MSNCB CMSRN - Quiz Questions with Answers

Elements of Interprofessional Care

1.

A patient with which of the following conditions would be **most likely** to be found sitting on the side of the bed, leaning forward, with an anxious expression?

Emphysema

Pleural effusion

Chronic bronchitis

Gastroesophageal reflux disease

Correct answer: Emphysema

The patient with emphysema is usually anxious due to dyspnea related to mild hypoxemia and leans forward to facilitate breathing with the use of accessory muscles. Very little sputum is produced in emphysema, and the patient appears thin due to difficulty eating and breathing at the same time. Enlarged alveoli lead to the classic "barrel chest" deformity.

Chronic obstructive pulmonary disease (COPD) is one of the most common lung diseases. It makes it difficult to breathe. There are two main forms of COPD: Chronic bronchitis, which involves a long-term cough with mucus production, and emphysema, which involves the destruction of the lungs over time.

2.

When evaluating a patient for symptoms associated with acute pancreatitis, the nurse would observe for:

Turner's sign

Increased intracranial pressure (ICP)

Bradycardia

Hypertension

Correct answer: Turner's sign

Turner's sign is bruising of the lower abdomen and flank areas, indicative of a retroperitoneal bleed associated with acute pancreatitis.

ICP is not affected in a patient with pancreatitis. Tachycardia (not bradycardia) is usually associated with hypovolemic or pulmonary complications of pancreatitis. Hypotension (not hypertension) is associated with shock as seen in acute pancreatitis.

3.

You are caring for Mr. H., who was admitted for an exacerbation of ulcerative colitis (UC). You gather the following data during your admission assessment:

- **Objective**: Temperature: 101 degrees F, pulse 108, blood pressure: 101/55, respiratory rate: 20, O2 saturation: 98% room air
- **Subjective**: frequent bloody stools, increased abdominal pain, decreased appetite with a 6-pound unexpected weight loss. noncompliance with pharmaceutical treatment plan due to financial restraints.

You anticipate that all of the following diagnostics and labs will be ordered on this patient **except**:

Serum amylase

Complete metabolic panel (CMP)

Complete blood count (CBC)

Stool samples

Correct answer: Serum amylase

The physician will likely order a CMP to assess electrolyte imbalance(s), a CBC to evaluate infection and inflammation, and stool samples will need to be obtained for assessment of infectious organisms such as C. diff. Coagulation studies may also be necessary, depending on the amount of bleeding the patient is experiencing.

Serum amylase studies are not indicated for ulcerative colitis exacerbation, but rather in the diagnosis of pancreatitis. Amylase is an enzyme that helps digest carbohydrates and is made primarily in the pancreas and the glands that make saliva. When the pancreas is diseased or inflamed, amylase releases into the blood and increased levels can be detected.

4.

Your patient is preparing for a cardiac catheterization. Primary nursing responsibilities for this patient during preparation include all of the following **except**:

Asking the patient if they have any metallic implants or electronic devices

Teaching the patient about use of local anesthesia

Confirming that the patient has been NPO for 6 to 12 hours before the procedure

Determining potential allergy to dye

Correct answer: Asking the patient if they have any metallic implants or electronic devices

Cardiac catheterization involves inserting a catheter into the heart and can provide information about oxygen saturation and pressure reading within chambers. Dye can be injected to assist in examining the structure and motion of the heart. The procedure is done by insertion of a catheter into a vein (for right side of heart) or an artery (for left side of heart). Prior to cardiac catheterization, the patient should be NPO for at least 6 to 12 hours, in the event that emergency intubation is required during the procedure. NPO may indicate everything except medications, which should be taken with small sips of water the day of the procedure. The nurse should teach the patient about use of local anesthesia for catheter insertion, and in the event that sedation is ordered. In addition, the nurse should determine potential allergy to dye and obtain written consent.

Asking the patient if they have any metallic implants or electronic devices is necessary when the patient is getting an MRI performed, not a cardiac cath.

5.

A 65-year-old patient with benign prostatic hypertrophy (BPH) doesn't respond to medical treatment and is admitted to the facility for prostate gland surgery. Before providing preoperative and postoperative instructions to the patient, the nurse asks the surgeon which prostatectomy procedure will be performed.

What is the most widely used surgical procedure for BPH treatment?

Transurethral resection of prostate (TURP)

Transurethral incision of the prostate

Retropubic prostatectomy

Suprapubic prostatectomy

Correct answer: Transurethral resection of prostate (TURP)

TURP is the most widely used surgical procedure for BPH treatment. Because it requires no incision, TURP is especially suitable for men with relatively minor prostatic enlargements and for those who are poor surgical risks.

Suprapubic prostatectomy, retropubic prostatectomy, and transurethral incision of the prostate are less common procedures, and they all require incisions.

6.

When reviewing the chart of your patient with long-standing chronic obstructive pulmonary disease (COPD), you should pay close attention to the results of which pulmonary function test?

FEV1/FVC ratio

Residual volume

Total lung capacity

Functional residual capacity

Correct answer: FEV1/FVC ratio

The FEV1/FVC ratio (forced expiratory volume in 1 second/forced vital capacity) indicates disease progression. As COPD worsens, the ratio of FEV1 to FVC becomes smaller. Residual volume and total lung capacity reflect a loss of elastic recoil due to narrowing and obstruction of the airway. Functional residual capacity is increased in patients with obstructive bronchitis.

7.

The nurse is assessing a patient's lung sounds. Where should the nurse expect to find vesicular lung sounds?

In the peripheral lung fields

In the center fields of each lung

Over the sternum or trachea

Vesicular lung sounds are an abnormal finding, and should not be present in healthy patients

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Correct answer: In the peripheral lung fields

Vesicular lung sounds are low-pitched, soft, breezy lung sounds that should be present over the peripheral aspects of the lung fields. Bronchovesicular lung sounds should be present in the center fields of each lung and bronchial lung sounds should be noted over the sternum or trachea. Vesicular lung sounds are an expected finding.

8.

You are caring for a 35-year-old woman, in previous good health and on no medications, who was admitted to the hospital with petechiae mainly on her legs, hemorrhagic bullae of the oral mucosa, reddish to purple-colored spots and patches on the skin, epistaxis, and gingival bleeding. The only abnormal laboratory finding is a low platelet count of 30,000/mcL (normal is 150,000 to 400,000).

What is the **most likely** diagnosis?

- **Idiopathic thrombocytopenia purpura (ITP)**
- Multiple myeloma
- Disseminated intravascular coagulation (DIC)
- Acute myelogenous leukemia (AML)

Correct answer: Idiopathic thrombocytopenia purpura (ITP)

ITP is considered a diagnosis of exclusion. All secondary causes of thrombocytopenia must be ruled out. In this case, routine workup shows normal findings. Numerous medications can cause thrombocytopenia (heparin, alcohol, quinidine/quinine, sulfonamides), but the patient denies taking any medications.

In high-risk patients, HIV/AIDS should also be ruled out as a possible etiology of thrombocytopenia.

9.

What reflex grade would be assigned to a patient with a hypoactive patellar reflex?

Grade 1+

Grade 0

Grade 2+

Grade 3+

Correct answer: Grade 1+

Deep tendon reflex testing is part of the neurological assessment of a patient; reflexes are involuntary motor responses by the nervous system to a specific stimulus. Responses are graded on a 0 to 4+ scale:

- *Grade 0: absent reflex*
- *Grade 1+: hypoactive*
- *Grade 2+: normal*
- *Grade 3+: brisk*
- *Grade 4+: hyperactive with clonus (involuntary contraction)*

10.

You are caring for a 68-year-old woman who was admitted to the hospital with complaints of painless vaginal bleeding. You should make certain the patient is tested for which of the following health problems?

Uterine or cervical cancer

Ovarian cyst

Endometriosis

Hormonal imbalances

Correct answer: Uterine or cervical cancer

Painless, abnormal uterine bleeding is an early and common symptom of cancers of the uterus and cervix. Due to this finding, the patient should be tested for cancer.

Ovarian cyst and endometriosis are not probable, given the patient's age; hormonal imbalances may cause bleeding, but is less urgent than the threat of cancer.

11.

While completing the admission assessment of a patient who is non-ambulatory and is unable to move or reposition himself in bed, you note an intact blood-filled blister on the heel. You should document this wound as which of the following?

Suspected deep tissue injury

Stage II pressure ulcer

Unstageable pressure ulcer

Stage I pressure ulcer

Correct answer: Suspected deep tissue injury

Suspected deep tissue injury is defined as purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear.

Stage II pressure ulcers are defined as partial thickness loss of dermis or an intact or open/ruptured serum-filled blister. Unstageable pressure ulcers are defined as full thickness tissue loss. Stage I pressure ulcers are defined as intact skin with non-blanchable redness.

12.

All of the following statements related to sputum specimens are correct **except**:

Broad spectrum antibiotics should started initially until a specimen can be collected

The specimen must come from the lung, not from the oropharynx

Only a single specimen is required for culturing to identify pulmonary infections

Sputum specimens can be used to identify cancer cells

Correct answer: Broad spectrum antibiotics should be started initially until a specimen can be collected

Culture and sensitivity specimens are obtained before initiating antibiotic therapy.

Broad spectrum antibiotics are started initially until an organism is identified on a culture specimen, and the antibiotic is changed to one to which the organism is sensitive.

13.

The nurse suspects a patient of having meningitis. Which of the following interventions would **best** help the nurse assess for this condition?

Flex the patient's neck

Raise the patient's arms to a 90-degree angle from their body

Have the patient rapidly touch their finger to their nose, then the nurse's finger and back

Administer Tylenol and monitor the patient's response

Correct answer: Flex the patient's neck

Flexing the patient's neck and observing for flexion in the hips and knees is how Brudzinski's sign is assessed. Positive flexion of the hips and knees indicates irritation of the meningitis and indicates that meningitis may be present. Raising the patient's arms to a 90-degree angle from their body and observing for drift is a method of assessing for stroke. Having the patient rapidly touch their finger to their nose, then the nurse's finger and back is a method of assessing for ataxia, but this is not an ideal assessment to determine the presence of meningeal irritation. Administering Tylenol and monitoring the patient's response will not help assess for meningitis.

14.

Which of the following diagnostic studies is the **most** reliable tool for gastrointestinal disorders?

Endoscopy

Radiology

Angiography

Ultrasonography

Correct answer: Endoscopy

Endoscopy is one of the most reliable diagnostic tools for gastrointestinal disorders because it can pinpoint the area of concern. A flexible, lighted tube called an endoscope is inserted orally or rectally for direct visualization of the concerning area of the GI tract; usually, photographs can be obtained. Specific procedures include gastroscopy, duodenoscopy, colonoscopy, and endoscopic retrograde cholangiopancreatography (ERCP).

15.

The med/surg nurse is assessing a patient who was recently diagnosed with hyperthyroidism. Which of the following symptoms would the nurse **not** expect to see?

Constipation

Tachycardia

Arrhythmias

Tremors

Correct answer: Constipation

Hyperthyroidism causes an increased metabolic rate that can lead to tachycardia, arrhythmias, tremors, and diarrhea. Constipation is very unlikely to occur with hyperthyroidism, and is more common with hypothyroidism.

16.

Which of the following diagnostic studies involves injecting a radioactive tracer into a vein to be taken up by the heart for the purpose of supplying information via pictures about contractility, perfusion, and cell damage?

Nuclear heart scan

Magnetic resonance imaging (MRI)

Coronary angiography

Cardiac catheterization

Correct answer: Nuclear heart scan

A nuclear heart scan is a test that provides important information (myocardial contractility, perfusion, and any cell injury) about the health of the heart. For this test, a safe, radioactive substance called a tracer is injected into the bloodstream through a vein. The tracer travels to the heart and releases energy.

An MRI provides images of the heart in multiple planes and obtains information about cardiac tissue integrity, aneurysms, ejection fraction (EF), cardiac output, and patency of proximal coronary arteries. A coronary angiography involves injecting radiopaque dye directly into the coronary arteries for the purpose of evaluating the patency of these arteries and collateral circulation to the heart. A cardiac cath involves insertion of a catheter into the heart and can obtain information about O2 saturation and pressure reading within the chambers of the heart.

17.

The **most common** diagnostic study used to assess the musculoskeletal system and monitor effects of treatment is:

X-ray

Magnetic resonance imaging (MRI)

Computed tomography (CT) scan

Bone scan

Correct answer: X-ray

Dense bones show as white on standard x-ray, providing information about bone deformity, joint congruity, bone density, and calcification, and are the most common diagnostic study used.

MRIs, CTs, and bone scans are also diagnostic studies used frequently, but not the most common.

18.

You are preparing your patient for an abdominal CT to evaluate for possible appendicitis. Which of the following instructions is **correct**?

The only thing that you need do to prepare for this exam is to change into a hospital gown.

You cannot eat for four hours before this test because it can affect the accuracy of the imaging.

You will need to swallow barium during this procedure to help the doctor visualize your intestinal tract better.

This exam will be more helpful and accurate if you have a full bladder during the test.

Correct answer: The only thing that you need do to prepare for this exam is to change into a hospital gown.

No preparation is needed for an abdominal CT besides ensuring there is nothing metal the patient is wearing that could interfere with the imaging. This can be addressed by having the patient change into a hospital gown.

While a patient suspected of appendicitis should be NPO for potential surgery, being NPO is not necessary for the accuracy of a CT. Barium swallows would not be needed for this test and are more commonly used for evaluating the upper GI tract. Having a full bladder is necessary for obstetric ultrasounds, not for abdominal CTs.

19.

Mr. J., your elderly patient, is recovery following bowel resection surgery. When removing his abdominal bandage to complete daily wound care, you note that the surgical wound has eviscerated. Your **best** response is to:

Cover the protruding portion with gauze soaked in normal saline, and notify the physician

Continue with the dressing change as ordered and chart your findings, as this is expected following bowel resection procedures

Cover the protruding part with the dressing that was just removed, and notify the physician

Using a sterile saline-soaked Q-tip, gently reinsert the protrusion into the incision, and notify the physician

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Correct answer: Cover the protruding portion with gauze soaked in normal saline, and notify the physician

Evisceration of a wound (protrusion of wound contents) is a serious complication, especially with abdominal incisions. You should cover the protruding part with gauze soaked in normal saline, rather than the dressing that was just removed and is contaminated, and notify the surgeon immediately for content replacement and reclosure. Maintain the patient on bed rest and monitor his vital signs closely.

20.

Acute gastrointestinal hemorrhage is characterized by which of the following clinical manifestations?

Body will attempt to expand plasma volume for 6-8 hours through the action of antidiuretic and aldosterone

Decreased platelet counts due to decreased coagulation process

Decreased BUN as blood proteins are depleted

Decreased creatinine level

Correct answer: Body will attempt to expand plasma volume for 6-8 hours through the action of antidiuretic and aldosterone

Gastrointestinal hemorrhage is defined as acute loss of blood from the upper GI tract. "Acute" or "massive" bleeding is defined as loss of 25% of circulating volume (approximately 1,500 mL in adults). Clinically, the patient's body will attempt to expand plasma volume due to the action of antidiuretic and aldosterone; platelet counts will increase due to instant (not decreased) coagulation process. BUN and creatinine levels will elevate as blood proteins accumulate (not deplete) in the intestine. Other manifestations include decreased blood pressure as blood is lost; venous and peripheral artery constriction causing oliguria, and skin that is cold, clammy, and pale; hematochezia; and hematemesis.

21.

A hospitalized patient with chronic obstructive pulmonary disease (COPD) is taking a bronchodilator and tells you that he is going to begin a smoking cessation program when he is discharged. You should tell the patient to notify the doctor if his smoking pattern changes because he:

May need his medication dosage adjusted

Will require an increase in antitussive medication

May no longer need annual influenza immunizations

Will not derive as much benefit from inhaler use

Correct answer: May need his medication dosage adjusted

Changes in smoking patterns should be discussed with the physician because they have an impact on the amount of medication needed.

Patients with COPD are placed on expectorants, not antitussives. An annual influenza vaccine is recommended for all those with lung disease, and benefits from inhaler use will be increased when the patient stops smoking.

22.

Chronic bronchitis is characterized by which of the following clinical manifestations?

Pulmonary hypertension in the late stages

Chronic non-productive cough

Respiratory alkalosis

Left-sided heart failure in the late stages

Correct answer: Pulmonary hypertension in the late stages

Clinical manifestations of chronic bronchitis include:

- *Chronic cough, with production of large amounts of thick, tenacious mucus (not non-productive)*
- *Wheezing and rhonchi*
- *Cyanosis and hypoxemia that leads to hypercapnia and respiratory acidosis (not respiratory alkalosis)*
- *Right-sided congestive heart failure (not left), and pulmonary hypertension*

23.

A gastric emptying study is an example of which of the following?

A nuclear imaging scan

Ultrasonography

A computerized tomography (CT) scan

Endoscopy

Correct answer: A nuclear imaging scan

Nuclear imaging scans show the size, shape, and position of organs. They may also identify functional disorders and structural defects; gastric emptying studies and liver/spleen scans are examples. A radioactive isotope is injected intravenously, and a scanning device picks up the radioactive emission. Only tracer doses of radioactive isotopes are used. For gastric emptying, the patient may be asked to eat a cooked egg white or to drink orange juice prior to the study.

Ultrasonography can detect masses (tumors, gallstones, etc.) abscesses, cysts, and cirrhotic liver tissue. CT scans are used primarily for the biliary tract, liver, and pancreatic disorders. Endoscopic procedures (including gastroscopy, duodenoscopy, colonoscopy) provide direct visualization of the area of concern within the GI tract with a lighted, flexible endoscope inserted orally or rectally.

24.

Which of the following patients is **most likely** to benefit from use of a pessary?

A patient with a prolapsed bladder

A patient with reflex incontinence

A patient with urinary retention caused by an enlarged prostate

A patient who is concerned about becoming pregnant

Correct answer: A patient with a prolapsed bladder

A pessary is placed into the vagina to reduce a prolapsed bladder or uterus. While a pessary may help with incontinence due to prolapsed bladder, reduction of the prolapsed organ is the primary indication. A patient with a prostate would never use a pessary, as they are exclusively used for female patients. Pessaries are not used as a method of birth control.

25.

A nurse is caring for an elderly patient with congestive heart failure. The nurse keeps in mind that respiratory changes associated with aging include diminished effectiveness of gas exchange between alveolus and capillary walls leading to:

A decline in pO2 and O2 saturation

Thinning of pulmonary vasculature

Thinning of moist mucous membranes

An increase in pH and pCO2

Correct answer: A decline in pO2 and O2 saturation

With age, the respiratory system changes in relation to environmental factors, heredity, and other disease processes. Pulmonary vasculature typically becomes thicker (not thinner) and fibrous, which in turn diminishes the effectiveness of gas exchange between alveolus and capillary walls; pO2 and O2 saturations decline, while pH and pCO2 remain the same (not increase). In addition, the gradual decline in body fluid composition affects moist mucous membranes, which become thick (not thin) and tenacious. Lastly, calcification of costal cartilages causes a decline in lung tissue elasticity and reduced compliance of the thorax.

26.

Your patient, Mrs. Y., is scheduled for an oral cholecystogram. You instruct her that:

She may be asked to drink milk prior to or during the procedure

She may be asked to eat a piece of fried chicken for the procedure

She may be asked to drink barium for the procedure

Radiopaque dye will be injected during the procedure

Correct answer: She may be asked to drink milk prior to or during the procedure

An oral cholecystogram (or gallbladder series) is an X-ray examination to visualize the gallbladder. This test determines the gallbladder's ability to concentrate and store dye, and the patency of the biliary duct system. The patient may be asked to drink milk or cream to check for gallbladder emptying.

A radiopaque dye is ingested orally or per T-tube (not injected). After administration of the dye, Mrs. Y. will need to remain NPO. A gastric emptying study requires the patient to eat a cooked egg or drink orange juice. Barium is often ingested prior to CT scans of the gastrointestinal system.

27.

The nurse is taking the history of a patient who has had benign prostatic hyperplasia (BPH) in the past. To determine whether the patient currently is experiencing difficulty, the nurse asks about the presence of which of the following **early** symptoms?

Decreased caliber and force of urinary stream

Nocturia

Urge incontinence

Bladder pain

Correct answer: Decreased caliber and force of urinary stream

Benign prostatic hyperplasia (BPH) is an enlarged prostate gland. The prostate gland surrounds the urethra, the tube that carries urine from the bladder out of the body. As the prostate enlarges, it may squeeze or partly block the urethra; this often causes problems with urinating.

Early symptoms of obstruction include decreased caliber and force of the urinary stream, difficulty in initiating voiding, and intermittency or dribbling when urinating. Later, irritating symptoms, signaling inflammation or infection, include urinary frequency, urgency, dysuria, bladder pain, nocturia, and incontinence.

28.

The nurse is caring for a patient with a neurological deficit involving the limbic system. Specific to this type of deficit, the nurse would document which of the following information related to the patient's behavior?

Affect is flat, with periods of emotional lability

Is disoriented to person, place, and time

Cannot recall wife's name

Demonstrates inability to add and subtract; does not know who President is

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Correct answer: Affect is flat, with periods of emotional lability

The limbic system, located within the basal temporal lobe, is responsible for feelings (affect) and emotions and controls emotion-related behavior. Problem-solving and knowledge of current events relate to function of the frontal lobe (intellectual function).

The cerebral hemispheres, with specific regional functions, control orientation. Long-term memory is controlled by the hippocampus, located within the temporal lobe.

29.

An ACTH (adrenocorticotropic hormone) stimulation test is commonly used to diagnose:

Addison's disease

Grave's disease

Cystic fibrosis

Hashimoto's disease

Correct answer: Addison's disease

The ACTH stimulation test measures blood and urine cortisol before and after injection of ACTH. Patients with chronic adrenal insufficiency or Addison's disease generally do not respond with the expected increase in cortisol levels. An abnormal ACTH test may be followed by a CRH (corticotropin-releasing hormone) stimulation test to pinpoint the cause of adrenal insufficiency.

Grave's disease is the most common cause of hyperthyroidism and is commonly diagnosed with serum TSH, T3, and T4 tests, as well as radioiodine uptake scans. Hashimoto's disease, or chronic thyroiditis, causes hypothyroidism and involves similar testing (T3, T4, TSH, and RAIU scan). Cystic fibrosis is diagnosed via a sweat test.

30.

You are reading the ER chart of a patient who is being admitted and note that the ER nurse wrote, "Telangiectasia noted on the right forearm." Which of the following should you expect related to this assessment when the patient arrives to your floor?

The patient will not need any intervention for this finding

The patient has a liver problem that requires further assessment

The patient may need steroids upon arrival

The patient is likely on chemotherapy

Correct answer: The patient will not need any intervention for this finding

Telangiectasia is a skin lesion that is characterized by fine, irregular lines. This skin condition is benign and is not typically an indicator of any concerning disease process.

Telangiectasia is not typically caused by liver problems, does not require steroids or any other form of treatment, and does not indicate that a patient is likely receiving chemotherapy.

31.

Which of the following patients with an MI is **least likely** to need surgical intervention?

A patient with a troponin greater than 1.2 ng/mL

A patient with 80% blockage of the left main coronary artery

A patient with 95% blockage of at least two coronary arteries

A patient who has not responded to medical management

Correct answer: A patient with a troponin greater than 1.2 ng/mL

Indications for surgical intervention of myocardial infarction include a significant (>75%) blockage of any two coronary arteries or the left main coronary artery. Ineffective medical management is also an indication for surgical intervention. Surgical intervention is not typically determined based exclusively on the troponin level.

32.

You are reviewing documentation on a patient in your care, and you see that rhonchi lung sounds were present on the previous shift. Upon chest auscultation, you note that rhonchi are still present in your patient. You are aware that:

Rhonchi are an expiratory sound caused by bronchial narrowing due to inflammation, fluid, or obstruction

Rhonchi are most commonly heard on inspiration and are caused by upper airway obstruction

Rhonchi are caused by inflamed surfaces of the pleural membranes moving against each other

Rhonchi are audible without a stethoscope

Correct answer: Rhonchi are an expiratory sound caused by bronchial narrowing due to inflammation, fluid, or obstruction

Rhonchi are continuous low-pitched, rattling lung sounds that often resemble snoring. Obstruction or secretions in larger airways are frequent causes of rhonchi. They can be heard in patients with chronic obstructive pulmonary disease (COPD), bronchiectasis, pneumonia, chronic bronchitis, or cystic fibrosis.

Pleural friction rubs are caused by inflamed surfaces of the pleural membranes moving against each other. Wheezes may be audible without a stethoscope, but rhonchi are generally not. Stridor is an inspiratory sound associated with upper airway obstruction.

33.

Clinical manifestations of tension pneumothorax may include:

Hypotension, distended neck veins, tracheal shift

Hypertension, absent breath sounds, distended neck veins

Hypo-resonance over pneumothorax, pallor, tachypnea

Hypo-resonance over pneumothorax, distended neck veins, tachycardia

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Correct answer: Hypotension, distended neck veins, tracheal shift

In tension pneumothorax, compression of all structures within the thorax (lungs, heart, great vessels) occurs due to a build-up of pressure caused by air being drawn into the pleural space that cannot escape.

Hypotension, not hypertension, is a clinical manifestation of this condition due to a decrease in venous return, and hyper-resonance, not hypo-resonance, occurs over pneumothorax.

34.

The physician has ordered several laboratory tests to help diagnose an infant's bleeding disorder. Which of the following tests, if abnormal, would the nurse interpret as **most** likely to indicate hemophilia?

Activated partial thromboplastin time (APTT)

Bleeding time

Fibrin degradation products (FDP)

Reticulocyte count

Correct answer: Activated partial thromboplastin time (APTT)

Activated partial thromboplastin time (APTT) measures the activity of thromboplastin, which is dependent on intrinsic clotting factors. In hemophilia, the intrinsic clotting factor VIII (antihemophilic factor) is deficient, resulting in a prolonged APTT.

Bleeding time reflects the ability of small blood vessels to constrict; FDP reflects the degree of fibrinolysis and is used to detect DIC; reticulocyte count reflects the number of immature RBCs, giving an indication of how a person may respond to blood loss in a preoperative situation. All of these are unaffected in people with hemophilia.

35.

When assessing a male patient with pheochromocytoma, a tumor of the adrenal medulla that secretes excessive catecholamine, the nurse is **most likely** to detect:

Tachycardia

A fasting blood glucose of 60 mg/dL

A supine blood pressure of 100/55

Weight gain

Correct answer: Tachycardia

Pheochromocytomas, rare tumors of the adrenal medulla (chromaffin tissue) that secrete excessive amounts of catecholamines (mostly norepinephrine), cause headaches, hypertension, tachycardia, hyperglycemia, hypermetabolism, and weight loss. Sweating, nervousness, anxiety, chest or abdominal pain, nausea, weakness, and orthostatic hypotension are also common.

36.

What is the primary symptom, and an early "red flag," of compartment syndrome following total joint arthroplasty (TJA)?

Increasing pain

Diminished pulses

Coolness of the affected extremity

Paresthesia

Correct answer: Increasing pain

Compartment syndrome following TJA is the result of high pressure in a muscle compartment in a closed fascial space related to swelling and a resultant decrease in pressure. The primary symptom of compartment syndrome is increasing pain or pain that is out of proportion to injury. Pain occurs as an early indicator of tissue compromise and should be recognized as a "red flag."

Later signs of compartment syndrome include diminished pulses, pallor, paresthesia ("pins and needles"), coolness of the affected extremity, and paralysis (indicative of irreversible damage).

37.

It is normal when auscultating the chest to hear:

Vesicular breath sounds in the peripheral lung fields

Bronchovesicular lung sounds in the peripheral lung fields

Bronchial breath sounds in the peripheral lung fields

Crackles in the peripheral lung fields

Correct answer: Vesicular breath sounds in the peripheral lung fields

Vesicular breath sounds are low-pitched, soft, breezy sounds heard over the peripheral lung fields; inspiratory phase is generally longer and more audible than expiratory phase.

Bronchovesicular lung sounds are harsh and moderate in pitch and intensity, normally heard over the thorax where the bronchi are closest to the chest wall (found at the edges of the sternum or scapula); abnormal if heard in peripheral lung fields.

Bronchial breath sounds are loud, harsh, with a blowing, hollow quality; normally heard over the sternum or trachea and abnormal if heard in peripheral lung fields.

Crackles are always abnormal lung sounds, caused by fluid in the small airways or atelectasis, and associated with inflammation or infection of the small bronchi, bronchioles, and alveoli.

38.

A low thyroid-stimulating hormone (TSH) level with elevated triiodothyronine (T3) and thyroxine (T4) levels indicates:

Primary hyperthyroidism

Secondary hyperthyroidism

Primary hyperparathyroidism

Secondary hypothyroidism

Correct answer: Primary hyperthyroidism

Primary hyperthyroidism results from hypersecretion of thyroid hormones and is evidenced by increased serum T3 and T4, and decreased serum TSH.

In rare cases of secondary hyperthyroidism (excess secretion of TSH), the TSH level will be increased. Primary hyperparathyroidism is characterized by a state of hypersecretion of one or more of the parathyroid glands, which is usually due to benign adenoma or hyperplasia.

In rare cases of secondary hypothyroidism (decreased secretion of TSH), the TSH level will be decreased, as well as T3 and T4.

39.

You are caring for Mr. H., who was admitted for an exacerbation of ulcerative colitis (UC). You gather the following data during your admission assessment:

- **Objective**: Temperature: 101 degrees F, pulse 108, blood pressure: 101/55, respiratory rate: 20, O2 saturation: 98% room air
- **Subjective**: frequent bloody stools, decreased appetite with a 6-pound unexpected weight loss. noncompliance with pharmaceutical treatment plan due to financial restraints.

All of the following consultations should be made for the patient **except**:

Pain management

Gastroenterologist

Nutritionist

Social Work

Correct answer: Pain management

Consultations that should be made include nutritionist for educating patient on dietary modifications to manage symptoms, social work to discuss community resources for financial and psychosocial support, and gastroenterologist for close monitoring and follow-up of patient's UC (if surgical procedure is indicated, this would be performed by gastroenterologist).

Pain management is not generally necessary as symptoms can be well managed with drug therapies consisting of aminosalicylates, antimicrobials, corticosteroids, immunosuppressants, and biologic therapy.

40.

You are providing care to a patient with chronic obstructive pulmonary disease (COPD) and are aware that:

Pulmonary function testing that measures expiratory airflow limitation is key to diagnosing this disease

With adequate treatment and patient compliance, COPD is fully reversible

Airway obstruction in COPD is typically more pronounced on inspiration

The barrel chest deformity often seen in emphysema is caused by copious secretions that are difficult to clear from the airways

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Correct answer: Pulmonary function testing that measures expiratory airflow limitation is key to diagnosing this disease

COPD is a disease characterized by airflow limitation that is not fully reversible; it is progressive and associated with an abnormal inflammatory response of the lungs to noxious particles or gases.

Airway obstruction is always more pronounced on expiration, due to airway narrowing that normally occurs with expiration. The barrel chest deformity often seen in emphysema is caused by enlarged alveoli due to trapped air and increase in the functional residual volume (FRV). Copious secretions are often seen in chronic bronchitis, not COPD.

41.

Your male patient, who has a diagnosis of chronic liver failure, has deficient vitamin K absorption. Which assessment findings indicate vitamin K deficiency?

Petechiae and ecchymosis

Dyspnea and fatigue

Ascites and orthopnea

Testicular atrophy and gynecomastia

Correct answer: Petechiae and ecchymosis

Chronic liver failure disrupts the liver's normal use of vitamin K to produce prothrombin (a clotting factor). Consequently, you should monitor the patient for signs of bleeding, including petechiae and ecchymosis; prothrombin time (PT) may be increased as well; vitamin K will likely need to be administered as ordered.

Dyspnea and fatigue suggest anemia. Ascites and orthopnea are not related to vitamin K absorption, although these are often present in liver failure, particularly ascites. Testicular atrophy and gynecomastia result from decreased estrogen metabolism by the patient's diseased liver.

42.

A nurse performs an admission assessment on a patient with a diagnosis of active tuberculosis. The nurse reviews the result of which diagnostic test that will **confirm** this diagnosis?

Sputum culture

Bronchoscopy

Tuberculin skin test

Chest x-ray

Correct answer: Sputum culture

Tuberculosis (TB) is definitively diagnosed through culture and isolation of Mycobacterium tuberculosis (pulmonary organism causing TB).

A presumptive (not definitive) diagnosis is made based on a tuberculin skin test (does not determine if TB is active), a sputum smear that is positive for acid-fast bacteria, a chest x-ray, and histological evidence of granulomatous disease on biopsy via a bronchoscopy.

43.

You are caring for a 24-year-old male who was in an MVA and had a ruptured spleen. The patient required an emergent splenectomy and received 14 units of blood to treat hemorrhage that occurred before and during the surgery. Which of the following urological complications is the **most** important consideration when assessing this patient?

The patient may have acute kidney injury due to insufficient circulation to the kidneys while hemorrhaging

The patient may have glomerulonephritis due to inflammation after surgery

The patient's splenectomy will lead to a decrease in the secretion of the antidiuretic hormone, potentially increasing urine production

The patient may experience incontinence due to neuromuscular changes from the trauma and surgery

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Correct answer: The patient may have acute kidney injury due to insufficient circulation to the kidneys while hemorrhaging

Hemorrhagic shock can lead to acute renal failure, also called acute kidney injury, because of decreased blood flow to the kidneys.

Glomerulonephritis is caused by infection, not by inflammation. A splenectomy does not affect the secretion of the antidiuretic hormone. Incontinence is possible, but not likely. Incontinence is, however, not as an important of a consideration as potential acute kidney injury.

44.

Which of the following is the **most** appropriate nursing diagnosis for a patient with a strained ankle?

Impaired physical mobility

Risk for deficient fluid volume

Disturbed body image

Impaired skin integrity

Correct answer: Impaired physical mobility

Ankle strains result in pain and damage to the muscle body and tendon (from overstretching, misuse, or overexertion), as well as altered physical mobility.

Although the traumatic event that caused the strain may disrupt the skin, the manifestations of a strain don't include disruption of skin integrity. Risk for deficient fluid volume is an appropriate nursing diagnosis for a process that results in the loss of a large volume of fluid or blood (not for a strain). Disruptions in body image can occur if the client's perception of self is altered because of the strain, but this is unlikely.

45.

A med/surg patient is suspected of having a pleural effusion. Which of the following findings would indicate that the patient does **not** have a pleural effusion?

Tracheal deviation towards the affected side

Nonproductive cough

Dyspnea

Dull percussion over the affected area

Correct answer: Tracheal deviation towards the affected side

Tracheal deviation may occur with severe pleural effusions, but will normally be away from the affected side. A nonproductive cough, dyspnea, and dull percussion over the effusion are all indicators of a pleural effusion.

46.

A 38-year-old patient is admitted to the hospital with the following clinical manifestations: dyspnea, tachypnea, and pink, frothy sputum. The nurse determines that the patient is experiencing:

Pulmonary embolism

Lung cancer

Pleural effusion

Lung abscess

Correct answer: Pulmonary embolism

A pulmonary embolism is an obstruction of the pulmonary vascular bed by a dislodged venous thrombus. The patient may experience tachypnea and tachycardia, syncope and cyanosis, crackles upon lung auscultation, dyspnea, coughing up blood or pink, frothy sputum, pleuritic chest pain, anxiety and a sense of doom, hemoptysis, and low-grade fever.

A pulmonary embolism is life-threatening and requires emergent medical treatment and cardiopulmonary support. None of the other conditions would cause this set of symptoms.

47.

You are performing a skin assessment on a new admission and notice a semisolid, encapsulated mass extending deep into the dermis. What would be the **best** word to use to describe this lesion in your documentation?

Cyst

Comedo

Nodule

Papule

Correct answer: Cyst

A cyst is a semisolid or fluid filled encapsulated mass that can extend deep into the dermis.

A comedo is plugged, exfoliative pilosebaceous duct formed from sebum and keratin. A nodule is defined as a firm, raised lesion that is deeper than a papule and extends into the dermal layer. A papule is a firm, inflammatory, raised lesion.

48.

You are assessing a patient with possible Cushing's Syndrome. Which of the following would be an expected finding in this patient?

Abdominal obesity

Hypotension

Alopecia

Oliguria

Correct answer: Abdominal obesity

Cushing's syndrome/disease is the result of the over-secretion of adrenocortical hormones (cortisol). Because of changes in fat distribution, adipose tissue accumulates in the abdomen, face, and dorsocervical (buffalo hump) areas.

Hypertension (not hypotension) is caused by fluid retention. Hirsutism (not alopecia) is likely to develop, as well as polyuria due to increased glucose in the body, which leads to osmotic diuresis and therefore, greatly increased urine production.

49.

What is the **most** comprehensive and **most** accurate way to diagnose myocardial infarction?

Angiography

Elevated troponin

EKG changes

Patient reports of chest pain

Correct answer: Angiography

Angiography allows for direct visualization and evaluation of the blood flow through the coronary arteries, making it the most accurate and comprehensive method for diagnosing myocardial infarction.

Myocardial infarction can also be diagnosed using elevated troponin, EKG changes, and reports of chest pain, and may be diagnosed using only these criteria in some clinical settings, but the most accurate way for diagnosing an MI will be through angiography.

50.

Thrombolytic therapy is designed to break up fibrin mesh in clots within the coronary arteries, and is indicated for which of the following patients experiencing a myocardial infarction (MI)?

A patient with chest pain unrelieved by sublingual nitroglycerin

A patient whose chest pain began 8 hours ago

A patient whose BP is 210/120

A pregnant patient with ST-segment elevation in two leads on 12-lead EKG

Correct answer: A patient with chest pain unrelieved by sublingual nitroglycerin

Indications for thrombolytic therapy, designed to dissolve clots within the coronary arteries, includes:

- *Chest pain unrelieved by sublingual nitroglycerin*
- *ST-segment elevation in two leads on 12-lead EKG*
- *Chest pain onset and duration less than 6 hours*

Contraindications of thrombolytic therapy include pregnancy and systolic BP of > 180 or diastolic BP of > 110. Other contraindications include recent CVA, recent GI bleed, recent surgery, and traumatic CPR.

51.

A patient is admitted to the hospital with severe pain, guarding, and rigidity of the abdomen. Labs indicate increased levels of amylase and leukocytosis. Cullen's sign is positive, and the patient is showing some signs of respiratory distress. The patient has a history of alcohol abuse. Which of the following conditions is **most** likely to be diagnosed?

Acute pancreatitis

Pneumonia

Acute liver failure

Alcoholic cirrhosis

Correct answer: Acute pancreatitis

Patients with acute pancreatitis clinically present as acutely ill, with severe pain, guarding, and rigidity of the abdomen. Labs indicate increased amylase and leukocytosis (increased white blood cells). Positive Turner's (bruising of the lower abdomen and flank areas, indicative of retroperitoneal bleed) or Cullen's sign (bruising around the umbilicus, indicative of intra-abdominal bleeding) indicates hemorrhage. Hypotension or shock are common indications. Respiratory distress occurs due to accumulation of fluid in the retroperitoneal space. The incidence of acute pancreatitis is 1/10,000 in the general population; 1/100 among alcoholics.

52.

All of the following are signs and symptoms associated with diabetic ketoacidosis (DKA) **except**:

Metabolic alkalosis

Hyperglycemia

Dehydration

Polyuria

Correct answer: Metabolic alkalosis

DKA is a potentially life-threatening condition that develops when cells in the body are unable to get the sugar (glucose) they need for energy because there is not enough insulin. Causes include illness/infections, omission of insulin, and newly diagnosed Type 1 DM, due to any absolute deficiency of endogenous insulin.

Signs and symptoms are as follows:

- *Hyperglycemia (usually > 250 mg/dl)*
- *Metabolic acidosis (not alkalosis), characterized by pH less than 7.2*
- *Dehydration*
- *Polyuria*
- *Polydipsia*
- *Anorexia*
- *Abdominal pain*
- *Nausea and vomiting*
- *Rapid respirations*
- *Acetone odor to breath*
- *Weakness*
- *Warm dry skin*
- *Tachycardia*
- *Somnolence*
- *Coma*

Treatment includes emergency measures, requiring hospitalization, IV fluids, insulin, and electrolyte replacement.

53.

Which of the following options is the **best** treatment to reverse the effects of polycystic kidney disease (PKD)?

Kidney transplant

Surgical drainage and removal of cysts as they develop

Furosemide (Lasix) 40 mg PO BID

Broad spectrum antibiotic therapy while cysts are present

Correct answer: Kidney transplant

PKD is a progressive, genetic, incurable condition in which normal kidney tissues are replaced with cysts. While surgical drainage of cysts may be indicated in some circumstances, this will not reverse the effects of PKD and will be more related to patient comfort. Lasix will not help with this condition. Antibiotic therapy will not reverse these cysts, as they are not caused by infection. Antibiotics may be needed to treat infections that develop, but do not reverse the effects of PKD.

Ultimately, the effects of PKD cannot be reversed, and kidney transplant is the only way to eliminate the effects of this disease.

54.

Noninvasive diagnostic studies of the cardiovascular system include:

MRI, phonocardiogram, echocardiogram

MRI, phonocardiogram, nuclear cardiology

Echocardiogram, nuclear cardiology, thallium imaging

MRI, nuclear cardiology, echocardiogram

Correct answer: MRI, phonocardiogram, echocardiogram

Noninvasive diagnostic studies of the cardiovascular system include MRI, phonocardiogram, echocardiogram, EKG, and chest x-ray.

MRI (magnetic resonance imaging) provides images in multiple planes with uniformly good resolutions. It cannot be used in persons with any implanted ferromagnetic metallic devices unless they are MRI safe. Phonocardiograms and echocardiograms are also noninvasive procedures because they do not involve the injection of any substances. A phonocardiogram uses microphones to record cardiac activity, and an echocardiogram uses ultrasound to record the activity of the heart.

Nuclear cardiology involves the injection of a radioactive isotope, and thallium imaging involves the injection of thallium. Since both of these procedures require the infusion of substances, they are considered to be invasive procedures.

55.

Which of the following statements is **true** related to Mallory-Weiss tears?

They are treated with endoscopic therapy

They are often associated with diabetes

They are treated preoperatively in an attempt to reduce the risk of cancer metastasis

The risk of developing the condition is highly correlated with obesity

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Correct answer: They are treated with endoscopic therapy

Mallory-Weiss tears are esophageal tears in the gastric mucosa at the esophagogastric junction probably due to mechanical irritation such as forceful vomiting; there is a strong correlation with alcohol and aspirin abuse. They are treated with endoscopic therapies including ligation, cauterization, embolization, and intra-arterial infusion of vasopressin.

Mallory-Weiss syndrome is not typically associated with diabetes, cancer, or morbid obesity.

56.

Which of the following findings in a patient awaiting abdominal aneurysm repair would you report immediately to the physician?

Severe back pain

Swelling of the arms and face

Increased cyanosis of the feet

Increased fatigue

Correct answer: Severe back pain

The primary symptom of a dissecting aneurysm is sudden, severe pain. Abdominal aneurysm dissections commonly cause back pain and require emergency treatment. The physician should be notified immediately if severe back pain is experienced by the patient.

Swelling of the arms and face, increased cyanosis of the feet, and increased fatigue are not immediately characteristic of abdominal aneurysm dissection.

57.

Your patient, Mrs. M., has Crohn's disease and just underwent a total proctocolectomy with a permanent ileostomy 12 hours ago. You are completing an assessment and should contact the physician **immediately** if Mrs. M. has which of the following findings?

The stoma appears pale and dry

The stoma appears red and shiny

There is 150 mL of dark green output from the stoma

There is 100 mL of serosanguinous drainage from the stoma

Correct answer: The stoma appears pale and dry

If there is an adequate blood supply to the stoma, the color is pink or red, and the stoma is moist, as a result of mucous production. The stoma will be edematous for the first 5-7 days postoperatively. A pale, dry stoma suggests ischemia of the stoma or bowel and must be reported immediately to the physician.

With an ileostomy, initially after surgery, the output is a loose, dark green liquid that may contain some blood. The ileostomy usually begins to drain within 24 hours of surgery.

58.

Which of the following interventions is **least likely** to help patients to avoid developing delirium?

Reduce stress on the patient by avoiding getting them out of bed for meals.

Performing range of motion exercises on patients who are unable to ambulate.

Decreasing stimuli.

Ensure the patient has access to a clock and calender.

Correct answer: Reduce stress on the patient by avoiding getting them out of bed for meals.

Getting patients out of bed for meals and ensuring they ambulate frequently is important for preventing the development of delirium. Patients who are unable to ambulate should receive passive range of motion exercises. Decreasing stimuli and ensuring the patient has access to a clock and calender are both helpful in reducing the risk of delirium.

59.

The nurse is teaching a patient with interstitial cystitis about her condition. The nurse is aware:

The patient's cystoscopy may reveal bladder hemorrhage

The patient will need to be on daily aspirin therapy

Bladder capacity is reduced in this condition due to obstruction

Up to 95% of all cases occur in young men

Correct answer: The patient's cystoscopy may reveal bladder hemorrhage

Interstitial cystitis is an autoimmune collagen disease which results in inflammation of the bladder wall. It may be non-infectious or abacterial and is most likely to occur in young women (90%-95% of all cases).

Fibrosis of the bladder wall and decreased loss of muscle elasticity, not obstruction, cause decreased bladder capacity. Cystoscopy often reveals bladder hemorrhage. Due to the chronic inflammation, caffeine, acidic foods, and acetylsalicylic acid (aspirin) should be eliminated. Medical interventions include antidepressants, antihistamines, and steroids.

60.

You are assessing a patient who has a pressure ulcer over the sacrum that is 2 mm deep, 4 cm wide, and 3 cm long with subcutaneous tissues visible in the top half and black eschar in the bottom half. What is the **best** way to describe this pressure ulcer?

Unstageable

Stage III

Stage IV

Deep tissue injury

Correct answer: Unstageable

The presence of eschar in the lower half of the pressure ulcer makes it impossible to determine if the ulcer is a stage III or a stage IV pressure ulcer, making it necessary to describe it as unstageable.

Stage III pressure ulcers include ulcers where there is full thickness tissue loss, but bone, tendon, or muscle are not exposed. Stage IV pressure ulcers allow bone, tendon, or muscle to be visualized. Deep tissue injuries are injuries to the tissues that are below intact skin, and often present as a purple or maroon discoloration.

61.

You are caring for an 82-year-old male patient admitted the previous day with COPD exacerbation. Since admission, he has not eaten well and refuses to get out of bed because he can't "catch his breath." During your assessment, you notice a 2-cm red spot with localized warmth located over the sacrum that is blanchable.

The doctor orders a hydrocolloid dressing for the patient's sacral area. What is the rationale for using this type of dressing?

It protects the wound and encourages a moist environment

It can be changed several times without damaging the wound bed

It contains a solution to clean the wound environment

It provides an antibiotic sponge to decrease bacteria and help the healing process

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Correct answer: It protects the wound and encourages a moist environment

Management of partial-thickness (superficial) ulcers such as the one described in this scenario involves covering with a noncontact layer, hydrocolloid hydrogel, or transparent film dressing as the wound tends to heal more quickly with a moisture-retentive dressing that is not changed as frequently as conventional dressings.

Hydrocolloid dressings do not contain solutions or antibiotics; rather, normal saline or commercial wound cleaners should be used prior to placing a new dressing. Hydrogen peroxide and betadine should be avoided; shear, friction, and pressure to the wound should also be avoided during healing.

62.

You are caring for an immobilized patient, and after thorough assessment, you chart that a pressure ulcer is present on the patient's sacrum with visible subcutaneous fat and slough that does not obscure the base of the wound.

What stage pressure ulcer would this be classified as, based on the description?

Stage III

Unstageable

Stage II

Stage IV

Correct answer: Stage III

According to the National Pressure Ulcer Advisory Panel, Stage III pressure ulcers present with full thickness tissue loss involving subcutaneous tissue; bone, tendon, or muscle is not exposed. Slough (yellow, tan, gray, green, or brown in color) may be present but does not obscure the depth of tissue loss.

Stage IV ulcers present with full thickness skin loss with extensive destruction involving bone, tendon, and/or muscle. Slough or eschar (tan, brown, or black) may be present in the wound bed. In unstageable wounds, there is full thickness tissue loss in which the base of the ulcer is covered by slough or eschar, and staging is indeterminate until the wound is thoroughly cleaned. Stage II wounds do not contain slough.

63.

Which of the following conditions could be diagnosed using cystoscopy?

Bladder stones

Kidney stones

Pyelonephritis

Prostate cancer

Correct answer: Bladder stones

A cystoscopy involves using an endoscope to visualize the bladder and urethra. Bladder stones can be visualized and diagnosed using cystoscopy.

Ureteroscopy is needed to visualize anything proximal to the bladder, such as the ureters or kidneys. Kidney stones and pyelonephritis cannot be diagnosed using a cystoscopy. While a cystoscopy can identify an enlarged prostate, this would not be sufficient to diagnose prostate cancer, and a prostate biopsy is necessary to diagnose this.

64.

You are assessing a patient who has three areas of pressure-related skin breakdown over the sacral region that are close together. Tunneling connects two of these areas. What is the **best** way to document your skin assessment?

Document these as three pressure ulcers, and note the tunneling when documenting both of the ulcers to which the tunneling is connected

Document this as one pressure ulcer with areas of intact skin

Document the isolated pressure ulcer as one pressure ulcer, and the two that are connected with tunneling as one pressure ulcer

Document these as three pressure ulcers, and note the tunneling when documenting the ulcer that the tunneling appears to have originated from

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Correct answer: Document these as three pressure ulcers, and note the tunneling when documenting both of the ulcers to which the tunneling is connected

Because these three pressure ulcers are separated by intact skin, they should be documented as three distinct pressure ulcers, even though they are in the same area. The tunneling that exists should be noted in the assessment of each of the two pressure ulcers that it affects. It would not be likely that a determination could be made about the origin of the tunneling if it connects two pressure ulcers.

65.

To confirm a diagnosis of myocardial infarction (MI), the nurse would expect the physician to order which laboratory tests?

Troponin, myoglobin, and creatine kinase

Myoglobin, creatine kinase, and sedimentation rate

Troponin, aPTT, and myoglobin

Creatine kinase, troponin, and sedimentation rate

Correct answer: Troponin, myoglobin, and creatine kinase

To confirm a diagnosis of MI, the nurse would expect the physician to order troponin, myoglobin, and creatine kinase-MB as they are cardiac markers used in the diagnosis and risk stratification of patients with chest pain and suspected acute coronary syndrome (e.g., MI).

Myoglobin is a nonspecific enzyme that is released with myocardial damage and generally rises 30 minutes to 2 hours after the onset of MI. Troponin is a cardiac-specific enzyme that causes elevations within 2-4 hours after the onset of MI and will remain elevated for 7-10 days after MI. Creatine kinase-MB are enzymes found in the heart, skeletal muscle, and brain cells. Within 6 hours of MI, they will rise, with a return to normal within 48-72 hours. None of these cardiac marker tests require the patient to be fasting. Sedimentation rate is a common blood test that is used to detect and monitor inflammation in the body, while aPTT (activated partial thromboplastin time) is a blood test that characterizes blood coagulation.

66.

All of the following statements are true related to urine ketone testing **except**:

It is recommended in the presence of hypoglycemia accompanied by diaphoresis, confusion, and slurred speech

It primarily used in those with type 1 diabetes

It is generally recommended when blood glucose levels are consistently greater than 300 mg/dL

It is used to monitor for impending diabetic ketoacidosis

Correct answer: It is recommended in the presence of hypoglycemia accompanied by diaphoresis, confusion, and slurred speech

Ketones are a chemical produced when the body breaks down body fat for energy. This can occur when there is no insulin to transport sugar into the cells for them to use for energy. Ketones in the urine is a sign that the body is using fat for energy instead of using glucose because not enough insulin is available to use glucose for energy. The presence of ketones in the urine is much more common in type 1 diabetes mellitus (DM) when insulin is not produced than in type 2 DM where insulin production is only reduced or where sensitivity to insulin is decreased.

Urine ketone testing is:

1) Used to monitor for impending diabetic ketoacidosis; therefore, it is primarily intended for use in those with type 1 DM.

2) It is generally recommended that urinary ketones be tested at the following times:

- *When blood glucose is consistently > 300 mg/dL*
- *During periods of acute illness*
- *In the presence of hyperglycemia (not hypoglycemia), accompanied by nausea, vomiting, and abdominal pain*

67.

A patient is diagnosed with scoliosis with a spinal curve of 45 degrees. What is the recommended treatment?

Surgery to correct spinal curvature

Close monitoring every 6 months for disease progression

Postural exercises

Back bracing in the patient

Correct answer: Surgery to correct spinal curvature

Surgery is generally recommended for curves greater than 40 degrees. Surgical options include anterior or posterior spinal fusion, or combined anterior and posterior surgery as a staged procedure.

Curves of less than 20 degrees require close observation for progression every six months with postural exercises that may be prescribed. Curves of 20-40 degrees require bracing in a growing child, and surgery in the adult (bracing is ineffective in skeletally mature patients).

68.

The med/surg nurse is caring for a patient who is suspected to have a pulmonary embolus. Which of the following findings **most** supports this?

Bloody sputum

Purulent sputum

Frothy sputum

Normal sputum

Correct answer: Bloody sputum

Pulmonary Embolisms (PEs) may cause sputum that is dark, bright red, or mixed with blood. Sputum may also be normal, but abnormal sputum consistent with a PE better supports a diagnosis of a PE. Purulent sputum and frothy sputum are both not normally associated with a PE, but with infection and pulmonary edema respectively.

69.

Which of the following **best** describes the use of Radioiodine Uptake (RAIU)?

Diagnosing hyperthyroidism

Treating hyperthyroidism

Treating hyperparathyroidism

Diagnosing hyperparathyroidism

Correct answer: Diagnosing hyperthyroidism

Radioiodine Uptake (RAIU) is a nuclear medicine test in which the rate at which the thyroid gland uptakes radioactive iodine is measured. In patients with hyperthyroidism, this rate will be increased. Hyperthyroidism can also be treated using a more radioactive form of iodine that destroys the thyroid gland; this is referred to as Radioactive Iodine (RAI) therapy. Iodine is not used by the parathyroid gland and cannot be used to diagnose or treat disorders of the parathyroid glands.

70.

Which of the following is not true of systemic lupus erythematosus (SLE)?

Individuals with SLE almost always have a butterfly rash over the cheeks and bridge of their nose

SLE affects multiple organs and body systems at one time

There is a high prevalence of SLE in individuals who are identical twins and whose twin has SLE

SLE affects women more often than men

Correct answer: Individuals with SLE almost always have a butterfly rash over the cheeks and bridge of their nose

SLE does cause a butterfly rash over the cheeks and the bridge of the nose, but this only occurs in less than 50% of patients who have SLE.

SLE does affect multiple body systems and organs simultaneously. There is a strong genetic component to SLE, and identical twins are much more likely to get SLE if their twin has it. SLE affects women about nine times more often than it affects men.

71.

A patient with severe variceal bleeding is to undergo a transjugular intrahepatic portosystemic shunt. The nurse is explaining the procedure to the patient's family. She tells the family:

The advantage of this procedure is that it can be performed in the interventional radiology department

A common side effect of this procedure is dumping syndrome

Another name for this procedure is the Billroth II

This procedure is sometimes called a portacaval shunt

Correct answer: The advantage of this procedure is that it can be performed in the interventional radiology department

The advantage of this procedure, also called the TIPS procedure, is that it can be performed in the interventional radiology department; it is a minimally invasive procedure by which stents connect portal and hepatic veins under radiographic guidance. This decreases pressure in the portal vein and subsequently on the varices to prevent rupture and bleeding.

Dumping syndrome is associated with the Billroth I procedure, not with the TIPS procedure. It is a group of symptoms that are most likely to develop following surgery to remove all or part of the stomach, or if the stomach has been surgically bypassed to help lose weight. Also called rapid gastric emptying, dumping syndrome occurs when the undigested contents of the stomach move too rapidly into the small bowel.

The Billroth II is a surgical gastric resection procedure. It is often indicated in refractory peptic ulcer disease and gastric adenocarcinoma.

Portacaval shunting is a major surgical procedure that involves a large cut in the belly area (abdomen). The surgeon then makes a connection between the portal vein (which supplies most of the liver's blood), and the inferior vena cava (the vein that drains blood from most of the lower part of the body). The new connection shunts blood away from the liver. This reduces blood pressure in the portal vein and decreases the risk of a tear (rupture) and bleeding from the veins in the esophagus and stomach.

72.

Which of the following terms is used to classify an immovable joint in which bones come into direct contact with each other?

Synarthrosis

Amphiarthrosis

Diarthrosis

Dysarthrosis

Correct answer: Synarthrosis

An immovable joint in which bones come into direct contact with each other is known as synarthrosis. The bones are separated only by a thin layer of fibrous connective tissue; cranial suture joints are an example.

Amphiarthrosis is a slightly movable joint with bones connected by fibrocartilage (i.e., pubic symphysis). Diarthrosis is a freely movable joint enclosed by a joint capsule (i.e., ball and socket joints). Dysarthrosis is a diseased, dislocated, or deformed joint.

73.

The physician has ordered a 24-hour urine test for metanephrine on a patient. This test is used in the diagnosis of which of the following conditions?

Pheochromocytomas

Diabetes insipidus

Diabetes mellitus

Addison's disease

Correct answer: Pheochromocytomas

Pheochromocytomas are rare tumors of the chromaffin tissue within the adrenal medulla that produce excess quantities of catecholamines.

In addition to the 24-hour urine test for metanephrine (a urinary metabolite of epinephrine), imaging studies such as MRI and CT scans are also used in diagnosing these tumors.

74.

Medications used for rescue/quick relief in the treatment of asthma include:

Anticholinergic drugs

Anti-inflammatory agents

Antibiotics

Leukotriene modifiers

Correct answer: Anticholinergic drugs

Medications to treat asthma are divided into two general classes: quick-relief and long-term control.

Quick-relief/rescue medications are used to treat acute symptoms and exacerbations and include:

- *Methylxanthines*
- *Anticholinergic drugs*
- *Short-acting bronchodilators*

Long-term control medications are used to achieve and maintain control of persistent asthma on a daily basis and include:

- *Anti-inflammatory agents*
- *Long-acting bronchodilators*
- *Leukotriene modifiers*

75.

A patient who is being tested for tuberculosis has a Purified Protein Derivative (PPD) skin test. The indurated area of the weal is 12 mm in diameter 50 hours after the test was administered. Which of the following questions is **most important** for the nurse for the nurse to ask?

Do you use IV drugs that aren't prescribed to you?

Have you exercised heavily in the last three days?

Have you been around anyone with tuberculosis in the last three weeks?

When was the last time you had a chest x-ray?

Correct answer: Do you use IV drugs that aren't prescribed to you?

An induration of 5 mm or more is positive for a severely immunocompromised patient. An induration of 10 mm or more is positive for a high-risk patient. Asking the patient if they use illegal IV drugs will help the nurse to determine if the patient is a high-risk patient. Heavy exercise will not affect the test results. Being around someone with TB is typically an indication for a PPD skin test. Understanding when the patient's last chest x-ray was may be useful, but will not help to read the PPD test results.

76.

According to the National Pressure Ulcer Advisory Panel (NPUAP), an intact, serum-filled blister is classified as which of the following?

A stage II pressure ulcer

A suspected deep tissue injury

A stage I pressure ulcer

An unstageable pressure ulcer

Correct answer: A stage II pressure ulcer

According to the National Pressure Ulcer Advisory Panel (NPUAP), an intact, serum-filled blister is classified as a stage II pressure ulcer.

According to the NPUAP, a stage II pressure ulcer is a partial thickness loss of dermis presenting as a shallow open ulcer with a red-pink wound bed, without slough. It may also present as an intact or open/ruptured serum-filled blister.

Suspected deep tissue injury is a localized area of discolored intact skin (purple or maroon) or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissues. This type of injury may be difficult to detect in individuals with dark skin tones.

Stage I pressure ulcers are defined as intact skin with nonblanchable redness of a localized area, usually over a bony prominence. Unstageable pressure ulcers are full-thickness ulcers in which the base of the wound is covered by slough and/or eschar; the wound must be thoroughly cleaned out in order to determine the extent of the damage.

77.

Which of the following is **least likely** to occur in a patient with Parkinson's disease?

Exaggerated arm movements while walking

Decreased blink rate

Diffuse muscular pain

Muscle tremors in the face

Correct answer: Exaggerated arm movements while walking

A patient with Parkinson's disease is likely to have decreased involuntary arm movements while walking, not exaggerated movements. Parkinson's disease can cause a decreased blink rate, diffuse muscular pain, and tremors that affect facial muscles.

78.

You are assisting in the assessment of a patient for rebound tenderness. You know that:

Rebound tenderness is present when the sudden removal of the palpating hand after deep palpation results in acute pain

Palpation of the abdomen should be done after auscultation and before percussion

Rebound tenderness is atypical with peritoneal irritation

In a healthy patient, a skilled practitioner will be able to palpate the spleen

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Correct answer: Rebound tenderness is present when the sudden removal of the palpating hand after deep palpation results in acute pain

Palpation should be done at the end of the abdominal examination, following inspection, auscultation, and percussion. Rebound tenderness is typical, not atypical, with peritoneal irritation or pain. It is abnormal to be able to palpate the gallbladder, spleen, or pancreas. Normally, the liver edge, parts of the colon, abdominal aorta, and possibly the right kidney can be palpated with deep palpation.

Note: *Deep palpation should only be performed by mid-level providers or physicians (APRNs, PAs, MDs, etc.).*

79.

While obtaining subjective assessment data from a patient with hypertension, you recognize that a modifiable risk factor for the development of this disease is:

Smoking

Family history

Hyperlipidemia

Consumption of a high-carbohydrate, high-calcium diet

Correct answer: Smoking

Primary risk factors for hypertension include:

- *Family history (not modifiable)*
- *Age*
- *Male younger than 55, female greater than 74 years of age*
- *African-American ethnicity*
- *High dietary sodium intake (not carbohydrates or calcium)*
- *Diabetes mellitus*
- *Smoking (modifiable)*

Hyperlipidemia and high-carbohydrate diets are both modifiable risk factors for the development of diabetes, not hypertension.

80.

A patient with endocarditis asks the nurse if his 12 weeks of IV antibiotic therapy can be done at home. Which of the following responses is **best**?

This could be possible, let me speak with the doctor.

I think you have misunderstood, your IV antibiotic therapy was probably ordered for 12 days, not 12 weeks.

You will have to stay in the hospital for the full 12 weeks.

Are you anxious about having to spend so much time in the hospital?

Correct answer: This could be possible, let me speak with the doctor.

Long-term IV antibiotic therapy can be performed at home in some situations. Offering to explore the possibility further is an appropriate answer. Long-term IV antibiotic therapy is a normal treatment for endocarditis, and it is likely that the patient has understood correctly. The patient may have to stay in the hospital for the entire course of therapy, but home therapy is also potentially an option. Assessing if the patient is anxious about treatment may be appropriate, but does not answer their question.

81.

You are caring for a patient who has pituitary Cushing's disease. Which of the following treatment options will be **most** effective in providing long-term relief of the patient's symptoms?

Brain surgery

40 mg furosemide (Lasix) PO BID

20 mg dexamethasone PO daily

Adrenalectomy of only the affected side

Correct answer: Brain surgery

Pituitary Cushing's disease is usually caused by a pituitary tumor. These tumors are usually relatively easy to treat surgically, making brain surgery the treatment option that will most likely help the patient.

Lasix is not used to treat Cushing's disease. Dexamethasone will make Cushing's disease worse. Cushing's disease is caused by an overproduction of adrenocorticotropic hormone (ACTH) that stimulates the release of cortisol from the adrenal glands. The problem is not with the adrenal glands themselves, but with the hormone stimulating them. Removing an adrenal gland will not provide relief of the symptoms.

82.

When evaluating the urine of a patient who has renal failure, the nurse understands that which of the following is **correct**?

Sodium excretion decreases in pre-renal kidney failure and increases in intra-renal kidney failure.

Sodium excretion increases in both pre-renal kidney failure and intra-renal kidney failure.

Sodium excretion increases in pre-renal kidney failure and decreases in intra-renal kidney failure.

Sodium excretion decreases in both pre-renal kidney failure and intra-renal kidney failure.

Correct answer: Sodium excretion decreases in pre-renal kidney failure and increases in intra-renal kidney failure.

Sodium excretion decreases in pre-renal kidney failure because the body is attempting to compensate for a perceived volume loss by retaining sodium and fluid. Sodium excretion increases in intra-renal kidney failure because of abnormal kidney function causing excessive sodium loss.

83.

The nurse assesses a male patient's respiratory status. Which of the following observations indicates that the patient is experiencing difficulty breathing?

Use of accessory muscles

Diaphragmatic breathing

Pursed-lip breathing

Controlled breathing

Correct answer: Use of accessory muscles

The use of accessory muscles for respiration indicates the patient is having difficulty breathing.

Diaphragmatic and pursed-lip breathing are two controlled breathing techniques that help the patient conserve energy. While pursed-lip breathing may be used by someone in respiratory distress, used of accessory muscles is a better indicator of respiratory distress.

84.

You are caring for an 82-year-old male patient admitted to the hospital the previous day with COPD exacerbation. Since admission, he has not eaten well and refuses to get out of bed because he can't "catch his breath."

During your assessment, you notice a 2-cm red spot with localized warmth located over the sacrum that is blanchable. How should this area be documented?

Erythema

Stage I pressure ulcer

Hematoma

Deep tissue injury

Correct answer: Erythema

Pressure ulcers are defined as localized injury to skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction. Nutrition compromise, excessive moisture, loss of sensation, and impaired mobility are also components that lead to the development of pressure ulcers. This patient's sacral ulcer should be documented as erythema at this stage since it is superficial and blanchable.

A stage I pressure ulcer is defined as intact skin with nonblanchable redness of a localized area. A hematoma is an abnormal collection of blood outside of a blood vessel. A deep tissue injury is a purple or maroon area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue and is a type of pressure ulcer.

85.

What amount of upper GI tract blood loss would be defined as "acute" or "massive" in adults?

1500 mL

1000 mL

500 mL

800 mL

Correct answer: 1500 mL

A gastrointestinal hemorrhage is defined as acute blood loss from the upper GI tract. "Acute" or "massive" bleeding is considered a loss of 25% of circulating volume (which is about 1500 mL in adults).

86.

You are caring for a patient with a fractured femur who is in a traction splint. Upon assessment, you note the patient is restless and disoriented with severe hypoxemia. Auscultation of the lungs reveal crackles in the lung fields.

What is the most probable cause of his symptoms?

Fat embolism syndrome (FES)

Venous thromboembolism

Compartment syndrome

Osteomyelitis

Correct answer: Fat embolism syndrome (FES)

FES is the presence of fat globules that deposit in the bloodstream and move into pulmonary circulation; it is a type of embolism that is often caused by physical trauma such as fracture of long bones. Severe hypoxemia is a hallmark sign of this complication, and often crackles and coarseness is heard on auscultation of the lungs. First symptoms noted are often restlessness, anxiety, and disorientation secondary to poor gas exchange.

None of the other conditions would be likely to cause these symptoms.

87.

When deep palpation is used to assess a patient's abdomen, which of the following would the nurse **not** expect to be able to palpate?

The spleen

The right kidney

The liver

The colon

Correct answer: The spleen

The spleen may be palpable when using deep palpitation; however, this would be an abnormal finding. Parts of the right kidney, the liver, and the colon may be expected to be palpable during deep palpation. Deep palpation should only be performed by midlevel providers or phsycians.

88.

Your patient is suspected to have liver failure and is getting diagnostic testing done to confirm this diagnosis. Which electrolyte imbalance is **most** commonly seen in liver failure?

Hypokalemia

Hyperkalemia

Hypomagnesemia

Hypermagnesemia

Correct answer: Hypokalemia

In liver failure, patients commonly experience metabolic alkalosis. This leads to the electrolyte imbalance hypokalemia (low potassium levels), due to preferential excretion of K+ over H+ to correct the metabolic alkalosis that's occurring within the body.

Hypomagnesemia can occur (although less common than hypokalemia), as there is a close relationship between the movement of these two electrolytes. Hypokalemia may also occur from inadequate oral intake, increased potassium losses from vomiting, or from medical interventions such as nasogastric suction or diuretic therapy.

89.

Which of the following is **least likely** to be noted in the urine of a patient with glomerulonephritis?

Large blood clots

RBC casts

Proteinuria

Brown coloration

Correct answer: Blood clots

During glomerulonephritis, bleeding through the glomerular membranes is caused by increased glomerular permeability. This leads to the creation of RBC casts due to the fact that the bleeding occurs in the glomeruli. Casts are groups of red blood cells that keep the shape of the tubules that they accumulated in. Because of the small space in which the bleeding occurs, blood clots are not likely to develop. The bleeding can lead to a brown coloration of the urine. Increased glomerular permeability does lead to proteinuria.

90.

All of the following statements related to a transurethral resection of the prostate (TURP) are true **except**:

TURP must be performed when a patient is diagnosed with benign prostatic hyperplasia (BPH)

Complications may include bleeding and urethral stricture

Flow rates with this procedure appear to be better than any other therapy

TURP requires longer recovery times

Correct answer: TURP must be performed when a patient is diagnosed with benign prostatic hyperplasia (BPH)

Evidence-based guidelines recommend the use of surgical interventions only when the patient has bothersome symptoms, complications of benign prostatic hyperplasia, and/or has failed a trial of urinary catheterization.

Flow rates with TURP appear to be better than any other therapy, but it requires longer recovery time. Complications may include bleeding and urethral stricture. Bladder spasms may occur and may require Belladonna or opium to control.

91.

The nurse is caring for a patient with acute kidney failure, and during the shift, the patient becomes more confused and irritable. The nurse understands that the **most likely** cause of the change in behavior is due to:

Elevated blood urea nitrogen (BUN)

Hyperkalemia

Hypernatremia

Dehydration

Correct answer: Elevated blood urea nitrogen (BUN)

BUN measures urea, an end product of nitrogen metabolism. An elevated BUN is indicative of uremia, which is toxic to the CNS and causes mental cloudiness and confusion and can result in a loss of consciousness.

Hyperkalemia results in muscle weakness, irritability, nausea, and diarrhea. Hypernatremia is associated with oliguria and agitation. Acute kidney failure will lead to hypokalemia and hyponatremia. Dehydration can cause fatigue, dry skin, dry mucous membranes, tachycardia, and tachypnea.

92.

All of the following statements are true related to osteoarthritis (OA) and the use of physical therapy e**xcept**:

High-impact activities should be encouraged to improve joint strength

Resistance exercises can contribute to decreased pain

Weight-bearing exercises improve gait and overall function

Cardiovascular conditioning is important in patients with OA

Correct answer: High-impact activities should be encouraged to improve joint strength

Physical therapy for the patient with osteoarthritis focuses on cardiovascular conditioning, improved strength and flexibility, and increased joint mobility. Aerobic or resistance exercises can contribute to decreased pain and decreased disability. Strength training and weight-bearing exercises improve gait and overall function.

High-impact activities, such as jogging, should be avoided unless adaptations can be made.

93.

A patient is scheduled for an intravenous pyelography, a radiological procedure used to visualize abnormalities of the urinary system, including the kidneys, ureters, and bladder. The nurse is aware of which of the following related to the ureters:

They have peristaltic waves to propel urine forward

They carry urine from the bladder for excretion

The male ureters are external

Female ureters are approximately 3-5 cm long and are found internally

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Correct answer: They have peristaltic waves to propel urine forward

The ureters are retroperitoneal structures that run from the renal pelvis to the bladder. They are approximately 25 to 30 cm in length from the renal pelvis to the trigone of the bladder. The pelvic brim divides them into abdominal and pelvic segments, each of which is approximately 12 to 15 cm in length. Ureters have peristaltic waves to propel urine forward. They carry urine from the kidneys to the bladder and anatomically enter the bladder obliquely to prevent backflow.

The urethra:

- *carries urine from the bladder for excretion*
- *much of the male urethra is external*
- *the female urethra is 3-5 cm long with internal placement (the ureter is roughly 3-4 mm in diameter).*

94.

The nurse is assessing the urine of a patient with a urinary tract infection. Which of the following characteristic of the patient's urine should the nurse assess in each specimen?

Clarity

Viscosity

Specific gravity

Glucose

Correct answer: Clarity

Urine that is cloudy indicates purulent drainage that is associated with an infection.

Viscosity is subjective and not measurable. Specific gravity gives information related to the fluid balance. Urinary glucose levels are not affected by urinary tract infections.

95.

Which of the following tests allows for **best** visualization of the bronchi?

Bronchoscopy

Chest X-ray

Chest CT scan

Chest MRI

Correct answer: Bronchoscopy

A bronchoscopy involves inserting a scope in the trachea and into the bronchi, allowing direct visualization of these structures. A bronchoscopy typically requires that the patient be intubated.

A chest X-ray provides the lowest quality of all the tests described here for visualizing the bronchi. A chest CT provides 3D imaging and is more detailed than a chest X-ray. An MRI provides a more detailed 3D image that allows for better evaluation of the soft tissues. None of theses other exams, however, provide the same degree of visualization that using a scope to visually examine the structures would.

96.

A patient is scheduled for a bronchoscopy. The nurse is aware that:

This procedure allows for specimen collection via biopsy

The patient will need to drink extra fluids following the procedure to help eliminate radioactive material

The patient should be informed of the warm, "flushed" feeling that may be experienced as dye is injected

The patient should have nothing by mouth for 24 hours prior to the procedure

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Correct answer: This procedure allows for specimen collection via biopsy

A bronchoscopy permits direct visualization of the larynx, trachea, and bronchi, and allows for specimen collection via biopsy, brushes, or washes.

In a bronchoscopy, no radioactive material is injected or ingested that will need to be eliminated, or that may produce a flushed feeling. A "flush" occurs when dye is injected during angiography procedures. Patients are to be nothing by mouth (NPO) for 4-8 hours, not 24 hours, prior to bronchoscopy.

97.

When assessing your patient, you note a palpable precordial thrill. This finding may be caused by:

Heart murmurs

Gallop rhythms

Pulmonary edema

Right ventricular hypertrophy

Correct answer: Heart murmurs

The precordium is located between the apex and sternum. Normally, no pulsations are seen or felt here. However, if abnormal palpable vibrations or pulsations are present, (called thrills), they may be indicative of heart murmurs, which are caused by incompetence of valves and/or abnormal blood flow patterns.

98.

Which of the following **correctly** describes the order in which abdominal assessment techniques should be used?

Inspection, auscultation, percussion, palpitation

Inspection, auscultation, palpitation, percussion

Inspection, palpitation, auscultation, percussion

The order in which abdominal assessment techniques are used is not important

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Correct answer: Inspection, auscultation, percussion, palpitation

The order in which abdominal assessment techniques are used is important, as some assessment techniques may affect others due to the stimulus they provide to the bowels. Inspection will not stimulate the bowels at all, and it should be performed first. Auscultation is used to assessment movement of the bowels. Movement of the bowels is likely to occur due to percussion or palpation, and auscultation should precede both of these assessments. Palpitation may affect the location and consistency of the areas of air or fluid that may be appreciated during percussion and precession should come before palpitation. Palpitation should be the last method of assessing the abdomen.

99.

Of the following factors, which might alter the result of pulse oximetry?

The patient's skin color, hypovolemia, temperature of appendage

Patient's age, hypervolemia, patient movement

The patient's age, patient movement, acrylic nails

Hypervolemia, the patient's skin color, acrylic nails

Correct answer: The patient's skin color, hypovolemia, temperature of appendage

Pulse oximetry evaluates the oxygen saturation of the blood by measuring the percentage of oxygen attached to hemoglobin. The infrared light passes through the tissues or is reflected off the bony structures of the fingertip, toe, earlobe, or nose.

The following factors might alter the result of a pulse oximetry reading:

- *Hypovolemia*
- *Cold appendage*
- *Faulty placement*
- *Patient movement*
- *Dark skin color*
- *Acrylic nails*

100.

The nurse is caring for a patient who was recently in an MVC. The nurse notes that the patient has recently developed restlessness, confusion, ptosis, and vomiting. Which of the following should the nurse **first** suspect as the potential cause of this change?

Elevated intracranial pressure

Stress from the accident

Respiratory distress

Abdominal contusion

Correct answer: Elevated intracranial pressure

Restlessness, confusion, and vomiting are relatively non-specific in this patient. Ptosis (drooping upper eyelid), however, is a distinctly neurological sign and, when combined with the other, less specific symptoms, indicates that elevated ICP (Intracranial Pressure) may be present.