

Kevin's Review - 35 NCLEX Practice Questions

1. To assess the kidney function of a patient with an indwelling urinary (Foley) catheter, the nurse measures his hourly urine output. She should notify the physician if the urine output is:

- A. Less than 30 ml/hour
- B. 64 ml in 2 hours
- C. 90 ml in 3 hours
- D. 125 ml in 4 hours

Correct Answer: A. Less than 30 ml/hour

A urine output of less than 30ml/hour indicates hypovolemia or oliguria, which is related to kidney function and inadequate fluid intake. Urine output is a noninvasive method to measure fluid balance once intravascular volume has been restored. Normal urine output is defined as 1.5 to 2 mL/kg per hour

- **Option B:** Micturition process entails contraction of the detrusor muscle and relaxation of the internal and external urethral sphincter. The process is slightly different based on age. Children younger than three years old have the micturition process coordinated by the spinal reflex.
- **Option C:** It starts with urine accumulation in the bladder that stretches the detrusor muscle causing activation of stretch receptors. The stretch sensation is carried by the visceral afferent to the sacral region of the spinal cord where it synapses with the interneuron that excites the parasympathetic neurons and inhibits the sympathetic neurons. The visceral afferent impulse concurrently decreases the firing of the somatic efferent that normally keeps the external urethral sphincter closed allowing reflexive urine output.
- **Option D:** Low bladder volume activates the pontine storage center which activates the sympathetic nervous system and inhibits the parasympathetic nervous system cumulatively allowing the accumulation of urine in the bladder. High bladder volume activates the pontine micturition center which activates the parasympathetic nervous system and inhibits the sympathetic nervous system as well as triggers awareness of a full bladder; consequently leading to relaxation of the internal sphincter and a choice to relax the external urethral sphincter once ready to void.

2. Before birth, which of the following structures connects the right and left auricles of the heart?

- A. Umbilical vein
- B. Foramen ovale
- C. Ductus arteriosus
- D. Ductus venosus

Correct Answer: B. Foramen ovale

The foramen ovale is an opening between the right and left auricles (atria) that should close shortly after birth so the newborn will not have a murmur or mixed-blood traveling through the vascular system.

- **Option A:** The umbilical vein carries oxygenated, nutrient-rich blood from the placenta to the fetus, and the umbilical arteries carry deoxygenated, nutrient-depleted blood from the fetus to the placenta. Any impairment in blood flow within the cord can be a catastrophic event for the fetus.
- **Option C:** At birth, the lungs fill with air with the first breaths, pulmonary vascular resistance drops, and blood flows from the right ventricle to the lungs for oxygenation. The increased arterial oxygen

tension and the decreased flow through the ductus arteriosus allow the ductus to constrict.

- **Option D:** In utero, the ductus venosus connects the left portal vein to the inferior vena cava, allowing a portion of the venous blood to bypass the liver and return to the heart. After birth, the ductus venosus generally closes between days of life 2 to 18 in term infants

3. The nurse is completing an assessment history of a client with pernicious anemia. Which complaint differentiates pernicious anemia from other types of anemia?

- A. Difficulty in breathing after exertion
- B. Numbness and tingling in the extremities
- C. A faster-than-usual heart rate
- D. Feelings of lightheadedness

Correct Answer: B. Numbness and tingling in the extremities

- **Option B:** Pernicious anemia is a condition where there is a vitamin B12 deficiency. A deficiency may lead to nerve damage. This can cause numbness and tingling sensation in the extremities.
- **Options A, C, and D:** These are common symptoms of all types of anemia.

4. The most important assessment for the nurse to make after a client has had a femoropopliteal bypass for peripheral vascular disease would be:

- A. Incisional pain
- B. Pedal pulse rate
- C. Capillary refill time
- D. Degree of hair growth

Correct Answer: C. Capillary refill time

Checking capillary refill provides data about the current perfusion of the extremity. Vascular surgery is considered a high-risk procedure and most procedures carry a >5% risk of an acute cardiac event. Direct reconstruction of aorta iliofemoral disease is associated with a 2.8% perioperative mortality while extra-anatomic bypass confers an 8.8% mortality.

- **Option A:** Patients undergoing PVB are at risk for wound infection, bleeding, pneumonia, conduit occlusion, and peripheral nerve damage. These patients often also have a higher prevalence of cerebrovascular and coronary artery disease which significantly increases their risk for stroke and myocardial infarction surgery.
- **Option B:** While the presence and quality of the pedal pulse provide data about peripheral circulation, it is not necessary to count the rate. Postoperatively, the patient's distal flow to the posterior tibial and dorsalis pedis should be assessed. If the pulses are not palpable, a doppler should be used for identification.
- **Option D:** Indicators for potential adverse outcomes include smoking, pulmonary disease, female sex, diabetes mellitus, previous bypass history, and advanced age. Conduit-related complications can be divided into immediate and long-term. Immediate including acute thrombosis and bleeding. Long-term including infection and occlusion secondary to intimal hyperplasia.

5. In the neonatal intensive care unit (NICU) of Tranquil Beginnings Hospital, Nurse Veronica is starting her shift. She's handed over the care of baby Ethan, who was born 12 hours ago with a noticeable cleft lip. The new parents, first-timers, are understandably concerned and have a lot of questions. As part of her assessment and while preparing to guide and reassure the parents, Nurse Veronica pays particular attention to potential complications that might be directly related to baby Ethan's cleft lip. While evaluating a newborn like Ethan with a cleft lip, which of the following aspects of his health should the nurse be particularly vigilant about, anticipating that it will most likely be compromised?

- A. Sucking ability
- B. Respiratory status
- C. Locomotion
- D. GI function
- E. Auditory function
- F. Vision

Correct Answer: A. Sucking ability

Newborns with a cleft lip often have difficulty creating a seal and generating the necessary suction for effective breastfeeding or bottle-feeding. This is a primary concern and often requires specialized feeding techniques or tools to support adequate nutrition. In this scenario, Nurse Veronica would focus on guiding and supporting Ethan's parents in managing his feeding needs, helping them understand his sucking challenges, and introducing them to specialized feeding techniques or tools designed for babies with a cleft lip.

- **Option B:** While respiratory issues can be a concern in newborns for various reasons, a cleft lip, in isolation, does not directly impact the respiratory system.
- **Option C:** Locomotion, or movement, is not typically affected by a cleft lip. This option pertains more to the physical ability to move, which is unrelated to the condition in question.
- **Option D:** A cleft lip does not directly affect gastrointestinal function. However, feeding difficulties related to the cleft lip might indirectly impact weight gain and nutrition.
- **Option E:** Although children with cleft palate (which can co-exist with cleft lip) may have an increased risk of middle ear infections that can affect hearing, a cleft lip alone does not directly impact auditory function.
- **Option F:** Vision is not impacted by a cleft lip.

6. A client is frustrated and embarrassed by urinary incontinence. Which of the following measures should Nurse Ginny include in a bladder retraining program?

- A. Establishing a predetermined fluid intake pattern for the client.
- B. Encouraging the client to increase the time between voidings.

- C. Restricting fluid intake to reduce the need to void.
- D. Assessing present elimination patterns.

Correct Answer: D. Assessing present elimination patterns

The guidelines for initiating bladder retraining include assessing the client's intake patterns, voiding patterns, and reasons for each accidental voiding. Bladder training is an important form of behavior therapy that can be effective in treating urinary incontinence. The goals are to increase the amount of time between emptying the bladder and the amount of fluids the bladder can hold. It also can diminish leakage and the sense of urgency associated with the problem.

- **Option A:** Lowering the client's fluid intake won't reduce or prevent incontinence. The recommended amount of fluids consumed (all types) in 24 hours totals 6-8 glasses. The benefits of adequate fluid intake include prevention of dehydration, constipation, UTI, and kidney stone formation.
- **Option B:** A voiding schedule should be established after assessment. Bladder training requires following a fixed voiding schedule, whether or not the client feels the urge to urinate. If he feels an urge to urinate before the assigned interval, he should use urge suppression techniques — such as relaxation and Kegel exercises.
- **Option C:** The client should actually be encouraged to drink 1.5 to 2 L of water per day. Keeping a diary of the bladder activity is very important. This helps the health care provider determine the correct place to start the training and to monitor the progress throughout the program.

7. A 39-year-old at 37 weeks gestation is admitted to the hospital with complaints of vaginal bleeding following the use of cocaine 1 hour earlier. Which complication is most likely causing the client's complaint of vaginal bleeding?

- A. Placenta previa
- B. Abruptio placentae
- C. Ectopic pregnancy
- D. Spontaneous abortion

Correct Answer: B. Abruptio placentae

The major maternal adverse reactions from cocaine use in pregnancy include spontaneous abortion first, not third, trimester abortion and abruptio placentae. The hypertension and increased levels of catecholamines caused by cocaine abuse are thought to be responsible for a vasospasm in the uterine blood vessels that causes placental separation and abruption.

- **Option A:** A pregnant woman who uses cocaine experiences a constriction of the blood vessels throughout her body. A fetus needs this blood flow for its oxygen supply. After cocaine abuse, the heart rate of the fetus goes up along with the blood pressure, but it may suffer a lack of oxygen (hypoxia). This restricted blood supply can also permanently damage sections of the placenta which can result in loss of the baby.
- **Option C:** Ectopic pregnancy (EP) is defined as the implantation and development of a fertilized ovum anywhere outside of the uterine cavity. Such a pregnancy may lead to tubal rupture and intra abdominal hemorrhage and represents the major cause of maternal death in the first trimester.

- **Option D:** Cocaine use early in pregnancy decreases uterine and placental blood flow by inhibiting the reuptake of norepinephrine, which causes arterial vasoconstriction. In most, but not all, previous studies of cocaine use during pregnancy and spontaneous abortion, the women's current use of cocaine, as assessed by self-reports or urine analysis, was related to their history of spontaneous abortion.

8. Conney with borderline personality disorder who is to be discharged soon threatens to “do something” to herself if discharged. Which of the following actions by the nurse would be most important?

- A. Ask a family member to stay with the client at home temporarily.
- B. Discuss the meaning of the client's statement with her.
- C. Request an immediate extension for the client.
- D. Ignore the client's statement because it's a sign of manipulation.

Correct Answer: B. Discuss the meaning of the client's statement with her.

Any suicidal statement must be assessed by the nurse. The nurse should discuss the client's statement with her to determine its meaning in terms of suicide. Determine whether the person has any thoughts of hurting him or herself. Suicidal ideation is highly linked to completed suicide. Some inexperienced clinicians have difficulty asking this question. They fear the inquiry may be too intrusive or that they may provide the person with an idea of suicide. In reality, patients appreciate the question as evidence of the clinician's concern. A positive response requires further inquiry.

- **Option A:** The individual must not be left alone. In the ED, such a recommendation is handled easily by hospital security personnel. In other settings, summon assistance quickly. In an isolated place, call 911. Involve family or friends; they can remain with the patient while treatment arrangements are made.
- **Option C:** Determine what the patient believes his or her suicide would achieve. This suggests how seriously the person has been considering suicide and the reason for death. For example, some believe that their suicide would provide a way for family or friends to realize their emotional distress. Others see their death as a relief from their own psychic pain. Still others believe that their death would provide a heavenly reunion with a departed loved one. In any scenario, the clinician has another gauge of the seriousness of the planning.
- **Option D:** A clear and complete evaluation and clinical interview provide the information upon which to base a suicide intervention. Although risk factors offer major indications of the suicide danger, nothing can substitute for a focused patient inquiry. However, although all the answers a patient gives may be inclusive, a therapist often develops a visceral sense that his or her patient is going to commit suicide. The clinician's reaction counts and should be considered in the intervention.

9. A male client seen in an ambulatory clinic has a butterfly rash across the nose. The nurse interprets that this finding is consistent with early manifestations of which of the following disorders?

- A. Hyperthyroidism
- B. Pernicious anemia

- C. Cardiopulmonary disorders
- D. Systemic lupus erythematosus (SLE)

Correct Answer: D. Systemic lupus erythematosus (SLE)

An early sign of SLE is the appearance of a butterfly rash across the nose.

- **Option A:** Hyperthyroidism often leads to moist skin and increased perspiration.
- **Option B:** Pernicious anemia would be manifested by pallor of the skin.
- **Option C:** Cardiopulmonary disorders may lead to clubbing of the fingers.

10. The therapeutic approach in the care of an autistic child includes the following except:

- A. Engage in diversionary activities when acting -out.
- B. Provide an atmosphere of acceptance.
- C. Provide safety measures.
- D. Rearrange the environment to activate the child.

Correct Answer: D. Rearrange the environment to activate the child

The child with the autistic disorder does not want change. Maintaining a consistent environment is therapeutic. Many individuals with ASD show a need for a structured, sometimes regimented, daily schedule. The need for controlled sensory stimulation, such as decreasing noise, lights, and tactile input, is common. Families must consider each family member's personality and activities while adapting to the needs of the family member with ASD.

- **Option A:** Angry outbursts can be re-channeled through safe activities. Education of nurses on how to best care for patients with ASD provides an avenue for ongoing advocacy to the entire healthcare team. Each person with ASD is unique and complex, and each must adapt to the world based on his or her strengths, weaknesses, and limitations. Remember that these individuals aren't autistic, but rather they have ASD.
- **Option B:** Acceptance enhances a trusting relationship. Nurses can team with the family for rehearsal of planned actions with expected behaviors before appointments or procedures, and frequent reminders during post-intervention care can reduce fear and outbursts while gaining patient cooperation. Tailoring care based on sensory sensitivity and the patient's ability to communicate is the primary focus. Interventions, such as dimming the lights, using a weighted blanket or vest, and allowing repetitive movement that doesn't hinder care, can soothe the person with ASD.
- **Option C:** Ensure safety from self-destructive behaviors like headbanging and hair-pulling. Clinical practice guidelines encourage direct, clear statements beginning with the patient's name to improve information processing. Instead of completing the entire head-to-toe assessment, nurses can anticipate the need to assess one or two body systems at a time to evaluate sensory tolerance. It's recommended for nurses and caregivers to deliver clear directions to gain inclusion and participation in the actions that are needed when giving care.

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

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

Correct Answer: C. Crayons and coloring book

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

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

12. Nathaniel has severe pruritus due to having hepatitis B. What is the best intervention for his comfort?

- A. Give tepid baths.
- B. Avoid lotions and creams.
- C. Use hot water to increase vasodilation.
- D. Use cold water to decrease the itching.

Correct Answer: A. Give tepid baths.

For pruritus, care should include tepid sponge baths and use of emollient creams and lotions. Bathe or shower using lukewarm water and mild soap or nonsoap cleansers. Long bathing or showering in hot water causes drying of the skin and can aggravate itching through vasodilation.

- **Option B:** Lubrication with fragrance-free creams or ointments serves as a barrier to prevent further drying of the skin through evaporation. Moisturizing is the cornerstone of treatment. Over-the-counter moisturizing lotions include Eucerin, Lubriderm, and Nivea. Lotions are lighter and less emollient than creams.
- **Option C:** Encourage the patient to adopt skincare routines to decrease skin irritation. After bathing, allow the skin to air dry or gently pat the skin dry. Avoid rubbing or brisk drying. Rubbing the skin with a towel can irritate the skin and exacerbate the itch-scratch cycle.
- **Option D:** If more moisturizing is required than a lotion can provide, a cream is recommended. These include Keri cream, Cetaphil cream, Eucerin cream, and Neutrogena Norwegian formula.

Ointments are the most emollient. Vaseline Pure Petroleum Jelly or Aquaphor Natural Healing Ointment may be beneficial.

13. Which electrolyte would the nurse identify as the major electrolyte responsible for determining the concentration of the extracellular fluid?

- A. Potassium
- B. Phosphate
- C. Chloride
- D. Sodium

Correct Answer: D. Sodium

Sodium is the electrolyte whose level is the primary determinant of the extracellular fluid concentration. Sodium a cation (e.g., positively charged ion), is the major electrolyte in extracellular fluid. Sodium, which is an osmotically active anion, is one of the most important electrolytes in the extracellular fluid. It is responsible for maintaining the extracellular fluid volume, and also for regulation of the membrane potential of cells. Sodium is exchanged along with potassium across cell membranes as part of active transport.

- **Option A:** Potassium (a cation) is a major electrolyte in the intracellular fluid. Potassium is mainly an intracellular ion. The sodium-potassium adenosine triphosphatase pump has the primary responsibility for regulating the homeostasis between sodium and potassium, which pumps out sodium in exchange for potassium, which moves into the cells.
- **Option B:** Phosphate (an anion) is a major electrolyte in the intracellular fluid. Phosphate is an essential electrolyte in the human body as it constitutes about 1% of the total body weight. In an adult, the normal serum phosphate level ranges between 2.5 to 4.5 mg/d L. The normal serum levels of phosphate tend to decrease with age and its highest levels i.e., 4.5 to 8.3 mg/dL are seen in infants, about 50% higher than adults; this is because infants and children need more phosphate for their growth and development.
- **Option C:** Chloride, an anion (e.g., negatively charged ion), is also present in extracellular fluid, but to a lesser extent. Chloride is an anion found predominantly in the extracellular fluid. The kidneys predominantly regulate serum chloride levels. Most of the chloride, which is filtered by the glomerulus, is reabsorbed by both proximal and distal tubules (majorly by proximal tubule) by both active and passive transport.

14. Which of the following activities, when voiced by the parents following a teaching session about the characteristics of school-age cognitive development would indicate the need for additional teaching?

- A. Collecting baseball cards and marbles.
- B. Ordering dolls according to size.
- C. Considering simple problem-solving options.
- D. Developing plans for the future.

Correct Answer: D. Developing plans for the future

The school-aged child is in the stage of concrete operations, marked by inductive reasoning, logical operations, and reversible concrete thought. The ability to consider the future requires formal thought operations, which are not developed until adolescence.

- **Option A:** Collecting baseball cards and marbles is an example of concrete operational thinking. Piaget considered the concrete stage a major turning point in the child's cognitive development because it marks the beginning of logical or operational thought.
- **Option B:** Children can conserve number (age 6), mass (age 7), and weight (age 9). Conservation is the understanding that something stays the same in quantity even though its appearance changes.
- **Option C:** Simple problem-solving options is an example of the concrete operational thinking of the school age.

15. The charge nurse is delegating tasks to her subordinates in the medical unit. Which infection control activity should she assign to an experienced nursing assistant?

- A. Asking clients about the use of immunosuppressant medications.
- B. Demonstrating correct hand washing to client visitors.
- C. Disinfecting blood pressure cuffs after clients are discharged.
- D. Screening clients for upper respiratory tract symptoms.

Correct Answer: C. Disinfecting blood pressure cuffs after clients are discharged

Nursing assistants can support agency policy to disinfect items that come in contact with intact skin such as blood pressure cuffs by cleaning with chemicals like alcohol. Depending on a nurse's role, some tasks can be delegated to a CNA depending on their scope of practice. Essentially, a nurse can delegate tasks to a CNA anytime help is necessary.

- **Option A:** This task should be performed by licensed nurses. The practice of pervasive functions of critical decisions, nursing judgment, and clinical reasoning cannot be delegated. There should be no confusion between assignments and delegation.
- **Option B:** Also known as a certified nursing assistant, a CNA's main role is to provide patients with basic care and assist them in their everyday activities, particularly when patients have a hard time doing a few activities on their own, such as bathing.
- **Option D:** Assessment for upper respiratory tract symptoms require further education and a broader scope of practice. A licensed nurse cannot delegate any activity involving critical decision-making or nursing judgment.

16. Which behavioral assessment in a child is most consistent with a diagnosis of conduct disorder?

- A. Arguing with adults
- B. Gross impairment in communication
- C. Physical aggression toward others
- D. Refusal to separate from caretaker

Correct Answer: C. Physical aggression toward others

Physical aggression toward others is a significant criterion consistent with the diagnoses of conduct disorder. Conduct disorder (CD) lies on a spectrum of disruptive behavioral disorders, which also include oppositional defiant disorder (ODD). In some cases, ODD is a precursor to CD. CD is characterized by a pattern of behaviors that demonstrate aggression and violation of the rights of others and evolves over time.

- **Option A:** Arguing with adults may indicate a lesser disorder, oppositional defiant disorder. Conduct disorder is a problem that involves a violation of social rules. Oppositional defiant disorder (ODD) is a type of childhood disruptive behavior disorder that primarily involves problems with the self-control of emotions and behaviors.
- **Option B:** Gross impairment in communication can be a sign of autism. Autism is a neurodevelopmental disorder characterized by severe impairment in reciprocal social interactions and communication skills, as well as the presence of restricted and stereotypical behaviors.
- **Option D:** Refusal to separate from a caretaker is a behavior that is more consistent with other mental disorders that can affect children. Anxiety disorders are characterized by excessive or inappropriate fear, with associated behavioral disturbances that impair functioning (APA 2013). Children with anxiety disorders have clinical symptoms, such as excessive anxiety; severe physiological anxiety symptoms; behavioral disturbances, such as avoidance of feared objects; and associated distress or impairment.

17. Jordanne is a client with a fear of air travel. She is being treated in a mental institution for phobic disorder. The treatment method involves systematic desensitization. The nurse would consider the treatment successful if:

- A. Jordanne plans a trip requiring air travel.
- B. Jordanne takes a short trip on an airplane.
- C. Jordanne recognizes the unrealistic nature of the fear of riding on airplanes.
- D. Jordanne verbalizes a decreased fear of air travel.

Correct Answer: B. Jordanne takes a short trip on an airplane.

Systematic desensitization is a behavioral technique in which the client with a specific phobia is gradually able to work through hierarchical fears until the most fearful situation is encountered. In this case, the most fearful is riding an airplane. Systematic desensitization (gradual systematic exposure of the client to the feared situation under controlled conditions) allows the client to begin to overcome the fear, become desensitized to the fear. Note: Implosion or flooding (continuous, rapid presentation of the phobic stimulus) may show quicker results than systematic desensitization, but relapse is more common, or the client may become terrified and withdraw from therapy.

- **Option A:** Explore client's perception of threat to physical integrity or threat to self-concept. It is important to understand the client's perception of the phobic object or situation in order to assist with the desensitization process. Present and discuss the reality of the situation with the client in order to recognize aspects that can be changed and those that cannot. The client must accept the reality of the situation before the work of reducing fear can progress.
- **Option C:** Encourage the client to explore underlying feelings that may be contributing to irrational fears. Help the client to understand how facing these feelings, rather than suppressing them, can result in more adaptive coping abilities. Verbalization of feelings in a non-threatening environment may help the client come to terms with unresolved issues.

- **Option D:** This response may occur earlier in treatment, but not indicative of success. Generally, a phobic individual recognizes that his fear is disproportionate to the things he fears. Explore things that may lower fear level and keep it manageable (e.g. singing while dressing, repeating a mantra, practicing positive self-talk while in a fearful situation). Provides the client with a sense of control over the fear. Distracts the client so that fear is not totally focused on and allowed to escalate.

18. When being admitted to a mental health facility, a young female adult tells Nurse Mylene that the voices she hears frighten her. Nurse Mylene understands that the client tends to hallucinate more vividly:

- A. While watching TV
- B. During mealtime
- C. During group activities
- D. After going to bed

Correct Answer: D. After going to bed

Auditory hallucinations are most troublesome when environmental stimuli are diminished and there are few competing distractions. Be alert for signs of increasing fear, anxiety or agitation. Might herald hallucinatory activity, which can be very frightening to client, and client might act upon command hallucinations (harm self or others). Explore how the hallucinations are experienced by the client. Exploring the hallucinations and sharing the experience can help give the person a sense of power that he or she might be able to manage the hallucinatory voices.

- **Option A:** Help the client to identify the needs that might underlie the hallucination. What other ways can these needs be met? Hallucinations might reflect needs for anger, power, self-esteem, and sexuality. Help the client to identify times that the hallucinations are most prevalent and frightening. Helps both nurse and client identify situations and times that might be most anxiety-producing and threatening to the client.
- **Option B:** Stay with clients when they are starting to hallucinate and direct them to tell the “voices they hear” to go away. Repeat often in a matter-of-fact manner. The client can sometimes learn to push voices aside when given repeated instructions. especially within the framework of a trusting relationship.
- **Option C:** Decrease environmental stimuli when possible (low noise, minimal activity). Decrease the potential for anxiety that might trigger hallucinations. Helps calm the client. Work with the client to find which activities help reduce anxiety and distract the client from a hallucinatory material. Practice new skills with the client. If clients’ stress triggers hallucinatory activity, they might be more motivated to find ways to remove themselves from a stressful environment or try distraction techniques.

19. A client is receiving methocarbamol (Robaxin) as an adjunct to physical therapy for the relief of painful muscle discomfort. Which of the following is not true regarding the use of the medication?

- A. The parenteral form causes hypotension and bradycardia when given rapidly.
- B. The medicine can cause the urine to turn brown, black, or green.
- C. The use of a cold or allergy medicine will lessen the side effects of the medication.

D. The parenteral form is contraindicated in clients with liver damage.

Correct Answer: C. The use of a cold or allergy medicine will lessen the side effects of the medication.

Methocarbamol is a muscle relaxant. Medicines such as cold or allergy medicine, sedatives, narcotic pain medicine, sleeping pills, muscle relaxers, and medicine for seizures, depression, or anxiety add to the sleepiness caused by methocarbamol.

20. Which of the following symptoms occurs with a hydatidiform mole?

- A. Heavy, bright red bleeding every 21 days.
- B. Fetal cardiac motion after 6 weeks gestation.
- C. Benign tumors found in the smooth muscle of the uterus.
- D. "Snowstorm" pattern on ultrasound with no fetus or gestational sac.

Correct Answer: D. "Snowstorm" pattern on ultrasound with no fetus or gestational sac.

The chorionic villi of a molar pregnancy resemble a snowstorm pattern on ultrasound. Bleeding with a hydatidiform mole is often dark brown and may occur erratically for weeks or months.

- **Option A:** The most common symptom of placenta previa is bright red, painless bleeding from the vagina. This is most common in the third trimester of pregnancy.
- **Option B:** The heart rate (HR) increases between the 5th week of gestation and 9th week of gestation and after the 13th week of gestation reduces. Cardiovascular development in a human embryo occurs between 3 and 6 weeks after ovulation. Cardiac function is the first sign of independent cardiac activity that can be explored with non-invasive techniques such as Doppler ultrasound
- **Option C:** Uterine smooth muscle tumors are neoplasms composed of smooth muscle; they range from benign leiomyomas to low-grade and high-grade leiomyosarcomas. Several histologic subtypes exist, including usual (spindled), epithelioid, and myxoid tumors.

21. A nurse is caring for a client in labor and is monitoring the fetal heart rate patterns. The nurse notes the presence of episodic accelerations on the electronic fetal monitor tracing. Which of the following actions is most appropriate?

- A. Document the findings and tell the mother that the monitor indicates fetal well-being.
- B. Take the mother's vital signs and tell the mother that bed rest is required to conserve oxygen.
- C. Notify the physician or nurse-midwife of the findings.
- D. Reposition the mother and check the monitor for changes in the fetal tracing.

Correct Answer: A. Document the findings and tell the mother that the monitor indicates fetal well-being.

Accelerations are transient increases in the fetal heart rate that often accompany contractions or are caused by fetal movement. Episodic accelerations are thought to be a sign of fetal-well being and adequate oxygen reserve.

- **Option B:** Inform the mother that they are usually associated with fetal movement, vaginal examinations, uterine contractions, umbilical vein compression, fetal scalp stimulation or even external acoustic stimulation. The presence of accelerations is considered a reassuring sign of fetal well-being.
- **Option C:** Accelerations are the basis for the nonstress test (NST). The presence of at least two accelerations, each lasting for 15 or more seconds above baseline and peaking at 15 or more bpm, in a 20-minute period is considered a reactive NST.
- **Option D:** The FHR is controlled by the autonomic nervous system. The inhibitory influence on the heart rate is conveyed by the vagus nerve, whereas excitatory influence is conveyed by the sympathetic nervous system. Progressive vagal dominance occurs as the fetus approaches term and, after birth, results in a gradual decrease in the baseline FHR. Stimulation of the peripheral nerves of the fetus by its own activity (such as movement) or by uterine contractions causes acceleration of the FHR.

22. Before administering amantadine (Symadine), the nurse should investigate which of the following client statements?

- A. "My hands are always shaking."
- B. "I had to take Dilantin 6 months ago."
- C. "I take low-dose enteric aspirin each day."
- D. "Simple tasks seem to take so long to perform."

Correct Answer: B. "I had to take Dilantin 6 months ago."

Amantadine is used cautiously in clients with a history of seizures. When administering amantadine, renal monitor function, mental status, such as depression/suicidality and psychosis, and blood pressure. Those with seizure disorders have monitoring for seizure activity. Options A and D are clinical manifestations of Parkinson's disease.

- **Option A:** Amantadine is an antiviral agent with mild antiparkinsonian activity. In the treatment of Parkinson disease, studies have shown amantadine acts on dopamine neurons. Amantadine is a weak, non-competitive antagonist of the NMDA receptor, which increases dopamine release and prevents dopamine reuptake.
- **Option C:** Amantadine does not interact negatively with aspirin. Amantadine is contraindicated in patients with hypersensitivity to the drug or components of the formulation. The drug undergoes renal excretion, so the extended-release dosage-form is contraindicated in patients with end-stage renal disease. Due to the possible anticholinergic side effects, patients with glaucoma or prostate hypertrophy should use it with caution.
- **Option D:** Amantadine is now used mostly for Parkinson's disease. Clinical trials have shown that amantadine decreases symptoms of bradykinesia, rigidity, and tremor. There is a combined synergistic effect with added levodopa, which is converted to dopamine by striatal enzymes in the CNS. There can be a transient benefit to the drug, so short-term therapy for patients with mild disease is best.

23. While cooking, your client couldn't feel the temperature of a hot oven. Which lobe could be dysfunctional?

- A. Frontal

- B. Occipital
- C. Parietal
- D. Temporal

Correct Answer: C. Parietal

The parietal lobe regulates sensory function, which would include the ability to sense hot or cold objects. The anterior parietal lobe contains the primary sensory cortex (SI), located in the postcentral gyrus (Brodmann area BA 3, 1, 2). SI receives the majority of the sensory inputs that are coming from the thalamus, and it's responsible for interpreting the simple somatosensory signals like (touch, position, vibration, pressure, pain, temperature).

- **Option A:** The frontal lobe regulates thinking, planning, and judgment. Prospective memory is a type of memory that involves remembering the plans that you made, from a simple daily plan to future lifelong plans.
- **Option B:** The occipital lobe is primarily responsible for vision function. The occipital lobe is the smallest lobe in the cerebral cortex, and it is located in the most posterior region of the brain, posterior to the parietal lobe and temporal lobe. The role of this lobe is visual processing and interpretation.
- **Option D:** The temporal lobe regulates memory. Semantic memory is a type of memory involved in remembering the thoughts or objectives that are common knowledge (for example, where the bathroom is located).

24. A patient with a history of diabetes mellitus is in the second postoperative day following cholecystectomy. She has complained of nausea and isn't able to eat solid foods. The nurse enters the room to find the patient confused and shaky. Which of the following is the most likely explanation for the patient's symptoms?

- A. Anesthesia reaction
- B. Hyperglycemia
- C. Hypoglycemia
- D. Diabetic ketoacidosis

Correct Answer: C. Hypoglycemia

A postoperative diabetic patient who is unable to eat is likely to be suffering from hypoglycemia. The actual treatment recommendations for a given patient should be individualized, based on diabetes classification, usual diabetes regimen, state of glycemic control, nature and extent of surgical procedure, and available expertise.

- **Option A:** An anesthesia reaction would not occur on the second postoperative day. Anesthesia and surgery cause a stereotypical metabolic stress response that could overwhelm homeostatic mechanisms in patients with pre-existing abnormalities of glucose metabolism. The invariant features of the metabolic stress response include release of the catabolic hormones epinephrine, norepinephrine, cortisol, glucagons, and growth hormone and inhibition of insulin secretion and action.
- **Option B:** Confusion is a late sign of hyperglycemia. Shakiness is not one of its symptoms. The management approach in these categories of patients always includes insulin therapy in

combination with dextrose and potassium infusion. Major surgery is defined as one requiring general anesthesia of ≥1 h. At a minimum, blood glucose should be monitored before and immediately after surgery in all patients. Those undergoing extensive procedures should have hourly glucose monitoring during and immediately following surgery.

- **Option D:** Symptoms of DKA include excessive thirst, frequent urination, abdominal pain, fruity-scented breath, confusion, and shortness of breath. However, shakiness is not a sign of DKA. The stress of surgery itself results in metabolic perturbations that alter glucose homeostasis, and persistent hyperglycemia is a risk factor for endothelial dysfunction, postoperative sepsis, impaired wound healing, and cerebral ischemia. The stress response itself may precipitate diabetic crises (diabetic ketoacidosis [DKA]).

25. A client who had cardiac surgery 24 hours ago has a urine output averaging 19 ml/hr for 2 hours. The client received a single bolus of 500 ml of IV fluid. Urine output for the subsequent hour was 25 ml. Daily laboratory results indicate the blood urea nitrogen is 45 mg/dL and the serum creatinine is 2.2 mg/dL. A nurse interprets the client is at risk for:

- A. Hypovolemia
- B. UTI
- C. Glomerulonephritis
- D. Acute renal failure

Correct Answer: D. Acute renal failure

The client who undergoes cardiac surgery is at risk for renal injury from poor perfusion, hemolysis, low cardiac output, or vasopressor medication therapy. Renal insult is signaled by decreased urine output and increased BUN and creatinine levels. The client may need medications such as dopamine (Intropin) to increase renal perfusion and possibly could need peritoneal dialysis or hemodialysis.

- **Option A:** Clinical signs, such as hypotension, tachycardia, and dry oral membranes, along with laboratory findings, such as blood urea nitrogen, serum and urine sodium, hematocrit, and blood gas measurements, help to elucidate the underlying etiology of hypovolemia. The simplest and fastest means of evaluating hypovolemia remains arterial blood pressure measuring.
- **Option B:** Remember that in patients with symptoms of UTI, a negative dipstick does not rule out UTI, but positive findings can help make the diagnosis. Look for the presence of bacteria and/or white blood cells (WBC) in the urine. A good urine sample with greater than 5 to 10 WBC/HPF is abnormal and highly suggestive of UTI in symptomatic patients.
- **Option C:** As the glomerular filtration rate (GFR) is decreased, symptoms like edema and hypertension occur, majorly due to the subsequent salt and water retention caused by the activation of the renin-angiotensin-aldosterone system.

26. For a male client with dysthymic disorder, which of the following approaches would the nurse expect to implement?

- A. ECT
- B. Psychotherapeutic approach
- C. Psychoanalysis

D. Antidepressant therapy

Correct Answer: B. Psychotherapeutic approach

Dysthymia is a less severe, chronic depression diagnosed when a client has had a depressed mood for more days than not over a period of at least 2 years. Clients with dysthymic disorder benefit from psychotherapeutic approaches that assist the client in reversing the negative self-image, negative feelings about the future. In addition to pharmacotherapy, psychotherapy may be helpful. However, Dunner cautions that "treatment with psychotherapy is difficult." A number of psychotherapies have been advocated including cognitive behavioral analysis system of psychotherapy (CBASP), interpersonal psychotherapy (IPT), cognitive behavioral therapy, manualized group therapy and problem-solving therapy. These do not exclude the potential value of supportive or psychodynamic psychotherapies.

- **Option A:** ECT is indicated in patients with treatment-resistant depression or severe major depression that impairs activities of daily living. The definition of treatment-resistant depression is depression that is unresponsive to multiple antidepressant medication trials. There are also suggestions for ECT as a treatment for suicidality, severe psychosis, food refusal secondary to depression, and catatonia. Bipolar depressive and manic patients can also receive treatment with ECT. ECT may have a safer profile than antidepressants or antipsychotics in debilitated, elderly, pregnant, and breastfeeding patients.
- **Option C:** Psychoanalysis is defined as a set of psychological theories and therapeutic techniques that have their origin in the work and theories of Sigmund Freud. The core of psychoanalysis is the belief that all people possess unconscious thoughts, feelings, desires, and memories. Psychoanalysis suggests that people can experience catharsis and gain insight into their current state of mind by bringing the content of the unconscious into conscious awareness. Through this process, a person can find relief from psychological distress.
- **Option D:** Antidepressants are a popular treatment choice for depression. Although antidepressants may not cure depression, they can reduce symptoms. The first antidepressant you try may work fine. But if it doesn't relieve your symptoms or it causes side effects that bother you, you may need to try another.

27. Septal involvement occurs in which type of cardiomyopathy?

- A. Congestive
- B. Dilated
- C. Hypertrophic
- D. Restrictive

Correct Answer: C. Hypertrophic

In hypertrophic cardiomyopathy, hypertrophy of the ventricular septum – not the ventricle chambers – is apparent. Hypertrophic cardiomyopathy (HCM) is a genetic cardiovascular disease. It is defined by an increase in left ventricular wall thickness that is not solely explained by abnormal loading conditions. This disorder is caused by a mutation in cardiac sarcomere protein genes and is most frequently transmitted as an autosomal dominant trait.

- **Option A:** In congestive cardiomyopathy, the heart becomes stretched and weakened and is unable to pump effectively. Congestive cardiomyopathy is a clinical state in which an abnormality of ventricular myocardium results in impaired pump function and circulatory congestion.

- **Option B:** Dilated cardiomyopathy is also called congestive cardiomyopathy, which is a condition wherein the heart cannot pump effectively due to its weakening state. In dilated cardiomyopathy, the heart's ability to pump blood is decreased because the heart's main pumping chamber, the left ventricle, is enlarged, dilated and weak. At first, the chambers of the heart respond by stretching to hold more blood to pump through the body. This helps to strengthen the heart's contraction and keep the blood moving for a short while. With time, the heart muscle walls weaken and are not able to pump as strongly.
- **Option D:** Restrictive cardiomyopathy, the rarest form of cardiomyopathy, is a condition in which the walls of the lower chambers of the heart (the ventricles) are abnormally rigid and lack the flexibility to expand as the ventricles fill with blood.

28. The doctor orders dextrose 5% in water, 1,000 ml to be infused over 8 hours. The I.V. tubing delivers 15 drops per milliliter. The nurse in charge should run the I.V. infusion at a rate of:

- A. 15 drop per minute
- B. 21 drop per minute
- C. 32 drop per minute
- D. 125 drops per minute

Correct Answer: C. 32 drop per minute

Giving 1,000 ml over 8 hours is the same as giving 125 ml over 1 hour (60 minutes) to find the number of milliliters per minute:

$$125/60 \text{ min} = X/1 \text{ minute}$$

$$60X = 125X = 2.1 \text{ ml/minute}$$

To find the number of drops/minute:

$$2.1 \text{ ml}/X \text{ gtts} = 1 \text{ ml}/15 \text{ gtts}$$

$$X = 32 \text{ gtts/minute, or } 32 \text{ drops/minute}$$

- **Option A:** When the nurse has an order for an IV infusion, it is her to make sure the fluid will infuse at the prescribed rate. IV fluids may be infused by gravity using a manual roller clamp or dial-a-flow, or infused using an infusion pump. Regardless of the method, it is important to know how to calculate the correct IV flow rate.
- **Option B:** When calculating the flow rate, determine which IV tubing will be used, microdrip or macrodrip, so the nurse can use the proper drop factor in her calculations. The drop factor is the number of drops in one mL of solution, and is printed on the IV tubing package. Macrodrip and microdrip refers to the diameter of the needle where the drop enters the drip chamber. Macrodrip tubing delivers 10 to 20 gtts/mL and is used to infuse large volumes or to infuse fluids quickly. Microdrip tubing delivers 60 gtts/mL and is used for small or very precise amounts of fluid, as with neonates or pediatric patients.
- **Option D:** To calculate the drops per minute, the drop factor is needed. The formula for calculating the IV flow rate (drip rate) is total volume (in mL) divided by time (in min), multiplied by the drop factor (in gtts/mL), which equals the IV flow rate in gtts/min.

29. A client diagnosed with active TB would be hospitalized primarily for which of the following reasons?

- A. To evaluate his condition.
- B. To determine his compliance.
- C. To prevent spread of the disease.
- D. To determine the need for antibiotic therapy.

Correct Answer: C. To prevent spread of the disease

The client with active TB is highly contagious until three consecutive sputum cultures are negative, so he's put in respiratory isolation in the hospital. Review the necessity of infection control measures. Put in temporary respiratory isolation if indicated. May help the patient understand the need for protecting others while acknowledging the patient's sense of isolation and social stigma associated with communicable diseases. AFB can pass through standard masks; therefore, particulate respirators are required.

- **Option A:** Identify others at risk like household members, close associates and friends. Those exposed may require a course of drug therapy to prevent spread or development of infection.
- **Option B:** Stress importance of uninterrupted drug therapy. Evaluate a patient's potential for cooperation. Compliance with multidrug regimens for prolonged periods is difficult, so directly observed therapy (DOT) should be considered.
- **Option D:** Initial therapy of uncomplicated pulmonary disease usually includes four drugs, e.g., four primary drugs or combination of primary and secondary drugs. Review importance of follow-up and periodic reculturing of sputum for the duration of therapy.

30. The normal dilatation of the cervix during the first stage of labor in a nullipara is

- A. 1.2 cm./hr
- B. 1.5 cm./hr.
- C. 1.8 cm./hr
- D. 2.0 cm./hr

Correct Answer: A. 1.2 cm./hr

For nullipara, the normal cervical dilatation should be 1.2 cm/hr. If it is less than that, it is considered a protracted active phase of the first stage. For multipara, the normal cervical dilatation is 1.5 cm/hr.

- **Option B:** For nulliparous women, Friedman (Friedman Studies) reported that the active phase of labor approximates the time from 2.5 cm cervical dilatation through complete dilatation, approximated at 10 cm. Use of 2.5 cm dilatation as the onset of active labor was an aggregate estimate and was, therefore, not strictly applicable to any individual woman.
- **Option C:** Active phase labor was further divided into three sub-phases, i.e., an acceleration phase, a phase of maximum slope, and a deceleration phase. Friedman described the acceleration phase as a rapid change in the slope of cervical dilation approximating the time needed for the cervix to dilate from 2.5 cm to 4 cm, and the phase of maximum slope as a period of rapid cervical dilation progressing linearly from approximately 4 cm to 9 cm cervical dilatation. Friedman reported the mean and slowest-yet-normal (i.e., mean – 2 standard deviations) cervical dilation rates in the phase of maximum slope to be 3.0 and 1.2 cm/hr, respectively.
- **Option D:** The deceleration phase was identified when the rate of dilation once again slowed as full dilatation was reached. For the aggregate of all labors, this phase approximated the time needed

for the cervix to dilate from 9 cm to 10 cm. Friedman included data from some women without a spontaneous labor onset and some who were not low-risk by modern standards.

31. A patient returns from surgery with an indwelling urinary catheter in place and empty. Six hours later, the volume is 120ml. The drainage system has no obstructions. Which intervention has priority?

- A. Give a 500 ml bolus of isotonic saline.
- B. Evaluate the patient's circulation and vital signs.
- C. Flush the urinary catheter with sterile water or saline.
- D. Place the patient in the shock position and notify the surgeon.

Correct Answer: B. Evaluate the patient's circulation and vital signs.

A total UO of 120ml is too low. Assess the patient's circulation and hemodynamic stability for signs of hypovolemia. Normal urine output is 1-2 ml/kg/hr. To determine the urine output of your patient, you need to know their weight, the amount of urine produced, and the amount of time it took them to produce that urine.

- **Option A:** A fluid bolus may be required, but only after further nursing assessment and a doctor's order. A decrease in output (to less than 400 ml per 24 hours) may indicate acute failure, especially in high-risk patients. Accurate monitoring of I&O; is necessary for determining renal function and fluid replacement needs and reducing the risk of fluid overload. Do note that hypervolemia usually occurs in the anuric phase of ARF and may mask the symptoms.
- **Option C:** Accurately record intake and output (I&O;) noting to include "hidden" fluids such as IV antibiotic additives, liquid medications, frozen treats, ice chips. Religiously measure gastrointestinal losses and estimate insensible losses (sweating), including wound drainage, nasogastric outputs, and diarrhea.
- **Option D:** Assess skin, face, dependent areas for edema. Evaluate the degree of edema (on a scale of +1→+4). Edema occurs primarily in dependent tissues of the body, (hands, feet, lumbosacral area). The patient can gain up to 10 lb (4.5 kg) of fluid before pitting edema is detected. Periorbital edema may be a presenting sign of this fluid shift because these fragile tissues are easily distended by even minimal fluid accumulation.

32. Which of the following laboratory values would be the most important to monitor for a patient with pancreatic cancer?

- A. Serum glucose
- B. Radioimmunoassay (RIA)
- C. Creatine phosphokinase (CPK)
- D. Carcinoembryonic antigen (CEA)

Correct Answer: A. Serum glucose

In pancreatitis, hypersecretion of the insulin from a tumor may affect the islets of Langerhans, resulting in hyperinsulinemia, a complication of pancreatic cancer. Pancreatitis damages the cells that produce insulin and glucagon, which are the hormones that control the amount of glucose in the blood. This can lead to an increase in blood glucose levels.

- **Option B:** RIA should also be monitored to measure the effects of therapy, but hypoglycemia may be life-threatening. Determination of serum pancreatic enzymes remains the gold standard for the diagnosis of acute pancreatitis. More expensive and cumbersome methods such as RIA or ELISA for pancreatic elastase are useful only in special clinical circumstances.
- **Option C:** Creatine phosphokinase is an enzyme that reflects normal tissue catabolism. Elevated serum levels indicate trauma to cells with high CPK content. CPK and CPK-isoenzymes are used to detect myocardial infarction. Serum CPK is elevated in most alcoholics including patients with delirium tremens (6, 9) or acute pancreatitis, a finding which possibly reflects a certain degree of myopathy known to occur in patients with acute alcohol intoxication as well as with chronic alcoholism
- **Option D:** Carcinoembryonic antigen (CEA) is one of the most widely used tumor markers and is increased in 30%–60% of patients with pancreatic cancer. Although carbohydrate antigen 19-9 (CA19-9) is the most important serum biomarker in pancreatic cancer, the diagnostic and prognostic value of CEA is gradually being recognized.

33. A 58-year-old male patient has been admitted to the cardiology unit following complaints of palpitations and fatigue. Upon reviewing his medical chart, the nurse notes a history of chronic kidney disease and a recent episode of hyperkalemia. The patient describes a variety of symptoms he has been experiencing over the past week. Based on his history of hyperkalemia, which of the following symptoms reported by the patient would the nurse consider unrelated to an acute episode of hyperkalemia?

- A. Decreased HR
- B. Paresthesias
- C. Muscle weakness of the extremities
- D. Migraines

Correct Answer: D. Migraines

Hyperkalemia, or elevated potassium levels in the blood, can manifest with various symptoms, including cardiac disturbances (like decreased heart rate), paresthesias (tingling sensations), and muscle weakness. Migraines or severe headaches are not typically associated with hyperkalemia.

34. The nurse would assess the client experiencing an acute episode of cholecystitis for pain that is located in the right

- A. Upper quadrant and radiates to the left scapula and shoulder.
- B. Upper quadrant and radiates to the right scapula and shoulder.
- C. Lower quadrant and radiates to the umbilicus.
- D. Lower quadrant and radiates to the back.

Correct Answer: B. Upper quadrant and radiates to the right scapula and shoulder

During an acute “gallbladder attack,” the client may complain of severe right upper quadrant pain that radiates to the right scapula and shoulder. This is governed by the pattern on dermatomes in the body. Acute cholecystitis is inflammation of the gallbladder that occurs due to occlusion of the cystic duct or

impaired emptying of the gallbladder. Often this impaired emptying is due to stones or biliary sludge.

- **Option A:** When cystic duct blockage is caused by a stone, it is called acute calculous cholecystitis. It is important to know, one can have pain due to temporary obstruction by gallstones, and that is called biliary colic. The diagnosis of biliary colic is upgraded to acute calculous cholecystitis if the pain does not resolve in six hours. If no stone is identified, it is called acute acalculous cholecystitis.
- **Option C:** Cases of chronic cholecystitis present with progressing right upper quadrant abdominal pain with bloating, food intolerances (especially greasy and spicy foods), increased gas, nausea, and vomiting. Pain in the mid-back or shoulder may also occur. This pain could be present for years until diagnosis.
- **Option D:** The pathophysiologic mechanism of acute cholecystitis is blockage of the cystic duct. Cholecystitis is a condition best treated with surgery; however, it can be treated conservatively if necessary. This condition can be associated with or without the presence of gallstones and can also be classified as acute or chronic.

35. After the nurse has explained the purpose of and schedule for chemotherapy to a 23-year-old patient who recently received a diagnosis of acute leukemia, the patient asks the nurse to repeat the information. Based on this assessment, which nursing diagnosis is most likely for the patient?

- A. Risk for ineffective health maintenance related to anxiety about new leukemia diagnosis
- B. Knowledge deficit: chemotherapy related to a lack of interest in learning about treatment
- C. Risk for ineffective adherence to treatment related to denial of need for chemotherapy
- D. Acute confusion related to infiltration of leukemia cells into the central nervous system

Correct Answer: A. Risk for ineffective health maintenance related to anxiety about new leukemia diagnosis

- **Option A:** The patient who has a new cancer diagnosis is likely to have high anxiety, which may impact learning and require that the nurse repeat and reinforce information.
- **Options B and C:** The patient asks for the information to be repeated, indicating that lack of interest in learning and denial are not etiologic factors.
- **Option D:** The patient's history of a recent diagnosis suggests that infiltration of the leukemia is not a likely cause of the confusion.