

Kevin's Review - 35 NCLEX Practice Questions

1. The nurse is developing a bowel-retraining plan for a client with multiple sclerosis. Which measure is likely to be least helpful to the client:

- A. Elevating the toilet seat for easy access
- B. Limiting fluid intake to 1000 mL per day
- C. Establishing a regular schedule for toileting
- D. Providing a high-fiber diet

Correct Answer: B. Limiting fluid intake to 1000 mL per day

- Option B: Bowel retraining plan is a behavioral program that helps people with chronic constipation or bowel loss control such as in multiple sclerosis. The program includes increasing fluid intake to at least 6 to 8 glasses of water, fiber therapy, and kegel exercise.
- Options A, C, and D: These measures would help the client to have a bowel movement.

2. A female client has just been diagnosed with condylomata acuminata (genital warts). What information is appropriate to tell this client?

- A. This condition puts her at a higher risk for cervical cancer; therefore, she should have a Papanicolaou (Pap) smear annually.
- B. The most common treatment is metronidazole (Flagyl), which should eradicate the problem within 7 to 10 days.
- C. The potential for transmission to her sexual partner will be eliminated if condoms are used every time they have sexual intercourse.
- D. The human papillomavirus (HPV), which causes condylomata acuminata, can't be transmitted during oral sex.

Correct Answer: A. This condition puts her at a higher risk for cervical cancer; therefore, she should have a Papanicolaou (Pap) smear annually.

Women with condylomata acuminata are at risk for cancer of the cervix and vulva. Yearly Pap smears are very important for early detection. Cervical cancer screening guidance comes from the American Cancer Society guidelines and does not require modification with the presence or absence of genital warts. There are no indications for females younger than 21 to be screened for cervical cancer.

- **Option B:** Because condylomata acuminata is a virus, there is no permanent cure. Topical therapies, cryotherapy, and surgical excision are available treatment options for patients. A formal treatment algorithm does not exist, and treatment depends on lesion location, morphology, and patient preference.
- **Option C:** Because condylomata acuminata can occur on the vulva, a condom won't protect sexual partners. The patient should receive education on safe sex practice; this means using barrier protection, avoiding anal sex, and multiple partners. The patient should be encouraged to be tested for other sexually transmitted infections and maintain long-term follow-up.
- **Option D:** HPV can be transmitted to other parts of the body, such as the mouth, oropharynx, and larynx. While condyloma acuminata generally occur in the anogenital region, lesions may also be present in the oral cavity. Simultaneous lesions in the anogenital region suggest sexual transmission, but fomites may also be the source of condyloma acuminata present in the oral cavity.

3. A male client with chronic renal failure has a serum potassium level of 6.8 mEq/L. What should nurse Olivia assess first?

- A. Blood pressure
- B. Respirations
- C. Temperature
- D. Pulse

Correct Answer: D. Pulse

An elevated serum potassium level may lead to a life-threatening cardiac arrhythmia, which the nurse can detect immediately by palpating the pulse. Hyperkalemia is defined as a serum or plasma potassium level above the upper limits of normal, usually greater than 5.0 mEq/L to 5.5 mEq/L. While mild hyperkalemia is usually asymptomatic, high levels of potassium may cause life-threatening cardiac arrhythmias, muscle weakness, or paralysis.

- **Option A:** The client's blood pressure may change, but only as a result of the arrhythmia. Therefore, the nurse should assess blood pressure later. Physical exam findings may include hypertension and edema in the setting of renal disease. There may also be signs of hypoperfusion. Muscle tenderness may be present in patients with rhabdomyolysis.
- **Option B:** Significant muscle weakness occurs at serum potassium levels below 2.5 mmol/L but can occur at higher levels if the onset is acute. Affected muscles can include the muscles of respiration which can lead to respiratory failure and death.
- **Option C:** The nurse also can delay assessing temperature because this isn't affected by the serum potassium level. A study concluded that hypothermia induced hypokalemia, possibly through redistribution, and that the myocardium appears to be more sensitive to the toxic effects of K⁺ as hypothermia deepens.

4. Which element in the circular chain of infection can be eliminated by preserving skin integrity?

- A. Host
- B. Reservoir
- C. Mode of transmission
- D. Portal of entry

Correct Answer: D. Portal of entry

In the circular chain of infection, pathogens must be able to leave their reservoir and be transmitted to a susceptible host through a portal of entry, such as broken skin. The portal of entry refers to the manner in which a pathogen enters a susceptible host. The portal of entry must provide access to tissues in which the pathogen can multiply or a toxin can act. Often, infectious agents use the same portal to enter a new host that they used to exit the source host.

- **Option A:** The final link in the chain of infection is a susceptible host. Susceptibility of a host depends on genetic or constitutional factors, specific immunity, and nonspecific factors that affect an individual's ability to resist infection or to limit pathogenicity. An individual's genetic makeup may either increase or decrease susceptibility.

- **Option B:** The reservoir of an infectious agent is the habitat in which the agent normally lives, grows, and multiplies. Reservoirs include humans, animals, and the environment. The reservoir may or may not be the source from which an agent is transferred to a host.
- **Option C:** An infectious agent may be transmitted from its natural reservoir to a susceptible host in different ways. There are different classifications for modes of transmission. In direct transmission, an infectious agent is transferred from a reservoir to a susceptible host by direct contact or droplet spread. Indirect transmission refers to the transfer of an infectious agent from a reservoir to a host by suspended air particles, inanimate objects (vehicles), or animate intermediaries (vectors).

5. Which insulin can be administered through continuous intravenous infusion?

- A. insulin glargine (Lantus)
- B. insulin aspart (Novolog)
- C. insulin detemir (Levemir)
- D. insulin Afrezza
- E. regular insulin (Novolin R)

Correct Answer: E. regular insulin (Novolin R)

Regular insulin is a short-acting insulin that can be given intravenously in a continuous manner. For intravenous infusions, to minimize insulin adsorption to plastic IV tubing, flush the intravenous tube with a priming infusion of 20 mL from a 100 mL-polyvinyl chloride bag insulin every time a new intravenous tubing is added to the insulin infusion container.

- **Option A:** Insulin glargine comes either in 100 ml vials or in dosing pens that contain 3 ml cartridges of medication and is administered via subcutaneous injection only. The drug is available at a concentration of 100 units per ml. Its administration includes a diluent with a pH of 4.0 to maintain the solubility of the drug before use.
- **Option B:** Insulin aspart should be administered subcutaneously (SC) within 5 to 10 minutes before a meal, with 1 to 4 meals per day. Rotate injection sites between the top of thighs, back of upper arms, buttocks, or abdomen to avoid lipodystrophy. Avoid injecting within 2 inches of the naval.
- **Option C:** Long-acting insulins, such as glargine and detemir, start action in 1 to 2 hours. They provide a plateau effect over 12 to 24 hours. Dosing is usually during the night time after meals. Their long duration of action helps in reducing the frequency of dosing throughout the day.
- **Option D:** Insulin degludec is a long-acting, man-made version of human insulin. Insulin degludec works by replacing the insulin that is normally produced by the body and by helping move sugar from the blood into other body tissues where it is used for energy. It also stops the liver from producing more sugar. Insulin degludec comes as a solution (liquid) to inject subcutaneously (under the skin). It is injected once a day.

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

- A. The CCU nurse gives a verbal report to the nurse on the telemetry unit before transferring the client to that unit.

- B. The CCU nurse notifies the on-call physician about a change in the client's condition.
- C. The emergency department nurse calls up the latest electrocardiogram results to check the client's progress.
- D. At the client's request, the CCU nurse updates the client's wife on his condition.

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

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

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

7. Which of the following drugs poses the greatest threat to an insulin-dependent diabetic who is pregnant?

- A. Ritodrine hydrochloride
- B. Oxytocin
- C. Prostaglandin
- D. Ergotrate

Correct Answer: A. Ritodrine hydrochloride

The only drug that poses a threat to diabetics who are pregnant is ritodrine. Tocolytic therapy in Japan consists of two main drugs, ritodrine hydrochloride and magnesium sulfate, unlike many Western countries. Ritodrine, the main traditional drug in Japan, is a beta-2 stimulant that causes maternal hyperglycemia. Using both ritodrine and glucocorticoid could cause maternal hyperglycemia.

- **Option B:** Oxytocin can be a good choice to decrease the blood glucose level and increase the insulin level. The hypoglycemic effect of OT can be explained by increasing glucose uptake via insulin-like signaling pathway (20, 21).
- **Option C:** Both arachidonic acid and prostaglandin E2 reverse the teratogenic effects of high glucose concentrations on neural tube development in mouse embryos in culture. Arachidonic acid supplementation also protects against diabetes-induced neural tube defects in vivo.
- **Option D:** This medication is used after childbirth to help stop bleeding after delivery of the placenta (afterbirth). Ergonovine maleate belongs to a class of drugs known as ergot alkaloids. It works by increasing the stiffness of the uterus muscles after the last stage of labor.

8. Which of the following disorders leads to cyanosis from deoxygenated blood entering the systemic arterial circulation?

- A. Aortic stenosis (AS)
- B. Coarctation of aorta

C. Patent ductus arteriosus (PDA)

D. Tetralogy of Fallot

Correct Answer: D. Tetralogy of Fallot

Tetralogy of Fallot consists of four major anomalies: ventricular septal defect, right ventricular hypertrophy, pulmonic stenosis (PS), aorta overriding the ventricular septal defect. PS impedes the flow of blood to the lungs, causing increased pressure in the right ventricle, forcing deoxygenated blood through the septal defect in the left ventricle. As a result of this decreased pulmonary flow, deoxygenated blood is shunted into the systemic circulation. The increased workload on the right ventricle causes hypertrophy. The overriding aorta receives blood from both the right and left ventricles. This is the definition of a defect with decreased pulmonary blood flow where unoxygenated blood is shunted into the systemic circulation.

- **Option A:** Aortic stenosis is a common valvular disorder, especially in the elderly population, causing left ventricular outflow obstruction. Etiologies include congenital (bicuspid/unicuspid), calcific, and rheumatic disease.
- **Option B:** Coarctation of the aorta is an obstructive defect where obstruction, not shunting, is the problem. Coarctation of the aorta is a narrowing of the aorta, most commonly occurring just beyond the left subclavian artery. However, it can occur in various other locations of the aortic arch or even in the thoracic or abdominal aorta.
- **Option C:** With PDA, blood flows from the aorta through the PDA and back to the pulmonary artery and lungs (shunting of oxygenated blood to the pulmonic system), causing increased pulmonary vascular congestion.

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

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

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

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

- **Option A:** Elimination of all dairy products can lead to significant clinical deficiencies of other nutrients. Be sure to get enough calcium in the diet, especially if the client avoids milk products completely. To get enough calcium, the client would need to eat calcium-rich foods as often as someone would drink milk. Calcium is very important because it keeps bones strong and reduces the risk of osteoporosis.
- **Option C:** Drinking milk on an empty stomach can exacerbate clinical symptoms. Drinking milk with a meal may benefit the client because other foods, (especially fat) may decrease transit time and allow for increased lactase activity. Limit the amount of milk and milk products in the diet. Try to drink 1 glass of milk each day. Drink small amounts several times a day. All types of milk contain the same amount of lactose.

Option D: Although individual tolerance should be acknowledged, spreading out the use of known dairy products will usually exacerbate clinical symptoms. Eat or drink milk and milk products along with other foods. For some people, combining solid food (like cereal) with a dairy product (like milk) can reduce symptoms.

10. A client with C7 quadriplegia is flushed and anxious and complains of a pounding headache. Which of the following symptoms would also be anticipated?

- A. Decreased urine output or oliguria
- B. Hypertension and bradycardia
- C. Respiratory depression
- D. Symptoms of shock

Correct Answer: B. Hypertension and bradycardia

Hypertension, bradycardia, anxiety, blurred vision, and flushing above the lesion occur with autonomic dysreflexia due to uninhibited sympathetic nervous system discharge. The other options are incorrect. C5 to C7 are responsible for deep tendon reflexes of the biceps, brachioradialis, and triceps respectively. C5 controls shoulder abduction with the aid of C4 and elbow flexion with the aid of C6. C6 to C7 are responsible for elbow extension, wrist extension, and flexion.

- **Option A:** Conus medullaris Syndrome is caused by injury to the terminal aspect of the spinal cord, just proximal to the cauda equina. It characteristically presents with loss of sacral nerve root functions. Loss of Achilles tendon reflexes, bowel and bladder dysfunction, and sexual dysfunction may be observable.
- **Option C:** C3 to C4 contributes to breathing by controlling the muscles of the diaphragm. Patients with an injury in this area of the cervical spine can complain of difficulty breathing. If C3 or C4 are involved, abnormal breathing or respiratory failure can occur.
- **Option D:** Neurogenic Shock results from high cervical injuries affecting the cervical ganglia, which leads to a loss of sympathetic tone. Loss of sympathetic tone results in a shock state characterized by hypotension and bradycardia.

11. When describing dizygotic twins to a couple, on which of the following would the nurse base the explanation?

- A. Two ova fertilized by separate sperm.
- B. Sharing of a common placenta.
- C. Each ova with the same genotype.
- D. Sharing of a common chorion.

Correct Answer: A. Two ova fertilized by separate sperm

Dizygotic (fraternal) twins involve two ova fertilized by separate sperm. Monozygotic (identical) twins involve a common placenta, same genotype, and common chorion.

- **Option B:** Monozygotic multiples form from a single egg and sperm combination that splits after conception. If the split is delayed for a few days, the embryos will develop with a single, shared placenta.
- **Option C:** Identical twins share all of their genes and are always of the same sex.
- **Option D:** In the majority of cases, these multiples will be enclosed within a shared chorion (the outer layer of the sac that contains a fetus).

12. Which of the following symptoms indicate acute rejection of a transplanted kidney?

- A. Edema, Nausea
- B. Fever, Anorexia
- C. Weight gain, pain at graft site
- D. Increased WBC count, pain with voiding

Correct Answer: C. Weight gain, pain at graft site

Pain at the graft site and weight gain indicates the transplanted kidney isn't functioning and possibly is being rejected. In general, when transplanting tissue or cells from a genetically different donor to the graft recipient, the alloantigen of the donor induces an immune response in the recipient against the graft. This response can destroy the graft if not controlled. The whole process is called allograft rejection.

- **Option A:** Transplant clients usually have edema, anorexia, fever, and nausea before transplantation, so those symptoms may not indicate rejection. Allograft rejection is inflammation with specific pathologic changes in the allograft, due to the recipient's immune system recognizing the non-self antigen in the allograft, with or without dysfunction of the allograft.
- **Option B:** Renal transplant rejection, as stated earlier, is an immunological response that leads to inflammation with specific pathological changes in the allograft, due to the recipient's immune system recognizing the non-self (foreign) antigen in the allograft.
- **Option D:** Hyperacute rejection is related to preexisting circulating antibodies in the recipient's blood against the donor antigen (usually ABO blood group or HLA antigen), which is present at the time of transplantation. These antibodies attack and destroy the transplanted organ as soon as or within a few hours after allograft is revascularized.

13. Mario has a burn injury. After 48 hours, the physician orders for Mario 2 liters of IV fluid to be administered q12 h. The drop factor of the tubing is 10 gtt/ml. The nurse should set the flow to provide:

- A. 18 gtt/min
- B. 28 gtt/min
- C. 32 gtt/min
- D. 36 gtt/min

Correct Answer: B. 28 gtt/min

This is the correct flow rate; multiply the amount to be infused (2000 ml) by the drop factor (10) and divide the result by the amount of time in minutes (12 hours x 60 minutes)

- **Option A:** This amount is inadequate according to the formula used.
- **Option C:** 32 gtts/min is more than the prescribed gtts/min given.
- **Option D:** This amount is incorrect according to the formula used to get the correct flow rate.

14. Sarah, a hospice nurse visits a client dying of ovarian cancer. During the visit, the client expresses that “If I can just live long enough to attend my daughter’s graduation, I’ll be ready to die.” Which phrase of coping is this client experiencing?

- A. Anger
- B. Denial
- C. Bargaining
- D. Depression

Correct Answer: C. Bargaining

- **Option C:** Denial, bargaining, anger, depression, and acceptance are recognized stages that a person facing a life-threatening illness experience. Bargaining identifies a behavior in which the individual is willing to do anything to avoid loss or change prognosis or fate.
- **Option A:** Anger also may be the first response to upsetting news and the predominant theme is “why me?” or the blaming of others.
- **Option B:** Denial is expressed as shock and disbelief and may be the first response to hearing bad news.
- **Option D:** Depression may be manifested by hopelessness, weeping openly, or remaining quiet or withdrawn.

15. Which of the following complications is thought to be the most common cause of appendicitis?

- A. A fecalith
- B. Bowel kinking
- C. Internal bowel occlusion
- D. Abdominal bowel swelling

Correct Answer: A. A fecalith

A fecalith is a fecal calculus, or stone, that occludes the lumen of the appendix and is the most common cause of appendicitis. The cause of appendicitis is usually an obstruction of the appendiceal lumen. This can be from an appendicolith (stone of the appendix), or some other mechanical etiologies. Appendiceal tumors such as carcinoid tumors, intestinal parasites, and hypertrophied lymphatic tissue are all known causes of appendiceal obstruction and appendicitis.

- **Option B:** Kinking of the appendix is one of the causes of appendicitis. Appendicitis is inflammation of the vermiform appendix. This is a hollow organ located at the tip of the cecum, usually in the right

lower quadrant of the abdomen.

- **Option C:** External, not internal, occlusion of the bowel by adhesion is a cause of appendicitis. When the appendiceal lumen gets obstructed, bacteria will build up in the appendix and cause acute inflammation with perforation and abscess formation.
- **Option D:** Bowel wall swelling is one of the causes of appendicitis. The pathophysiology of appendicitis likely stems from obstruction of the appendiceal orifice. This results in inflammation, localized ischemia, perforation, and the development of a contained abscess or frank perforation with resultant peritonitis.

16. The client is very hostile toward one of the staff for no apparent reason. The client is manifesting:

- A. Splitting
- B. Transference
- C. Countertransference
- D. Resistance

Correct Answer: B. Transference

Transference is a positive or negative feeling associated with a significant person in the client's past that is unconsciously assigned to another. Transference describes a situation where the feelings, desires, and expectations of one person are redirected and applied to another person. Most commonly, transference refers to a therapeutic setting, where a person in therapy may apply certain feelings or emotions toward the therapist.

- **Option A:** Splitting is a defense mechanism commonly seen in a client with a personality disorder in which the world is perceived as all good or all bad. Splitting is a term used in psychiatry to describe the inability to hold opposing thoughts, feelings, or beliefs. Some might say that a person who splits sees the world in terms of black or white—all or nothing. It's a distorted way of thinking in which the positive or negative attributes of a person or event are neither weighed nor cohesive.
- **Option C:** Countertransference is a phenomenon where the nurse shifts feelings assigned to someone in her past to the patient. Countertransference, which occurs when a therapist transfers emotions to a person in therapy, is often a reaction to transference, a phenomenon in which the person in treatment redirects feelings for others onto the therapist.
- **Option D:** Resistance is the client's refusal to submit himself to the care of the nurse. Resistance in psychology refers to any opposition to the therapeutic process. Resistance is a way of pushing back against suggestions, even those that could help you solve mental or emotional health concerns.

17. A nurse is assigned to care for a client with hypotonic uterine dysfunction and signs of slowing labor. The nurse is reviewing the physician's orders and would expect to note which of the following prescribed treatments for this condition?

- A. Medication that will provide sedation
- B. Increased hydration

- C. Oxytocin (Pitocin) infusion
- D. Administration of a tocolytic medication

Correct Answer: C. Oxytocin (Pitocin) infusion.

Therapeutic management for hypotonic uterine dysfunction includes oxytocin augmentation and amniotomy to stimulate labor that slows. Hypotonic labor is an abnormal labor pattern, notable especially during the active phase of labor, characterized by poor and inadequate uterine contractions that are ineffective to cause cervical dilation, effacement, and fetal descent, leading to a prolonged or protracted delivery.

- **Option A:** Provided there are no contraindications. Oxytocin is the medication of choice for augmenting contractions. The dosage regimen should be titrated to effect for achieving adequate uterine contractions. However, dosing generally does not exceed 30milliunit/ minute. The usual protocol is 5 units of oxytocin in 500mls of 5% Dextrose intravenous infusion, starting with 10 drops/min and gradually titrating the rate to achieve a contraction rate of at least 3 per minute.
- **Option B:** Maintain adequate hydration. Encourage ambulation and avoid supine position. Although these are not proven to improve contractions or prolonged labor due to hypocontractility, they may improve the comfort of the patient.
- **Option D:** A combination of amniotomy and oxytocin augmentation is more effective in the management of hypocontractile labor than amniotomy alone when instituted early in the active phase.

18. A patient is catheterized with a #16 indwelling urinary (Foley) catheter to determine if:

- A. Trauma has occurred.
- B. His 24-hour output is adequate.
- C. He has a urinary tract infection.
- D. Residual urine remains in the bladder after voiding.

Correct Answer: B. His 24-hour output is inadequate.

A 24-hour urine output of less than 500 ml in an adult is considered inadequate and may indicate kidney failure. This must be corrected while the patient is in the acute state so that appropriate fluids, electrolytes, and medications can be administered and excreted. Indwelling catheterization is not needed to diagnose trauma, urinary tract infection, or residual urine.

- **Option A:** Urinary bladder catheterization is performed for both therapeutic and diagnostic purposes. Based on the dwell time, the urinary catheter can be either intermittent (short-term) or indwelling (long-term).
- **Option C:** Cystitis, urethritis, prostatitis (common infectious etiology in men), and vulvovaginitis in the woman can cause urinary retention.
- **Option D:** Brain or spinal cord injury, cerebrovascular accident, multiple sclerosis, Parkinson's disease, and dementia can lead to urinary retention.

19. The clinic nurse is preparing to test the visual acuity of a client using a Snellen chart. Which of the following identifies the accurate procedure for this visual acuity test?

- A. Both eyes are assessed together, followed by the assessment of the right and then the left eye.
- B. The right eye is tested followed by the left eye, and then both eyes are tested.
- C. The client is asked to stand at a distance of 40ft. from the chart and is asked to read the largest line on the chart.
- D. The client is asked to stand at a distance of 40ft from the chart and to read the line that can be read 200 ft away by an individual with unimpaired vision.

Correct Answer: B. The right eye is tested followed by the left eye, and then both eyes are tested.

Visual acuity is assessed in one eye at a time, and then in both eyes together with the client comfortably standing or sitting. The right eye is tested with the left eye covered; then the left eye is tested with the right eye covered. Both eyes then are tested together. Visual acuity is measured with or without corrective lenses and the client stands at a distance of 20ft. from the chart. A visual acuity test is only one part of a comprehensive ophthalmologic examination. The goal of the visual acuity test is to determine clarity or sharpness of vision.

- **Option A:** Cover the patient's eye with their hand or an occluder card. Some testers prefer to test the eyes in the same order on all patients. An alternative is to test the eye with worse vision first to reduce remembered letters. The second eye can also read the letters backward to reduce remembered letters.
- **Option C:** Position the patient in a well-lit area so that they are a standard distance from the chart. The testing distance is typically 20 feet (6 m), but this may vary. In smaller spaces, mirrors can be used to achieve the required distance. Additionally, a near Snellen chart may be used at 14 inches in some cases, which would require reading glasses if applicable.
- **Option D:** Move the patient closer to the chart if they are unable to read to the top line, the new distance from the chart becomes the numerator in a fraction reporting system. For example, if able to read the top line at 10 feet, the patient's vision would be represented as 10/200.

20. What is a characteristic of metasynthesis?

- A. It is useful for triangulating research.
- B. It synthesizes critical masses of qualitative findings.
- C. It leads to higher reliability of research findings.
- D. It cannot be conducted on historical or case study findings.

Correct Answer: B. It synthesizes critical masses of qualitative findings.

Qualitative synthesis refers to a collection of different methods for systematically reviewing and integrating findings from qualitative studies. The aims of such methods are to capture the increasing volume of qualitative research, to facilitate the transfer of knowledge to improve healthcare and to bring together a broad range of participants and descriptions.

- **Option A:** Qualitative synthesis requires not only a systematic approach to collecting, analyzing, and interpreting results across multiple studies, but also to develop overarching interpretation emerging from the joint interpretation of the primary studies included in the synthesis.
- **Option C:** It involves going beyond the findings of any individual study to make the "whole into something more than the parts alone imply" They have been shown to be particularly useful to identify research gaps, to inform the development of primary studies, and to provide evidence for

the development, implementation, and evaluation of health interventions

- **Option D:** Qualitative research sheds new light on scientific questions by emphasizing the participants' subjective understanding and experience. Metasynthesis proposes a third level of comprehension and interpretation that brings original insights.

21. A client has just been diagnosed with terminal cancer and is being transferred to home hospice care. The client's daughter tells the nurse, "I don't know what to say to my mother if she asks me if she's going to die." Which responses by the nurse would be appropriate? Select all that apply.

- A. "Tell your mother not to worry. She still has some time left."
- B. "Let's talk about your mother's illness and how it will progress."
- C. "You sound like you have some questions about your mother dying. Let's talk about that."
- D. "Don't worry, hospice will take care of your mother."
- E. "Tell me how you're feeling about your mother dying."

Correct Answer: B, C, & E.

Talking about death is an uncomfortable situation. Conveying information clearly and openly can alleviate fears and strengthen the individual's sense of control. Encouraging verbalization of feelings helps build a therapeutic relationship based on trust and reduces anxiety. Advising the daughter not to worry, or having her tell her mother that, ignores her feelings and discourages further communication.

- **Option A:** The nurse needs to recognize and understand these events as a time during which an individual or family member incorporates his or her strength to go on to the next stage of grief.
- **Option B:** Support the client and significant others share mutual fears, concerns, plans, and hopes for each other. Keeping secrets won't do any help during this time. These times of stress can be used as an opportunity for growth and family development.
- **Option C:** Communicate therapeutically with the client and family members and allow them to verbalize feelings. Sharing feelings with a healthcare provider may help the client and significant others find significance in the experience of loss.
- **Option D:** Acknowledge the client's and significant other's need to review the loss experience. In this way, the client and family members integrate the event into their experience.
- **Option E:** Review and point out strengths and progress to date. Reviewing the client's progress is very helpful and provides perspective in the whole process.

22. A male client with a spinal cord injury is prone to experiencing autonomic dysreflexia. The nurse would avoid which of the following measures to minimize the risk of recurrence?

- A. Strict adherence to a bowel retraining program.
- B. Keeping the linen wrinkle-free under the client.
- C. Preventing unnecessary pressure on the lower limbs.
- D. Limiting bladder catheterization to once every 12 hours.

Correct Answer: D. Limiting bladder catheterization to once every 12 hours

The most frequent cause of autonomic dysreflexia is a distended bladder. Straight catheterization should be done every four (4) to six (6) hours, and foley catheters should be checked frequently to prevent kinks in the tubing. Other causes include stimulation of the skin from tactile, thermal, or painful stimuli. The nurse administers care to minimize risk in these areas.

- **Option A:** Constipation and fecal impaction are other causes, so maintaining bowel regularity is important. Establish a regular daily bowel program (digital stimulation, prune juice, warm beverage, and use of stool softeners and suppositories at set intervals. Determine usual time and routine of postinjury evacuations.
- **Option B:** Massage and lubricate skin with bland lotion or oil. Protect pressure points by use of heel or elbow pads, lamb's wool, foam padding, egg-crate mattress. Use skin hardening agents (tincture of benzoin, karaya, Sween cream). Enhances circulation and protects skin surfaces, reducing risk of ulceration. Tetraplegic and paraplegic patients require lifelong protection from decubitus formation, which can cause extensive tissue necrosis and sepsis. Keep bed clothes dry and free of wrinkles, crumbs. Reduces or prevents skin irritation.
- **Option C:** Elevate lower extremities at intervals when in chair, or raise foot of bed when permitted in individual situations. Assess for edema of feet and ankles. Loss of vascular tone and "muscle action" results in pooling of blood and venous stasis in the lower abdomen and lower extremities, with increased risk of hypotension and thrombus formation.

23. An additional Vitamin C is required during all of the following periods except:

- A. Infancy
- B. Young adulthood
- C. Childhood
- D. Pregnancy

Correct Answer: B. Young adulthood

Additional Vitamin C is needed in growth periods, such as infancy and childhood, and during pregnancy to supply demands for fetal growth and maternal tissues. Other conditions requiring extra vitamin C include wound healing, fever, infection and stress. Vitamin C is a water-soluble vitamin, antioxidant, and essential cofactor for collagen biosynthesis, carnitine and catecholamine metabolism, and dietary iron absorption. Humans are unable to synthesize vitamin C, so they can only obtain it through dietary intake of fruits and vegetables.

- **Option A:** An infant requires Vitamin C. Although most vitamin C is completely absorbed in the small intestine, the percentage of absorbed vitamin C decreases as intraluminal concentrations increase. Proline residues on procollagen require vitamin C for the hydroxylation, making it necessary for the triple-helix formation of mature collagen. The lack of a stable triple-helical structure compromises the integrity of the skin, mucous membranes, blood vessels, and bone.
- **Option C:** Children need lots of Vitamin C. Usual dietary doses of up to 100 mg/day are almost completely absorbed. The highest concentrations of ascorbic acid are in the pituitary gland, the adrenal gland, the brain, leukocytes, and eyes. Ascorbic acid functions as a cofactor, enzyme complement, co-substrate, and a powerful antioxidant in a variety of reactions and metabolic processes. It also stabilizes vitamin E and folic acid and enhances iron absorption. It neutralizes free radicals and toxins as well as attenuates inflammatory response, including sepsis syndrome.

- **Option D:** A pregnant woman requires an abundant amount of Vitamin C. The average protective adult dose of vitamin C is 70 to 150 mg daily. Increase the dose to 300 mg to 1 g daily when scurvy is present. Daily need increases in patients with conditions like gingivitis, asthma, glaucoma, collagen disorders, heatstroke, arthritis, infections (pneumonia, sinusitis, rheumatic fever), and chronic illnesses. Hemovascular disorders, burns, and delayed wound healing are causes for an increase in daily intake.

24. Which of the following is the most important physical assessment parameter the nurse would consider when assessing fluid and electrolyte imbalance?

- A. Skin turgor
- B. Intake and output
- C. Osmotic pressure
- D. Cardiac rate and rhythm

Correct Answer: D. Cardiac rate and rhythm

Cardiac rate and rhythm are the most important physical assessment parameter to measure. Skin turgor, intake, and output are physical assessment parameters a nurse would consider when assessing fluid and electrolyte imbalance, but choice d is the most important. Tachycardia and hypertension are common manifestations. Tachypnea is usually present with or without dyspnea. Elevated CVP may be noted before dyspnea and adventitious breath sounds occur. Hypertension may be a primary disorder or occur secondary to other associated conditions such as heart failure.

- **Option A:** Skin turgor is a sign of fluid loss (dehydration). Diarrhea or vomiting can cause fluid loss. Infants and young children with these conditions can rapidly lose a lot of fluid if they do not take enough water. Fever speeds up this process. To check for skin turgor, the health care provider grasps the skin between two fingers so that it is tented up. Commonly on the lower arm or abdomen is checked. The skin is held for a few seconds then released.
- **Option B:** These measurements are important to help evaluate a person's fluid and electrolyte balance, to suggest various diagnoses and allows for a prompt intervention to correct the imbalance. Records of all intake and output must be kept meticulously in an Intake and Output Chart (I/O Chart).
- **Option C:** Osmosis is the diffusion of water across a membrane in response to osmotic pressure caused by an imbalance of molecules on either side of the membrane. Osmoregulation is the process of maintenance of salt and water balance (osmotic balance) across membranes within the body's fluids, which are composed of water, plus electrolytes, and non-electrolytes.

25. A client has been diagnosed with adenocarcinoma of the stomach and is scheduled to undergo a subtotal gastrectomy (Billroth II procedure). During preoperative teaching, the nurse is reinforcing information about the procedure. Which of the following explanations is most accurate?

- A. The procedure will result in enlargement of the pyloric sphincter.
- B. The procedure will result in anastomosis of the gastric stump to the jejunum.
- C. The procedure will result in removal of the duodenum.

D. The procedure will result in repositioning of the vagus nerve.

Correct Answer: B. The procedure will result in anastomosis of the gastric stump to the jejunum.

A Billroth II procedure bypasses the duodenum and connects the gastric stump directly to the jejunum. The pyloric sphincter is removed, along with some of the stomach fundus. If the stomach cannot be reconnected to the duodenum, a Billroth II is performed, in which an opening hole is made in the next section of the small intestine, the jejunum, and the stomach attached at that opening.

- **Option A:** A pyloromyotomy is an operation to loosen the tight muscle causing the blockage between the stomach and small intestine. During the operation, the surgeon cuts the tight muscle between the stomach and small intestine. This loosens the muscle so the stomach can empty and food will be able to pass easily into the small intestine.
- **Option C:** The Whipple procedure (pancreaticoduodenectomy) is an operation to remove the head of the pancreas, the first part of the small intestine (duodenum), the gallbladder, and the bile duct. The remaining organs are reattached to allow the client to digest food normally after surgery.
- **Option D:** Billroth II gastrojejunostomy is a procedure that has been performed for tumor or severe ulcer disease in the distal stomach. There are many variations on the procedure, but they generally involve resection of the diseased portion of the distal stomach and a side-to-side anastomosis of the residual stomach to jejunum through the transverse mesocolon. It can be performed with either an antecolic or a retrocolic anastomosis.

26. You're caring for Jane, a 57 y.o. patient with liver cirrhosis who developed ascites and requires paracentesis. Before her paracentesis, you instruct her to:

- A. Empty her bladder.
- B. Lie supine in bed.
- C. Remain NPO for 4 hours.
- D. Clean her bowels with an enema.

Correct Answer: A. Empty her bladder.

A full bladder can interfere with paracentesis and be punctured inadvertently. The preferred site for the procedure is in either the lower quadrant of the abdomen lateral to the rectus sheath. Placing the patient in the lateral decubitus position can aid in identifying fluid pockets in patients with lower fluid volumes. Ask the patient to empty his or her bladder before starting the procedure.

- **Option B:** Placing the patient in the lateral decubitus position can aid in identifying fluid pockets in patients with lower fluid volumes. Paracentesis is done in a lateral decubitus or supine position. The ascites fluid level is percussed, and a needle is inserted either in the midline or lateral lower quadrant (lateral to rectus abdominis muscle, 2 cm to 4 cm superomedial to anterior superior iliac spine). This positioning avoids puncture of the inferior epigastric arteries.
- **Option C:** NPO is not necessary for the procedure. There are few absolute contraindications for paracentesis. Coagulopathy and thrombocytopenia (both very common in cirrhotic patients) are themselves not absolute contraindications as the incidence of bleeding complications from the procedure has been shown to be very low.
- **Option D:** An enema is not necessary for the procedure. A bedside ultrasound should be used to identify an appropriate location for the procedure. Ultrasound can confirm the presence of fluid and identify an area with a sufficient amount of fluid for aspiration, thereby decreasing the incidence of

both unsuccessful aspiration and complications.

27. Which category of drugs prevents/treats constipation by the osmotic drawing of water from extravascular space to intestinal lumen?

- A. Stimulants
- B. Bulk-forming agents
- C. Hyperosmotic agents
- D. Lubricants

Correct Answer: C. Hyperosmotic agents

Hyperosmotic agents change the osmotic gradient between the intestine and extravascular space causing water to move into the intestinal lumen and balance the gradient. Hyperosmotic agents reduce intraocular pressure by creating an osmotic gradient between the blood and the intraocular fluid compartments that causes fluid to shift from the eye to the blood. These agents are most effective when used for a short period of time. Systemic side effects and a limited period of efficacy in maintaining a reduction in intraocular pressure preclude their chronic use in the treatment of glaucoma.

- **Option A:** Caffeine has a unique mechanism as a stimulant as it works as an inhibitor at the adenosine receptors. Agonism at these receptors induces a sensation of drowsiness, and therefore inhibition at these receptors leads to increased energy levels. The general mechanism of action of amphetamines is the induction of catecholamines, specifically norepinephrine and dopamine. These catecholamines lead to increased energy levels, euphoria, increased libido, and higher cognition. The induction of most of the effects of cocaine is through the blockade of the dopamine transporter protein. This results in increased dopamine levels at the synaptic cleft, and hence the effects of dopamine become amplified.
- **Option B:** Bulk-forming laxatives absorb liquid in the intestines. This creates a bulky, more liquid-like stool that's softer and easier to pass. Common bulk-forming laxatives include psyllium (Metamucil), polycarbophil (FiberCon), and methylcellulose (Citrucel). Bulk-forming laxatives are different from these laxatives. They're most similar to stool softeners in that they help the bowels retain water. Unlike stimulant laxatives, they don't stimulate nerves that speed up the movement of bowels through the intestines. They also don't lubricate the stools like lubricant laxatives do. Osmotic laxatives differs from bulk-forming types by helping the intestines — not the bowels — retain water.
- **Option D:** Lubricant is a substance which is used to control (more often to reduce) friction and wear of the surfaces in a contact of the bodies in relative motion [1]. Depending on its nature, lubricants are also used to eliminate heat and wear debris, supply additives into the contact, transmit power, protect, seal.

28. 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.

29. A client with congestive heart failure has been receiving Digoxin (lanoxin). Which finding indicates that the medication is having a desired effect?

- A. Increased urinary output
- B. Stabilized weight
- C. Improved appetite
- D. Increased pedal edema

Correct Answer: A. Increased urinary output

- Option A: Lanoxin slows and strengthens the contraction of the heart. An increase in the urinary output shows that the medication is having the desired effect by eliminating excess fluid from the body.
- Option B: Decrease in weight is more expected.
- Option C: Improved appetite might occur but is not directly related to the question.
- Option D: Pedal edema would decrease, not increase.

30. Which of the following substances is most likely to cause gastritis?

- A. Milk
- B. Bicarbonate of soda, or baking soda
- C. Enteric-coated aspirin
- D. Nonsteroidal anti-inflammatory drugs

Correct Answer: D. Nonsteroidal anti-inflammatory drugs

NSAIDs are a common cause of gastritis because they inhibit prostaglandin synthesis. When NSAIDs irritate the gastric mucosa, they weaken the resistance to acid, causing gastritis, ulcers, bleeding, or perforation. The damage ranges from superficial injury to single or multiple ulcers, some of which may

bleed. Suppression of prostaglandin synthesis can occur systemically with both oral and parenteral NSAID therapy. The antiplatelet activity of some NSAIDs in low doses may cause bleeding from preexisting ulcers

- **Option A:** Milk, once thought to help gastritis, has little effect on the stomach mucosa. Studies on certain ingredients found in high concentrations in milk, such as calcium and amino acids, have suggested that milk may be harmful to ulcer patients because of its potential to directly stimulate acid secretion. Therapeutic endeavors have therefore aimed at reducing gastric acid secretion or neutralizing its effect.
- **Option B:** Bicarbonate of soda, or baking soda, may be used to neutralize stomach acid, but it should be used cautiously because it may lead to metabolic acidosis. The Canadian Society of Intestinal Research reminds people that baking soda is a temporary solution to acid reflux. They advise people that sodium bicarbonate is available from a pharmacy in the form of tablets and effervescent powder.
- **Option C:** ASA with enteric coating shouldn't contribute significantly to gastritis because the coating limits the aspirin's effect on the gastric mucosa. Enteric-coated aspirin is designed to resist dissolving and being absorbed in the stomach. As such, enteric-coated aspirin passes into the small intestine, where it's absorbed into the bloodstream. The purported goal is to prevent stomach ulcers and bleeding that can sometimes occur with aspirin use.

31. A patient's unresolved feelings related to loss would be most likely observed during which phase of the therapeutic nurse-patient relationship?

- A. Trusting
- B. Working
- C. Orientation
- D. Termination

Correct Answer: D. Termination

In the termination phase, the relationship comes to a close. Ending treatment sometimes may be traumatic for patients who have come to value the relationship and the help. Because loss is an issue, any unresolved feelings related to loss may resurface during this phase.

- **Option A:** Sometimes during the working phase of the relationship, the nurse may choose to self-disclose information about themselves to relate to the client. Limited self-disclosure may be beneficial when it helps the client express their feelings as they relate their experience to what the nurse has disclosed. Sharing personal information with a client can deepen trust.
- **Option B:** Within this phase, relevant treatment goals are established to guide nursing interventions and client actions, and the conversation in the working phase turns to active problem solving related to assessed needs. Clients can more deeply disclose concerns/issues that they are having.
- **Option C:** The nurse begins to build a sense of trust by providing the client with basic information (name, professional status, and essential information about the purpose and nature of the relationship). Introductions are important even when the client is confused, aphasic, unresponsive, or unable to respond. Nonverbal supportive communication such as a handshake, eye contact, a smile, and appropriate body language reinforce spoken words.

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

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

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

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

- **Option A:** Have the patient sit upright with her head tilted forward, and instruct her to apply direct external digital pressure to the nares with her index finger and thumb. The correct position for a patient with an anterior nosebleed is upright and leaning forward to prevent blood from entering the stomach and avoid aspiration. All of the other instructions are appropriate according to best practice for emergency care of a patient with an anterior nosebleed.
- **Option B:** Tell her to breathe through her mouth while she holds firm pressure on the soft flesh of her nose for at least 10 minutes. If bleeding persists, cotton pledgets soaked in a vasoconstrictor and anesthetic will be placed in the anterior nasal cavity, and direct pressure should be applied at both sides of the nose.
- **Option C:** Put on protective gear, including gown, gloves, and face shields. Provide an emesis basin and tissues. Tell her to spit blood into the basin if necessary. This helps prevent nausea and vomiting and lets you estimate the amount of bleeding.
- **Option D:** Cooling the nape of the neck is said to induce reflex constriction of the mucosal vessels of the nose, but there is no general agreement in the literature on the benefit of an ice pack as an adjuvant treatment of epistaxis.
- **Option E:** The nasal packing will be left in place for 3 to 5 days. Instruct the patient to avoid exerting herself, forcefully blowing her nose, or bending over. She should also avoid NSAIDs, alcoholic beverages, and smoking for 5 to 7 days. Tell her to apply water-soluble ointment to her lips and nostrils while packing is in place and to use a cool-mist room humidifier. Advise her to take steps to prevent constipation and straining, which increases the risk of bleeding.

33. She checks the documentary requirements for the applicants for the staff nurse position. Which one is not necessary?

- A. Certificate of previous employment
- B. Record of the related learning experience (RLE)
- C. Membership to an accredited professional organization
- D. Professional identification card

Correct Answer: B. Record of the related learning experience (RLE)

Record of RLE is not required for employment purposes but it is required for the nurse's licensure examination. Related Learning Experience (RLE) is a teaching-learning opportunity designed to advance the competencies of students utilizing methods in various health situations. Related learning experience provides an opportunity for the student-nurses to practice what has been learned in the classroom.

- **Option A:** A certificate of employment, also called an employment certificate, is used to verify the employment history of a former or current employee. If the employee is no longer employed by the employer, the employer usually issues the certificate of employment upon request by the employee. It is usually requested to complete the requirements for employment with a new employer.
- **Option C:** A professional organization, sometimes referred to as a professional association or professional body, exists to advance a particular profession, support the interests of people working in that profession and serve the public good. It facilitates innovation, communication, and connection.
- **Option D:** Professional Identification is a type of social identification and is the sense of oneness individuals have with a profession (e.g. law, medicine) and the degree to which individuals define themselves as professional members.

34. The nursing intervention to relieve “morning sickness” in a pregnant woman is by giving:

- A. Dry carbohydrate food like crackers
- B. Low sodium diet
- C. Intravenous infusion
- D. Antacid

Correct Answer: A. Dry carbohydrate food like crackers

Morning sickness may be caused by hypoglycemia early in the morning thus giving carbohydrate food will help. Foods high in starch — such as saltines, bread, and toast — help absorb gastric acid and settle a queasy stomach. The bland nature of a cracker helps to satisfy hunger (excessive hunger can exacerbate nausea) without the strong smells or tastes that may increase nausea, according to Erin Palinski-Wade, RD, CDE.

- **Option B:** A beverage containing sodium, such as a broth, may also help to promote hydration — which is important when the woman may be dehydrated from vomiting.
- **Option C:** In treating ailments like cramping, electrolyte loss, dehydration, and nausea, mobile IV drip therapy can effectively and quickly relieve even the most persistent cases of stomach upset. Nausea, especially when persistent, can significantly affect daily life. Intravenous fluid administration (20-30 mL/kg of isotonic sodium chloride 0.9% solution over 1-2 h) may also be used until oral rehydration is tolerated.
- **Option D:** Antacids containing aluminum, calcium, and magnesium were not found to be teratogenic in animal studies and are recommended as first-line treatment of heartburn and acid reflux during pregnancy.

35. Which cause of hypertension is the most common in acute renal failure?

- A. Pulmonary edema
- B. Hypervolemia
- C. Hypovolemia
- D. Anemia

Correct Answer: B. Hypervolemia

Acute renal failure causes hypervolemia as a result of overexpansion of extracellular fluid and plasma volume with the hypersecretion of renin. Therefore, hypervolemia causes hypertension. Fluid overload leads to endothelial dysfunction due to inflammation and ischemia-reperfusion injury, causing damage to glycocalyx and capillary leakage. Capillary leakage leads to interstitial edema and at the same time, due to significant loss of volume to the interstitial compartment, there is reduction in circulating intravascular volume. This may then lead to reduction in renal perfusion pressure and subsequently to AKI.

- **Option A:** Interstitial edema leads to impairment in the diffusion of oxygen and metabolites from capillaries to tissues. Interstitial edema increases tissue pressure and leads to obstruction of lymphatic drainage and disturbance in cell-to-cell interaction, which will lead to progressive organ failure. The kidney's ability to accommodate increasing hydrostatic interstitial pressures is limited due to renal capsule, and thus all these effects are more prominently seen in the kidney.
- **Option C:** Fluid overload is also known to cause distension of atria and stretching of vessel walls, causing a release of ANP, which further leads to EGL damage, and cascade leads to AKI. Massive fluid resuscitation and positive fluid balance are known risk factors for intra-abdominal hypertension (IAH) development. Elevated IAP leads to compression of intra-abdominal vessels causing compromised microvascular blood flow and increased renal venous congestion. This results in impaired renal plasma flow and decreased glomerular filtration rate, causing AKI.
- **Option D:** Acute kidney injury can be classified based on the causative factor into intrinsic renal, prerenal, and postrenal AKI. Prerenal causes contribute to the majority of community-acquired cases of AKI. In the case of prerenal AKI, fluid resuscitation is the gold standard, but if this resuscitation continues beyond the correction of hypovolemia, then it is associated with increased morbidity, mortality, and length of hospital stay as well as increased risk of AKI.