

# HESI Pharmacology Practice Exam

## GRADED A 2023 100 QUESTIONS AND ANSWERS

Following the administration of sublingual nitroglycerin to a client experiencing an acute anginal attack, which assessment finding indicates to the nurse that the desired effect has been achieved?

- A. Client states chest pain is relieved
- B. Client's pulse decreases from 120 to 90
- C. Client's systolic blood pressure decreases from 180 to 90
- D. Client's SaO<sub>2</sub> level increases from 92% to 96% - **CORRECT ANSWER A. nitroglycerin reduces myocardial oxygen consumption which decreases ischemia and reduces chest pain**

A client with hyperlipidemia receives a prescription for niacin (niaspan). which client teaching is most important for the nurse to provide

- a. expected duration of flushing
- b. symptoms of hyperglycemia
- c. diets that minimize gi irritation
- d. comfort measure for pruritis - **CORRECT ANSWER A. flushing of the face and neck, lasting up to an hour, is a frequent reason for discontinuing niacin. inclusion of this effect in client teaching may promote compliance in taking the med.**

When assessing an adolescent who recently overdosed on acetaminophen (tylone), it is most important for the nurse to assess for pain in which area of the body

- a. flank
- b. abdomen
- c. chest
- d. head - **CORRECT ANSWER B. acetaminophen toxicity can result in liver damage; therefore, it is especially important for the nurse to assess for pain in the right upper quadrant of the abdomen (which might indicate liver damage)**

A client is admitted to the coronary care unit with a medical diagnosis of acute myocardial infarction. Which medication prescription decreases both preload and afterload?

- a. nitroglycerin
- b. propranolol
- c. propranolol
- d. captopril - **CORRECT ANSWER A. nitroglycerin is a nitrate that causes peripheral vasodilation and decreases contractility, thereby decreasing both preload and afterload**

A client is being treated for hyperthyroidism with propylthiouracil (PTU). The nurse knows that the action of this drug is to

- A. decrease the amount of the thyroid-stimulating hormone circulating in the blood
- B. increase the amount of thyroid-stimulating hormone circulating in the blood
- C. increase the amount of T4 and decrease the amount of T3 produced by the thyroid
- D. inhibit synthesis of T3 and T4 by the thyroid gland - **CORRECT ANSWER D. PTU is an adjunct therapy used to control hyperthyroidism by inhibiting production of thyroid hormones. It is often prescribed in prep for thyroidectomy or radioactive iodine therapy**

Which change in data indicates to the nurse the desired effect of the angiotensin II receptor antagonist has been achieved

- A. Dependent edema reduced from +3 to +1
- B. Serum HDL increased from 35 to 55mg/dl
- C. Pulse rate reduced from 150 to 90 beats/min
- D. Blood pressure reduced from 160/90 to 130/80 - **CORRECT ANSWER** D. angiotensin II receptor antagonist (blocker), prescribed for treatment of HTN. The desired effect is a decrease in blood pressure.

Which instructions should the nurse give to a female client who just received a prescription for oral metronidazole (Flagyl) for treatment of trichomonas vaginalis (select all that apply)

- A. increase fluid intake, especially cranberry juice
- B. Do not abruptly discontinue the medication; taper use
- C. Check blood pressure daily to detect hypertension
- D. Avoid drinking alcohol while taking this medication
- E. Use condoms until treatment is completed
- F. Ensure that all sexual partners are treated at the same time - **CORRECT ANSWER** ADEF

The nurse is transcribing a new prescription for spironolactone (aldactone) for a client who receives an angiotensin-converting enzyme inhibitor. Which action should the nurse implement

- A. verify both prescriptions with the HCP
- B. report the medication interactions to the nurse manager
- C. hold the ACE inhibitor and give the new prescription

D. Transcribe and send the prescription to the pharmacy - **CORRECT ANSWER A.** the concomitant use of an ACE inhibitor and a potassium-sparing diuretic such as spironolactone, should be given with caution b/c the two drugs may interact to cause an elevation in serum potassium levels.

A client has myxedema, which results from a deficiency of thyroid hormone synthesis in adults. The nurse knows that which medication should be contraindicated for this client?

A. liothyronine (cytomel) to replace iodine

B. Furosemide (Lasix) for relief of fluid retention

C. Pentobarbital sodium for sleep

D. nitroglycerin for angina pain - **CORRECT ANSWER C.** persons with myxedema are dangerously hypersensitive to narcotics, barbiturates, and anesthetics. They do not tolerate liothyronine and usually receive iodine replacement therapy. These clients are also susceptible to heart problems such as angina for which nitroglycerine would be indicated and congestive heart failure for which furosemide would be indicated

A client has a continuous IV infusion of dopamine and an IV of normal saline at 50ml/hour. The nurse notes that the client's urinary output has been 20ml/hour for the last two hours. Which intervention should the nurse initiate?

A. stop the infusion of dopamine

B. change the normal saline to a keep open rate

C. replace the urinary catheter

D. notify the healthcare provider of the urinary output. - **CORRECT ANSWER D.**

A healthcare provider prescribes cephalexin monohydrate (Keflex) for a client with a postoperative infection. It is most important for the nurse to assess for what additional drug allergy before administering this prescription?

A. Penicillins

B. Aminoglycosides

C. Erythromycins

D. Sulfonamides - **CORRECT ANSWER A. Cross-allergies exist between penicillins and cephalosporines**, such as keflex. so checking for penicillin allergy is a wise precaution

Which medications should the nurse caution the client about taking while receiving an opioid analgesic?

A. Antacids.

B. Benzodiazepines

C. Antihypertensives

D. Oral antidiabetics - **CORRECT ANSWER B. respiratory depression increases with the concurrent use of opioid analgesics and other CNS depressant agents, such as alcohol, barbiturates, and benzodiazepines**

Which nursing diagnosis is important to include in the plan of care for a client receiving the angiotensin II receptor antagonist irbesartan (Avapro)?

A. Fluid volume deficit

B. Risk for infection

C. Risk for injury

D. Impaired sleep patterns - **CORRECT ANSWER C. Avapro is an antihypertensive agent, which acts by blocking vasoconstrictor effects at various receptor sites. This can cause hypotension and dizziness, placing the client at high risk for injury**

A postoperative client has been receiving a continuous IV infusion of meperidine (demerol) 35mg/hr for four days. The client has a PRN prescription for Demorol

100mg PO Q3H. The nurse notes that the client has become increasingly restless, irritable and confused, stating that there are bugs all over the walls. What action should the nurse take FIRST?

A. Administer a PRN dose of the PO meperidine (demorol)

B. Administer naloxone (narcan) IV per PRN protocol

C. Decrease the IV infusion rate of the demerol per protocol

D. notify the healthcare provider of the clients confusion and hallucinations -

CORRECT ANSWER C. The client is exhibiting symptoms of demerol toxicity, which is consistent with the large dose of demerol recieved over four days. C. is the most effective action to immediately decrease the amount of serum demerol.

The client with a dysrhythmia is to receive procainamide (pronestyl) in 4 divided doses over the next 24 hours. What dosing schedule is best for the nurse to implement?

A. q6h

B. QID

C. AC and bedtime

D. PC and bedtime - CORRECT ANSWER A. q6h

After abdominal surgery, a male client is prescribed low molecular weight heparin. during administration of the medication, the client asks the nurse why he is receiving this medication. Which is the best response for the nurse to provide.

A. This medication is a blood thinner given to prevent blood clot formation

B. this medication enhances antibiotics to prevent infection

C. This medication dissolves any glots that develop int he legs

D. This abdominal injection assists in the healing of the abdominal wound -

CORRECT ANSWER A

Following heparin treatment for a PE, a client is being discharged with a prescription for warfarin. In conducting discharge teaching, the nurse advises the client to have which diagnostic test monitored regularly?

A. Perfusion scan

B. Prothrombin time (PT/INR)

C. Activated Partial thromboplastin (APTT)

D. Serum Coumadin Level (SCL) - CORRECT ANSWER B. When used for a client with PE, the therapeutic goal for warfarin therapy is a PT 1/5 to 2/5 times greater than the control or an INR of 2-3. A perfusion might be performed to monitor lung function but not monthly. APTT is monitored for Heparin.

A client who has been taking levodopa PO TID to control the symptoms of Parkinsons disease has a new prescription for sustained release levodopa/carbidopa (sinemet 25/100 PO BID. The client took his levodopa at 0800. Which instruction should the nurse include in the teaching plan for this client?

A. take the first dose of sinemet today, as soon as your prescription is filled

B. Since you already took your levodopa, wait until tomorrow to take the sinemet

C. Take both drugs for the 1st week, then switch to taking only the sinemet.

D. You can begin taking the sinemet this evening, but do not take anymore levodopa - CORRECT ANSWER D

While taking a nursing history, the client states, "I am allergic to penicillin." what related allergy to another type of anti-infective agent should the nurse ask the client about when taking nursing history.

A. aminoglycosides

B. Cephalosporins

C. Sulfonamides

D. Tetracyclines - CORRECT ANSWER B. Cross allergies exist between penicillins and cephalosporins

A client asks the nurse if glipizide (Glucotrol) is an oral insulin. Which response should the nurse provide?

A. Yes it is an oral insulin and has the same actions and properties as intermediate insulin

B. Yes, it is an oral insulin and is distributed, metabolized, and excreted in the same manner as insulin

C. No it is not an oral insulin and can be used only when some beta cell function is present

D. No, it is not an oral insulin, but it is effective for those who are resistant to injectable insulins - CORRECT ANSWER C

An adult client has prescriptions for morphine sulfate 2.5 mg IV q6h and ketorolac (toradol) 30mg IV q6h. which action should the nurse implement?

A. administer both medications according to the prescription

B. Hold the ketorolac to prevent an antagonist effect

C. Hold the morphine to prevent an additive drug interaction

D. Contact the healthcare provider to clarify the prescription - CORRECT ANSWER

A. Morphine and ketorolac can be administered concurrently and may produce additive analgesic effect resulting in ability to reduce the dose of morphine, as seen in this prescription

The healthcare provider prescribes digitalis (Digoxin) for a client diagnosed with congestive heart failure. Which intervention should the nurse implement prior to administering the digoxin?



- A. Observe resp rate and depth
- B. assess the serum potassium level
- C. Obtain the clients blood pressure
- D. Monitor the serum glucose level - CORRECT ANSWER B. hypokalemia (decreased serum potassium) will precipitate digitalis toxicity in persons receiving digoxin

An antacid (maalox) is prescribed for a client with PUD. The nurse knows that the purpose of this medication is to

- A. Decrease production of gastric secretions
- B. produce an adherent barrier over the ulcer
- C. Maintain a gastric pH of 3.5 or above
- D. decrease gastric motor activity - CORRECT ANSWER C.

Which client should the nurse identify as being at the highest risk for complications during the use of an opioid analgesic?

- A. an older client with type 2 diabetes
- B. A client with chronic rheumatoid arthritis
- C. A client with a open compound fracture
- D. A young adult with inflammatory bowel disease - CORRECT ANSWER D

A client is being treated for osteoporosis with alendronate (fosamax), and the nurse has completed discharge teaching regarding medication administration. Which morning schedule would indicated to the nurse that the client teaching has been effective?

- A. take medication, go for a30 minutes morning walk, then eat breakfast

- B. take med, rest in bed for 30 min., eat breakfast, go for morning walk
- C. take medication with breakfast, then take a 30 minute morning walk
- D. go for a 30minute morning walk, eat breakfast, then take the med - CORRECT ANSWER A.

A client is receiving clonidine (catapres) 0.1mg/24hr via transdermal patch. Which assessment finding indicates that the desired effect of the medication has been achieved?

- A. client denies recent episodes of angina
- B. Change in peripheral edema from +3 to +1
- C. Client denies recent nausea or vomiting
- D. Blood pressure has changed from 180/120 to 140/70 - CORRECT ANSWER D. Catapres acts as a centrally-acting analgesic and antihypertensive agent. D. indicates a reduction in hypertention

A female client with RA takes ibuprofen (motrin) 600mg PO 4xday. To preven GI bleeding, misoprostol (cytotec) 100mcg PO is prescribed. Which information is most important for the nurse to include in client teaching?

- A. use contraception during intercourse
- B. ensure the cytotec is taken on an empty stomach
- C. encourage oral fluid intake to prevent constipation
- D. take cytotec 30min prior to motrin - CORRECT ANSWER A. Cytotec, a synthetic form of prostaglandin, is classified as pregnancy category X and can act as an abortifacient, so the client should be instructed to use contraception during intercourse to prevent loss of early pregnancy

Which dosing schedule should the nurse teach the client to observe for a controlled-release oxycodone prescription - CORRECT ANSWER Q12H