagulability, or vessel wall injuries, microthrombi could propagate and then form macroscopic thrombi. Vascular endothelial injury reliably results in thrombus formation by triggering an inflammatory response that results in immediate platelet adhesion. Platelet aggregation is mediated by thrombin and thromboxane A₂.
- **Option B:** Patients with superficial thrombophlebitis typically present with a reddened, warm, inflamed, tender area overlying the track of a superficial vein. There is often a palpable cord. Some surrounding edema or associated pruritus may occur. Significant swelling of the limb is more commonly associated with DVT and should only be attributed to SVT after DVT has been excluded.
- **Option C:** Signs and symptoms of phlebitis include pain or discomfort, edema and heat at the I.V. insertion site, and a red streak going up the arm or leg from the I.V. insertion site. Patients should be educated on the likelihood and significance of the propagation of disease and recurrence based on their risk factors. They should be advised of the need for further evaluation in the presence of migratory thrombophlebitis or if they are more than 40 years old at the time of their initial presentation and are without other risk factors for venous thromboembolic disease.

83. The client with suspected meningitis is admitted to the unit. The doctor is performing an assessment to determine meningeal irritation and spinal nerve root inflammation. A positive Kernig's sign is charted if the nurse notes:

- A. Pain on flexion of the hip and knee
- B. Nuchal rigidity on flexion of the neck
- C. Pain when the head is turned to the left side

D. Dizziness when changing positions

Correct Answer: A. Pain on flexion of the hip and knee

Kernig's sign is positive if pain occurs on flexion of the hip and knee. Kernig's sign is one of the physically demonstrable symptoms of meningitis. Severe stiffness of the hamstrings causes an inability to straighten the leg when the hip is flexed to 90 degrees.

- **Option B:** The Brudzinski reflex is positive if pain occurs on flexion of the head and neck onto the chest. Brudzinski's sign is one of the physically demonstrable symptoms of meningitis. Severe neck stiffness causes a patient's hips and knees to flex when the neck is flexed. Brudzinski's sign is used to diagnose meningitis.
- **Option C:** A tension headache may cause pain on the left side and behind the eyes, and may be linked to stress. Tension headaches account for up to 42 percent of headaches worldwide. They may occur on one side so could be the cause of a headache on the left side.
- **Option D:** Benign paroxysmal positional vertigo (BPPV) is one of the most common causes of vertigo — the sudden sensation that you're spinning or that the inside of your head is spinning. BPPV causes brief episodes of mild to intense dizziness. It is usually triggered by specific changes in the head's position. This might occur when one tips their head up or down, when the client lies down, or when he turns over or sits up in bed.

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

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

Correct Answer: C. Retroperitoneal rupture at the repair site

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

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

85. When a client abuses a CNS depressant, withdrawal symptoms will be caused by which of the following?

- A. Acetylcholine excess
- B. Dopamine depletion
- C. Serotonin inhibition
- D. Norepinephrine rebound

Correct Answer: D. Norepinephrine rebound

CNS depressants, when abused, cause depletion of stimulating neurotransmitters. When the CNS depressant is stopped, the result is a rebound of excitatory or stimulating neurotransmitters, such as norepinephrine. Central Nervous System (CNS) depressants are medicines that include sedatives, tranquilizers, and hypnotics. These drugs can slow brain activity, making them useful for treating anxiety, panic, acute stress reactions, and sleep disorders.

- **Option A:** Most CNS depressants act on the brain by increasing activity of gamma-aminobutyric acid (GABA), a chemical that inhibits brain activity. This action causes the drowsy and calming effects that make the medicine effective for anxiety and sleep disorders. People who start taking CNS depressants usually feel sleepy and uncoordinated for the first few days until the body adjusts to these side effects.
- **Option B:** If a person takes CNS depressants long term, he or she might need larger doses to achieve therapeutic effects. Continued use can also lead to dependence and withdrawal when use is abruptly reduced or stopped. Suddenly stopping can also lead to harmful consequences like seizures.
- **Option C:** Acetylcholine, dopamine, and serotonin are not significant factors in the symptoms of withdrawal from a CNS depressant. When people overdose on a CNS depressant, their breathing often slows or stops. This can decrease the amount of oxygen that reaches the brain, a condition called hypoxia. Hypoxia can have short- and long-term mental effects and effects on the nervous system, including coma and permanent brain damage.

86. A male client arriving in the emergency department is receiving cardiopulmonary resuscitation from paramedics who are giving ventilation through an endotracheal (ET) tube that they placed in the client's home. During a pause in compressions, the cardiac monitor shows narrow QRS complexes and a heart rate of beats/minute with a palpable pulse. Which of the following actions should the nurse take first?

- A. Start an L.V. line and administer amiodarone (Cordarone), 300 mg L.V. over 10 minutes.
- B. Check endotracheal tube placement.
- C. Obtain an arterial blood gas (ABG) sample.
- D. Administer atropine, 1 mg L.V.

Correct Answer: B. Check endotracheal tube placement.

ET tube placement should be confirmed as soon as the client arrives in the emergency department. Once the airway is secured, oxygenation and ventilation should be confirmed using an end-tidal carbon dioxide monitor and pulse oximetry.

- **Option A:** Next, the nurse should make sure L.V. access is established.
- **Option D:** If the client experiences symptomatic bradycardia, atropine is administered as ordered 0.5 to 1 mg every 3 to 5 minutes to a total of 3 mg.
- **Option C:** Then the nurse should try to find the cause of the client's arrest by obtaining an ABG sample. Amiodarone is indicated for ventricular tachycardia, ventricular fibrillation, and atrial flutter – not symptomatic bradycardia.

87. When teaching a client about contraception. Which of the following would the nurse include as the most effective method for preventing sexually transmitted infections?

- A. Spermicides
- B. Diaphragm
- C. Condoms
- D. Vasectomy

Correct Answer: C. Condoms

Condoms, when used correctly and consistently, are the most effective contraceptive method or barrier against bacterial and viral sexually transmitted infections.

- **Option A:** Although spermicides kill sperm, they do not provide reliable protection against the spread of sexually transmitted infections, especially intracellular organisms such as HIV.
- **Option B:** Insertion and removal of the diaphragm along with the use of the spermicides may cause vaginal irritations, which could place the client at risk for infection transmission.
- **Option D:** Male sterilization eliminates spermatozoa from the ejaculate, but it does not eliminate bacterial and/or viral microorganisms that can cause sexually transmitted infections.

88. Mike, a 43-year old construction worker, has a history of hypertension. He smokes two packs of cigarettes a day, is nervous about the possibility of being unemployed, and has difficulty coping with stress. His current concern is calf pain during minimal exercise that decreased with rest. The nurse assesses Mike's symptoms as being associated with peripheral arterial occlusive disease. The nursing diagnosis is probably:

- A. Alteration in tissue perfusion related to compromised circulation.
- B. Dysfunctional use of extremities related to muscle spasms.
- C. Impaired mobility related to stress associated with pain.
- D. Impairment in muscle use is associated with pain on exertion.

Correct Answer: A. Alteration in tissue perfusion related to compromised circulation.

Insufficient arterial blood flow causes decreased nutrition and oxygenation at the cellular level. Decreased tissue perfusion can be temporary, with few or minimal consequences to the health of the patient, or it can be more acute or protracted, with potentially destructive effects on the patient.

- **Option B:** Patients with peripheral arterial disease (PAD) have decreased lower extremity arterial perfusion which is commonly referred to as “poor circulation.” In most cases of PAD, atherosclerotic plaques narrow the arterial flow lumen which restricts blood flow to the distal extremity. Reduced blood flow can cause thigh or calf pain with walking due to temporary ischemia of the leg muscles during exertion
- **Option C:** Walking pain from PAD is referred to as intermittent claudication which means “to limp.” Many patients with PAD have either no symptoms or atypical complaints that do not strictly conform to the definition of claudication. Others may develop limb-threatening compromise of blood flow, necessitating emergent surgery.
- **Option D:** Patients with PAD usually have enough collateral blood flow that they only have symptoms during activities that increase energy demand such as walking. Rarely, the PAD becomes progressively more severe, and the blood flow cannot meet the resting metabolic demands of the lower extremity. Poor perfusion to the nerves can result in ischemic rest pain which is often described as an intractable, burning pain in the soles of the feet.

89. A primigravida with diabetes is admitted to the labor and delivery unit at 34 weeks gestation. Which doctor’s order should the nurse question?

- A. Magnesium sulfate 4gm (25%) IV
- B. Brethine 10 mcg IV
- C. Stadol 1 mg IV push every 4 hours as needed prn for pain
- D. Ancef 2gm IVPB every 6 hours

Correct Answer: B. Brethine 10 mcg IV

Brethine is used cautiously because it raises the blood glucose levels. Terbutaline can cause a temporary increase in the baby’s heart rate and blood sugar levels. These side effects usually aren’t serious and are easy to treat after delivery if they occur. There are concerns about long term use of this drug because the incidence of danger to the baby increases.

- **Option A:** Magnesium sulfate is indicated to prevent seizures associated with pre-eclampsia, and for control of seizures with eclampsia. Magnesium levels must be monitored frequently by checking serum levels every 6 to 8 hours or clinically by following patellar reflexes or urinary output. If serum concentration levels are low, a proper dose of magnesium sulfate can be given parenterally to replete low serum concentrations with recommended follow up laboratory testing.
- **Option C:** Stadol is indicated for labor pain in full-term (37 weeks gestation or more) women without fetal distress in early labor. This medication is used to treat moderate to severe pain, including pain from surgery, muscle pain, and migraine headaches. Butorphanol is an opioid pain reliever similar to morphine. It acts on certain centers in the brain to give pain relief.
- **Option D:** Ancef is generally acceptable for pregnant women. Controlled studies in pregnant women show no evidence of fetal risk. Cefazolin is an antibiotic used to treat a wide variety of bacterial infections. It may also be used before and during certain surgeries to help prevent infection. This medication is known as a cephalosporin antibiotic. It works by stopping the growth of bacteria.

90. Which of the following drugs will reduce the effectiveness of sucralfate?

- A. ranitidine

- B. sucralfate
- C. metoclopramide
- D. meclizine

Correct Answer: A. ranitidine

Ranitidine decreases the effectiveness of sucralfate because it decreases the acid content of gastric secretion. Ranitidine is a competitive inhibitor of histamine H₂-receptors. The reversible inhibition of H₂-receptors in gastric parietal cells results in a reduction in both gastric acid volume and concentration. Ranitidine's acid-lowering effect is more pronounced for basal and nocturnal acid secretion than it is for food-stimulated acid secretion. Additional indirect effects of ranitidine are decreased pepsin secretion and increased nitrate-reducing bacterial flora.

- **Option B:** Sucralfate is a unique anti-ulcer drug. It is a basic aluminum salt of sucrose octasulfate. It prevents hydrolysis by preventing the formation of the enzyme-substrate complex. It adsorbs to pepsin and decreases its concentration. Increases mucous hydrophobicity, viscosity, sulfation, and the aluminum and carbohydrate content, which leads to improved mucosal protection from acid. It also increases the production of mucus by increasing prostaglandin production. Sucralfate prevents the breakdown of mucus by pepsin A, reducing ulcerogenesis. It increases prostaglandin dependent and independent production of bicarbonate by stomach and duodenum.
- **Option C:** Metoclopramide is a gastric stimulant that does not alter pH. It has been approved by the FDA specifically to treat nausea and vomiting in patients with gastroesophageal reflux disease or diabetic gastroparesis by increasing gastric motility. It is also used to control nausea and vomiting in chemotherapy patients.
- **Option D:** Meclizine is an antihistamine and its GI effect is antiemetic. It is a first-generation antihistamine (non-selective H₁ antagonist). It also has central anticholinergic actions. The blocking actions on these receptors give meclizine its antiemetic and antivertigo properties. Meclizine, an FDA- approved drug, is a first-generation antihistamine used for the symptomatic management of motion sickness. These symptoms include dizziness, nausea, and vomiting. It also treats vertigo symptoms caused by vestibular diseases that commonly affect the inner ear, such as Meniere's disease.

91. The nurse uses a stethoscope to auscultate a male patient's chest. Which statement about a stethoscope with a bell and diaphragm is true?

- A. The bell detects high-pitched sounds best.
- B. The diaphragm detects high-pitched sounds best.
- C. The bell detects thrills best.
- D. The diaphragm detects low-pitched sounds best.

Correct Answer: B. The diaphragm detects high-pitched sounds best.

The diaphragm of a stethoscope detects high-pitched sound best; the bell detects low pitched sounds best. Palpation detects thrills best. The bell is flat and round and is covered by a thin layer of plastic known as the diaphragm. The diaphragm vibrates as sound is produced within the body. These vibrations travel from the bell, up the hollow tube which splits into two, and into hollow earpieces to be heard as sound by the medical professional.

- **Option A:** The smaller or other part of the resonator is called a bell. It is made up of hollow pieces of metal that help at picking up low-frequency sounds.

- **Option C:** Whenever a medical practitioner places a stethoscope diaphragm on a chest of a patient, vibration will occur at the flat surface of the stethoscope which is a result of sound waves that is being generated from the patient's body. The vibration picked by the diaphragm is being protected externally in order to prevent sound loss and thereby channeled through the tube to a specific direction.
- **Option D:** The diaphragm is the lower part of the chest piece. It is a flat metallic disc surrounded by chill rings which enable it to pick a very high pitch sound.

92. A nurse is conducting a follow-up home visit to a client who has been discharged with parenteral nutrition(PN). Which of the following should the nurse most closely monitor in this kind of therapy?

- A. Blood pressure and temperature.
- B. Blood pressure and pulse rate.
- C. Height and weight.
- D. Temperature and weight.

Correct Answer: D. Temperature and weight.

The client's temperature is monitored to identify signs of infection which is one of the complications of this therapy. While the weight is monitored to detect hypervolemia and to determine the effectiveness of this nutritional therapy. Monitoring patients on parenteral nutrition (PN) requires a multidisciplinary approach with effective communication throughout the team. This will help to minimize potential complications and will aid safe, effective, and appropriate use of PN.

- **Option A:** Temperature should be monitored to watch for infection, however, blood pressure is not as important during total parenteral nutrition. But blood pressure should still be monitored routinely. The risk of infectious complications is increased due to venous access for PN. The likelihood of hyperglycemia-induced complications may depend on concomitant diseases, duration of PN, and life expectancy.
- **Option B:** Blood pressure and pulse rate may be checked routinely in a patient with TPN. Efficient monitoring in all types of PN can result in reduced PN-associated complications and reduced costs. Water and electrolyte balance, blood sugar, and cardiovascular function should regularly be monitored during PN.
- **Option C:** Monitoring the patient's height is not necessary during TPN administration. Nutritional status is most effectively assessed and monitored through a combination of anthropometric data, biochemical and clinical measures. A stand-alone measure e.g. weight can rarely provide adequate information.

93. Nurse Tony was caring for a 41-year-old female client. Which behavior by the client indicates adult cognitive development?

- A. Generates new levels of awareness.
- B. Assumes responsibility for her actions.
- C. Has maximum ability to solve problems and learn new skills.
- D. Her perception is based on reality.

Correct Answer: A. Generates new levels of awareness

An adult age 31 to 45 generates a new level of awareness. Two forms of intelligence—crystallized and fluid—are the main focus of middle adulthood. Our crystallized intelligence is dependent upon accumulated knowledge and experience—it is the information, skills, and strategies we have gathered throughout our lifetime. This kind of intelligence tends to hold steady as we age—in fact, it may even improve. For example, adults show relatively stable to increasing scores on intelligence tests until their mid-30s to mid-50s (Bayley & Oden, 1955). Fluid intelligence, on the other hand, is more dependent on basic information-processing skills and starts to decline even prior to middle adulthood. Cognitive processing speed slows down during this stage of life, as does the ability to solve problems and divide attention. However, practical problem-solving skills tend to increase. These skills are necessary to solve real-world problems and figure out how to best achieve the desired goal.

- **Option B:** During early adulthood, cognition begins to stabilize, reaching a peak around the age of 35. Early adulthood is a time of relativistic thinking, in which young people begin to become aware of more than simplistic views of right vs. wrong. They begin to look at ideas and concepts from multiple angles and understand that a question can have more than one right (or wrong) answer.
- **Option C:** The need for specialization results in pragmatic thinking—using logic to solve real-world problems while accepting contradiction, imperfection, and other issues. Finally, young adults develop a sort of expertise in either education or career, which further enhances problem-solving skills and the capacity for creativity.
- **Option D:** Since Piaget’s theory, other developmental psychologists have suggested a fifth stage of cognitive development, known as postformal operational thinking (Basseches, 1984; Commons & Bresette, 2006; Sinnott, 1998). In postformal thinking, decisions are made based on situations and circumstances, and logic is integrated with emotion as adults develop principles that depend on contexts. This kind of thinking includes the ability to think in dialectics, and differentiates between the ways in which adults and adolescents are able to cognitively handle emotionally charged situations.

94. On a clinic visit a client who has a relative with cancer, is asking about the warning signs that may relate to cancer. The nurse correctly identifies the warning signs of cancer by responding:

- A. “A lump located only in the breast area may suggest the presence of cancer.”
- B. “Sudden weight loss of unexplained etiology can be a warning sign of cancer.”
- C. “Presence of dry cough is one of the warning signs of cancer.”
- D. “If a sore healing took a month or more to heal, cancer should be suspected.”

Correct Answer: B. “Sudden weight loss of unexplained etiology can be a warning sign of cancer.”

- **Option B:** Unexplained sudden weight loss of 10 pounds or more is a warning signal of cancer. This is common among cancers of the esophagus, stomach, and pancreas.
- **Option A:** The presence of lump is not limited to the breast only; it can grow elsewhere which is why this option is wrong.
- **Option C:** Nagging cough not dry cough and hoarseness of voice is a sign of cancer.
- **Option D:** The sore in cancer does not heal.

95. Which of the following conditions is associated with elevated serum chloride levels?

- A. Cystitis
- B. Diabetes
- C. Eclampsia
- D. Hypertension

Correct Answer: C. Eclampsia

Eclampsia is associated with increased levels of serum chloride. Metabolic alkalosis is uncommon in pregnancy and is most often the result of severe vomiting. If this is present at the time of delivery, transient metabolic derangement in the fetus can occur, potentially requiring additional organ support.

- **Option A:** Urinalysis, when indicated, is the most important laboratory test in the diagnosis of UTI. Pyuria, which is the presence of at least 10 WBCs or leukocytes in an unspun midstream urine specimen, is almost always present. They detect the presence of leukocyte esterase, an enzyme produced by leukocytes, and nitrite, which is indicative of the presence of Enterobacteriaceae.
- **Option B:** Present study showed the importance of measuring serum electrolytes in patients with type 2 diabetes mellitus. As fasting blood glucose rises, electrolytes mainly sodium, chloride, and potassium become more deranged significantly. Also, raised fasting blood glucose worsens renal function, as shown by an increase in microalbumin levels in urine.
- **Option D:** Among the environmental factors that affect blood pressure, dietary sodium chloride has been studied the most, and there is general consensus that increased sodium chloride intake increases blood pressure. The role for NaCl is supported by insights from the pressure-natriuresis mechanism, monogenic forms of hypertension, and dietary salt reduction studies.

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

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

Correct Answer: D. Keep platelets from clumping together

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

97. Nurse Elena is handling a 7-year-old child who has cystitis. Which of the following would Nurse Elena expect when assessing the child?

- A. Dysuria

- B. Costovertebral tenderness
- C. Flank pain
- D. High fever

Correct Answer: A. Dysuria

Dysuria is a symptom of a lower urinary tract infection (UTI) such as cystitis. Common symptoms include frequency, dysuria, urgency, suprapubic pain, cloudy urine, hematuria, nausea, vomiting, and fever. A history is the most important tool for the diagnosis of acute uncomplicated cystitis, and it should be supported by a focused examination and urinalysis.

- **Option B:** Acute pyelonephritis may be suspected if the patient is ill-appearing and seems uncomfortable, particularly if she has a concomitant fever, tachycardia, or costovertebral angle tenderness.
- **Option C:** Pyelonephritis may have similar symptoms of cystitis but usually will have flank pain, fever, and other systemic symptoms. Acute pyelonephritis is a bacterial infection causing inflammation of the kidneys. Pyelonephritis occurs as a complication of an ascending urinary tract infection that spreads from the bladder to the kidneys.
- **Option D:** Costovertebral tenderness, flank pain, and high fever are signs and symptoms of pyelonephritis, an upper UTI. Acute pyelonephritis will classically present as a triad of fever, flank pain, and nausea or vomiting, but not all symptoms have to be present. Symptoms will usually develop within several hours or over the course of a day.

98. A 16-year-old patient involved in a motor vehicle accident arrives in the ED unconscious and severely hypotensive. He's suspected to have several fractures of his pelvis and legs. Which of the following parenteral fluids is the best choice for his current condition?

- A. Packed red blood cells
- B. 0.9% sodium chloride solution
- C. Lactated Ringer's solution
- D. Fresh frozen plasma

Correct Answer: A. Packed red blood cells

In a trauma situation, the first blood product given is unmatched (O negative) packed red blood cells.

- **Options B and C:** Lactated Ringer's solution or 0.9% sodium chloride is used to increase volume and blood pressure, but too much of these crystalloids will dilute the blood and won't improve oxygen-carrying capacity.
- **Option D:** Fresh frozen plasma often is used to replace clotting factors.

99. The physician has scheduled a client for a left pneumonectomy. The position that will most likely be ordered postoperatively for his is the:

- A. Nonoperative side or back
- B. Operative side or back

- C. Back only
- D. Back or either side.

Correct Answer: B. Operative side or back

Following pneumonectomy, the client is positioned on the operative side to allow the fluid left in the lung space to consolidate and avoid the heart from shifting to the operative side. Pneumonectomy is defined as the surgical removal of the entire lung. Extrapleural pneumonectomy is an expanded procedure that also involves resection of parietal and visceral pleura, ipsilateral hemidiaphragm, pericardium, and mediastinal lymph nodes.

- **Option A:** The patient is then usually positioned in a lateral decubitus position with the operating side up. Proper positioning of the DLT or the bronchial blocker is usually reconfirmed with the FOB, and single lung ventilation is then started. Care should be taken to ensure proper positioning to avoid perioperative nerve injury.
- **Option C:** Following pneumonectomy, pulmonary functions decrease but are usually less than anticipated for removal of 50% of lung, especially for residual volume, and this may be explained by overexpansion of the remaining lung tissue. FEV1, FVC, DLCO, and lung compliance decrease. Airway resistance increases.
- **Option D:** Patients with no disease in the remaining lung usually do have normal SaO2, PO2, and PaCO2 at rest. A chest X-ray immediately following pneumonectomy usually shows the trachea in the midline and the postpneumonectomy space to be filled with air. Later, that space becomes filled gradually with fluid at a rate of 1 to 2 intercostal spaces/day. The ipsilateral diaphragm becomes elevated, and the mediastinum is gradually shifted towards the operative side.

100. A second-year nursing student, who is on a clinical rotation in the infectious diseases unit of a major urban hospital, has just suffered a needlestick injury. The incident occurred while the student was assisting in drawing blood from a patient known to have a high viral load and is positive for AIDS. The student is visibly shaken, as they are aware of the patient's medical history. Given the circumstances and potential risk, which of the following is the most significant action that the nursing student should take immediately after the incident?

- A. Immediately see a social worker to discuss potential implications.
- B. Start prophylactic AZT treatment as soon as possible.
- C. Start prophylactic Pentamidine treatment to prevent potential opportunistic infections.
- D. Seek counseling to address potential emotional and psychological impacts.
- E. Report the incident to the clinical instructor and fill out an incident report.
- F. Seek immediate testing for HIV to establish a baseline.

Correct Answer: B. Start prophylactic AZT treatment

Azidothymidine (AZT) treatment is the most critical intervention. It is an antiretroviral medication used to prevent and treat HIV/AIDS by reducing the replication of the virus. Post-exposure prophylaxis (PEP) for HIV is a treatment to suppress the virus and prevent infection after exposure. PEP should be taken within 72 hours of possible exposure to HIV, so it is important to seek treatment quickly. While reporting the incident, seeking counseling, and other actions are also important, the immediate priority is to

reduce the risk of HIV transmission.