Chapter 48, Immunostimulants and Immunomodulators

- 1. A nurse is preparing to administer ferrous to a client. Which adverse reaction should the nurse point out to the client to report if noted?
 - A) Headache
 - B) Allergic reaction
 - C) Soreness
 - D) Backache

Answer: B

Rationale: The nurse needs to closely monitor the client for an allergic reaction and report to the health care provider if symptoms are noted. Headache and backache are the generalized system reactions to iron supplements. Soreness is a generalized system reaction to the administration of iron when given through the parenteral route.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 660, Summary Drug Table

- 2. A nurse is conducting the preadministration assessment on a client who is prescribed ferrous and notes the client is also currently prescribed ascorbic acid. Which potential reaction of these two drugs should the nurse **prioritize** for monitoring?
 - A) An increase in seizure activity
 - B) Signs of vitamin B₁₂ deficiency
 - C) Increased absorption of iron
 - D) Signs of folate deficiency

Answer: C

Rationale: The nurse should monitor for an increased absorption of iron in the client due to the interaction of ascorbic acid with the iron preparation, ferrous. An increase in seizure activity may occur when folic acid is administered with the hydantoins. Signs of folate deficiency may occur when sulfasalazine is administered concurrently. Vitamin B_{12} deficiency is a rare deficiency caused by a low dietary intake.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 655, Generalized System Reactions

- 3. A client with megaloblastic anemia is prescribed leucovorin. The nurse would question administration of this drug if which additional disorder is noted in the client's medical record?
 - A) Pernicious anemia
 - B) Hemochromatosis
 - C) Uncontrolled hypertension
 - D) Hypersensitivity to human albumin

Answer: A

Rationale: Leucovorin is contraindicated in clients with pernicious anemia or other anemias in which vitamin B_{12} is deficient. Leucovorin is not contraindicated in clients with hemochromatosis, uncontrolled hypertension, and hypersensitivity to human albumin. Epoetin alfa is contraindicated in clients with uncontrolled hypertension and hypersensitivity to human albumin. Iron compounds are contraindicated in clients with hemochromatosis or hemolytic anemia.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 656, Folic Acid Deficiency

- 4. A nurse is caring for a client with iron deficiency anemia who is receiving iron supplements. What information should the nurse point out in the teaching plan for this client?
 - A) Frequency of urination will increase.
 - B) Soreness of throat might occur.
 - C) Itching of throat might occur.
 - D) Color of stools will become darker.

Answer: D

Rationale: The nurse should inform the client receiving oral iron supplements that the color of stools will become darker. Frequency of urination is not known to increase with the oral administration of iron supplements. Similarly, soreness of the throat and itching of the throat are also not known to occur with the oral administration of iron supplements.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Teaching/Learning

Reference: p. 657, Ongoing Assessment

- 5. The nurse is preparing discharge teaching for a client with anemia who is prescribed epoetin alfa for the next week. Which instruction should the nurse **prioritize** to the client?
 - A) Avoid use of multivitamin preparations.
 - B) Report signs of joint pain to the primary health care provider.
 - C) Follow the recommended diet provided by the primary health care provider.
 - D) Take the drug on an empty stomach or with water.

Answer: B

Rationale: When caring for a client who is to take epoetin alfa for anemia, the nurse should instruct the client to report any signs of joint pain, dizziness, headache, fatigue, nausea, vomiting, or diarrhea to the primary health care provider. The nurse should instruct the client to avoid taking multivitamin preparations and to follow the diet recommended by the primary health care provider when caring for a client who has to take folic acid. The nurse should instruct the client to take the drug on an empty stomach or with water when caring for a client who has to take iron supplements on an outpatient basis.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential

Integrated Process: Teaching/Learning Reference: p. 659, Hematopoietic Factors

- 6. A nurse is caring for a client with hypertension and anemia. Which action would the nurse include in the plan of care when administering epoetin alfa to the client?
 - A) Report 10 mm Hg rise in systolic blood pressure to primary health care provider.
 - B) Note the hematocrit value before each dose during therapy.
 - C) Shake the drug well before it is administered to the client.
 - D) Administer the drug once every 3 weeks through IV route.

Answer: B

Rationale: When caring for a client who is prescribed epoetin alfa, the nurse should measure the hematocrit before each dose during the drug therapy. The nurse should monitor the blood pressure of a client with hypertension when they are receiving epoetin alfa and report any rise of 20 mm Hg or more in the systolic or diastolic pressure to the primary health care provider. The drug is given three times weekly IV or subcutaneously. If the client is receiving dialysis, the drug is administered into the venous access line. The drug is mixed gently during preparation for administration. Shaking may denature the glycoprotein.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 6

Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 658, Epoetin Alfa

- 7. A client is prescribed cyanocobalamin following gastric bypass surgery. The nurse will **prioritize** which finding on the ongoing assessment?
 - A) Urticaria
 - B) Dyspnea
 - C) Pulmonary edema
 - D) Joint pain

Answer: C

Rationale: The nurse needs to closely monitor the client for pulmonary edema, an adverse reaction to cyanocobalamin or vitamin B_{12} . The other adverse reactions to the administration of vitamin B_{12} include increased RBC production, acne, peripheral vascular thrombosis, heart failure, mild diarrhea, and itching. Urticaria, dyspnea, and joint pain are not adverse reactions to vitamin B_{12} . Urticaria and dyspnea are caused when iron is administered parenterally. Joint pain is an adverse reaction to epoetin alfa.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 6 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 656, Vitamin B₁₂ Deficiency

- 8. A nurse determines a nursing diagnosis of constipation is appropriate for a client receiving iron supplements. Which suggestion would be appropriate for the nurse to recommend to the client to promote resolution of this problem?
 - A) Increase the intake of milk and dairy products.
 - B) Consume a diet high in fiber.
 - C) Take antacids after consuming meals.
 - D) Perform vigorous exercises.

Answer: B

Rationale: When caring for a client with constipation, the nurse should instruct the client to consume a high-fiber diet, increase fluid intake to 10–12 glasses of water daily, and increase activity. Increased activity can include exercise; however, the client does not need to engage in vigorous exercise. Increasing the intake of milk and dairy products or taking antacids after meals will not help reduce the constipation or the discomfort caused due to it.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply Client Needs: Physiological Integrity: Basic Care and Comfort

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 659, Constipation

- 9. A nurse is preparing to administer iron dextran to a client. The nurse will obtain which information on the preadministration assessment to calculate the drug dosage?
 - A) Client's age
 - B) Client's height
 - C) Hemoglobin level
 - D) Platelet count

Answer: C

Rationale: Hemoglobin level and body weight of the client are important information the nurse requires to calculate the drug dosage for administering iron dextran. The client's age, height, and platelet count are not essential information when calculating drug dosage for iron dextran.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 6 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 660, Summary Drug Table

- 10. The nurse is preparing to administer vitamin B_{12} to a client. The nurse would administer the drug cautiously if the client had which condition noted in the medical record?
 - A) Pulmonary disease
 - B) Hypertension
 - C) Heart disease
 - D) Seizures

Answer: A

Rationale: Vitamin B_{12} is cautiously administered to clients with pulmonary disease. Epoetin alfa and darbepoetin alfa are administered cautiously to clients with hypertension, heart disease, and a history of seizures.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 656, Vitamin B₁₂ Deficiency

11. A nurse administers 0.5 mL iron dextran IM. The nurse would wait at least how long before administering the remainder of the dose?

- A) 15 minutes
- B) 30 minutes
- C) 45 minutes
- D) 60 minutes

Answer: D

Rationale: After giving the test dose of 0.5 mL, the nurse would monitor the client for an allergic response for at least 1 hour before administering the remaining dose. Epinephrine is kept on standby in the event of severe anaphylactic reaction.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 659, Iron

- 12. A nurse administers filgrastim to a client who is also prescribed chemotherapy. The nurse monitors the client's absolute neutrophil count (ANC) and anticipates stopping the drug when the ANC reaches which level?
 - A) 2500/mm³
 - B) 5000/mm³
 - C) 7500/mm³
 - D) 10,000/mm³

Answer: D

Rationale: Injections of the CSF filgrastim are started at least 24 hours after the completion of a cycle of chemotherapy. The absolute neutrophil count (ANC) is monitored and therapy is continued until an ANC count of at least 10,000/mm³ is achieved.

Question format: Multiple Choice

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 652, Colony-Stimulating Factors—Neutrophils

- 13. A nursing instructor is teaching a class on the different types of blood cells. The instructor will point out which action(s) as a function of the various blood cells? Select all that apply.
 - A) Erythrocytes supply cells with oxygen from the lungs.
 - B) Erythrocytes control bleeding from tears in tissues.
 - C) Leukocytes supply cells with oxygen from the lungs.
 - D) Leukocytes protect the body from organisms.
 - E) Megakaryocytes control bleeding from tears in tissues.

Answer: A, D, E

Rationale: Erythrocytes supply our cells with oxygen from the lungs to the tissues; leukocytes protect the body from dangerous organisms; and

megakaryocytes (platelets) control bleeding from microscopic to major tears in

our tissues.

Question format: Multiple Select

Chapter: 48

Learning Objective: 3 Cognitive Level: Apply

Client Needs: Physiological Integrity: Physiological Adaptation

Integrated Process: Teaching/Learning

Reference: p. 651, Stimulation of the Hematopoietic System

- 14. A nurse is providing care to a client receiving therapy for chronic kidney disease. The nurse predicts the client will be diagnosed with hematologic failure based on which assessment finding(s)? Select all that apply.
 - A) Anemia
 - B) Bleeding
 - C) Hypertension
 - D) Infection
 - E) Hypoglycemia

Answer: A, B, D

Rationale: Hematologic failure results when inadequate numbers of blood cells are produced, leading to decreased oxygen transportation, blood coagulation, or inability for the body to prevent the invasion of microorganisms, which can lead to anemia, bleeding, and infection. Hypertension is a potential adverse reaction to colony-stimulating factors and ESAs. Hypertension is a contraindication for clients prescribed immunostimulant drugs. Individuals taking ACEI and IMDH inhibitors may develop neutropenia. Hypoglycemia is not noted to be a contraindication or does not necessitate cautious administration when the client is receiving immunomodulating drugs.

Question format: Multiple Select

Chapter: 48

Learning Objective: 1, 3 Cognitive Level: Apply

Client Needs: Physiological Integrity: Physiological Adaptation

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 651, Stimulation of the Hematopoietic System

- 15. A group of nursing students are preparing a chart to illustrate the various functions of immunomodulating drugs. The instructor determines the student's chart should be successful after noting which function(s) is correlated with filgrastim? Select all that apply.
 - A) Is a glycoprotein
 - B) Promotes proliferation of leukocytes
 - C) Stimulates differentiation of erythrocytes

- D) Stimulates maturation of megakaryocytes
- E) Is used to treat chemotherapy-induced neutropenia

Answer: A, B, E

Rationale: Colony-stimulating factors such as filgrastim are glycoproteins used to stimulate proliferation, differentiation, and maturation of leukocytes. They are used to treat chemotherapy-induced neutropenia. Drugs such as oprelvekin are used to stimulate thrombopoiesis, which will stimulate maturation of megakaryocytes. Erythropoiesis-stimulating agents are used to stimulate and regulate the production of erythrocytes.

Question format: Multiple Select

Chapter: 48

Learning Objective: 4

Cognitive Level: Understand

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Teaching/Learning

Reference: p. 652, Colony-Stimulating Factors—Neutrophils

- 16. A nurse is preparing to teach a client about the sargramostim that has been prescribed. Which adverse reaction(s) should the nurse caution the client about related to this drug? Select all that apply.
 - A) Bone pain
 - B) Anemia
 - C) Infection
 - D) Nausea
 - E) Rash

Answer: A, D, E

Rationale: Headache, bone pain, nausea, vomiting, diarrhea, alopecia, and rash are adverse reactions the nurse should inform the client about prior to the administration of sargramostim. Various immunostimulant drugs are used to treat the various types of anemia. There is an increased risk of infection if the client is receiving immunosuppressive agents, such as corticosteroids, calcineurin inhibitors, mTOR inhibitors, IMDH inhibitors, biologics, and monoclonal antibodies.

Question format: Multiple Select

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Teaching/Learning Reference: p. 660, Summary Drug Table

- 17. The nurse notes the client is developing a hypersensitivity to pegfilgrastim. Which additional medication(s) does the nurse predict the client will be prescribed in response to this reaction? Select all that apply.
 - A) Prednisone

- B) Diphenhydramine
- C) Albuterol
- D) Naproxen
- E) Hydrocodone

Answer: A, B, C

Rationale: Colony-stimulating factors, such as pegfilgrastim, can cause hypersensitivity reactions and should be treated with antihistamines (diphenhydramine), steroids (prednisone), and bronchodilators (albuterol) to maintain their use. Naproxen, an NSAID, and hydrocodone, an opioid pain medication, are used to treat the hypersensitivity related to pegfilgrastim use.

Question format: Multiple Select

Chapter: 48

Learning Objective: 6

Cognitive Level: Understand

Client Needs: Physiological Integrity: Pharmacological Therapies Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 655, Generalized System Reactions

- 18. A nurse is preparing to teach a client about the darbepoetin alfa that the health care provider has prescribed. Which fact(s) about this drug should the nurse incorporate in the teaching? Select all that apply.
 - A) Is a glycoprotein
 - B) Used to stimulate the production of erythrocytes
 - C) Helps stimulate differentiation of leukocytes
 - D) Promotes the maturation of megakaryocytes
 - E) Used to stimulate thrombopoiesis

Answer: A, B

Rationale: Erythropoiesis-stimulating agents such as darbepoetin alfa, epoetin alfa, and peginesatide are glycoproteins and are used to stimulate and regulate the production of erythrocytes (erythropoiesis). Agents such as eltrombopag, oprelvekin, and romiplostim are thrombopoietin agents and stimulate the maturation of megakaryocytes and thrombopoiesis. Colony-stimulating factors, such as filgrastim, pegfilgrastim, and sargramostim, act on the hematopoietic cells to stimulate proliferation, differentiation, and maturation of WBCs.

Question format: Multiple Select

Chapter: 48

Learning Objective: 4 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 654, Anemia

19. A nurse is preparing to administer epoetin alfa to a client. The nurse expects to see which diagnos(es) for the basis of this treatment? Select all that apply.

A) Anemia of chronic kidney disease

- B) Iron deficiency anemia
- C) Vitamin B₁₂ deficiency anemia
- D) Anemia caused by cancer chemotherapy
- E) Anemia caused be zidovudine therapy

Answer: A, D, E

Rationale: Erythropoiesis-stimulating agents, such as epoetin alfa, are used for anemia associated with the following: chronic kidney disease, cancer chemotherapy, zidovudine therapy, and postsurgical replacement in place of allogeneic transfusions. Ferrous, iron dextran, iron sucrose, and sodium ferric gluconate complex are potential drugs that are used for iron deficiency anemia. Cyanocobalamin (vitamin B_{12}) is used for vitamin B_{12} deficiency anemia.

Question format: Multiple Select

Chapter: 48

Learning Objective: 3 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 660, Summary Drug Table

- 20. The nurse has administered methoxy polyethylene–epoetin β to a client with chronic kidney disease. Which finding(s) on the ongoing assessment should the nurse **prioritize**? Select all that apply.
 - A) Bone pain
 - B) Fluid retention
 - C) Hypertension
 - D) Fatique
 - E) Arthralgia

Answer: C, D, E

Rationale: Common adverse reactions to erythropoiesis-stimulating agents such as methoxy polyethylene–epoetin β include hypertension, headache, nausea, vomiting, diarrhea, rashes, fatigue, arthralgia, and injection site skin reactions. Bone pain is a possible adverse reaction to immunostimulant drugs. Fluid retention may be seen with drugs that stimulate thrombopoiesis.

Question format: Multiple Select

Chapter: 48

Learning Objective: 3 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 654, Anemia

- 21. The nurse is preparing to administer epoetin alfa to a client. The nurse prepares to administer this medication with caution if which disorder(s) is noted in the client's medical record? Select all that apply.
 - A) Diabetes

- B) Renal failure
- C) History of seizures
- D) Congestive heart failure
- E) Hypotension

Answer: C, D

Rationale: Epoetin alfa is used cautiously in clients with hypertension, heart disease, congestive heart failure, or a history of seizures. Thrombopoietin drugs are used cautiously in clients with renal failure, heart failure, or atrial arrhythmias. Hypotension is a potential adverse reaction to the various agents used for anemia. Diabetes is not a concern with these classes of drugs.

Question format: Multiple Select

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 654, Anemia

- 22. A nurse is administering darbepoetin alfa to a client. The nurse assesses an elevated hemoglobin level and prepares to take necessary steps to avoid which potential complication(s)? Select all that apply.
 - A) Increased mortality
 - B) Tumor progression
 - C) Severe hypotension
 - D) Thromboembolic events
 - E) Cardiovascular events

Answer: A, B, D, E

Rationale: Polycythemia is an overload of erythrocytes that can result in increased mortality, serious cardiovascular and thromboembolic events, and possible tumor progression in clients with cancer. It can occur if the hemoglobin is not carefully monitored and the dosage of the drug is too high.

Question format: Multiple Select

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 654, Anemia

- 23. The nurse is teaching a client about ferrous that has been prescribed for anemia. The nurse determines the session is successful when the client correctly chooses which potential adverse reaction(s) to watch for? Select all that apply.
 - A) Constipation
 - B) Fluid retention
 - C) Nausea

- D) Fatigue
- E) Dark stools

Answer: A, C, E

Rationale: GI irritation, nausea, vomiting, constipation, diarrhea, darker stools, headache, backache, and allergic reactions are adverse reactions the nurse should discuss with a client prior to the administration of ferrous.

Colony-stimulating drugs may have the adverse reactions of fluid retention and

fatigue.

Question format: Multiple Select

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 655, GI Reactions

- 24. The nurse is preparing to administer ferrous to a client. The nurse will question this order if which disorder(s) is noted in the client's medical history? Select all that apply.
 - A) Hemolytic anemia
 - B) Vitamin B₁₂ deficiency anemia
 - C) Anemia of chronic kidney disease
 - D) Hemochromatosis
 - E) Hypertension

Answer: A, D

Rationale: The use of iron supplements is contraindicated in clients with hemochromatosis or hemolytic anemia. Vitamin B_{12} deficiency anemia is usually due to some disorder of the GI tract or dietary restrictions. Various cancer treatments can lead to anemia of chronic kidney disease. Hypertension is a potential adverse reaction to the immunostimulant drugs.

Question format: Multiple Select

Chapter: 48

Learning Objective: 5 Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 655, Generalized System Reactions

- 25. A nurse is preparing a care plan for a client with megaloblastic anemia. When discussing nutritional recommendations, which food(s) should the nurse **prioritize**? Select all that apply.
 - A) Collard greens
 - B) Grapes
 - C) Wheat bread
 - D) Salmon

Answer: A, C, D, E

Rationale: A deficiency of folic acid (folate) results in megaloblastic anemia, and the nurse should encourage a client to eat foods rich in folic acid including leafy green vegetables (collard greens), fish (salmon), meat, poultry (chicken), and whole grains (wheat bread). Grapes contain other nutrients that are beneficial; however, they are not known for being high in folic acid.

Question format: Multiple Select

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential

Integrated Process: Teaching/Learning Reference: p. 656, Folic Acid Deficiency

- 26. A client is prescribed cyanocobalamin for pernicious anemia. The nurse cautions the client about ingesting which substance(s) as it can interfere with absorption of the cyanocobalamin? Select all that apply.
 - A) Alcohol
 - B) Calcium
 - C) Neomycin
 - D) Colchicine
 - E) Phenytoin

Answer: A, C, D

Rationale: Alcohol, neomycin, and colchicine may decrease the absorption of cyanocobalamin (oral vitamin B_{12}). An increase in seizure activity may occur when folic acid is administered with the hydantoins. Interactions with calcium are not noted with these drug classifications.

Question format: Multiple Select

Chapter: 48

Learning Objective: 8 Cognitive Level: Apply

Client Needs: Physiological Integrity: Reduction of Risk Potential

Integrated Process: Teaching/Learning Reference: p. 656, Vitamin B₁₂ Deficiency

- 27. The nurse is preparing to administer a drug that will treat the client's anemia. Which sign(s) or symptom(s) should the nurse **prioritize** in the preadministration assessment for this client? Select all that apply.
 - A) Insomnia
 - B) Pallor
 - C) Headache
 - D) Shortness of breath
 - E) Dry mucous membranes

Answer: B, C, D

Rationale: Prior to administering a drug used to treat anemia, the nurse should assess vital signs, ability to carry out activities of daily living, and general appearance, and for the presence of other general symptoms including fatigue, shortness of breath, sore tongue, headache, and pallor. Insomnia and dry mucous membranes are not indications of anemia.

Question format: Multiple Select

Chapter: 48

Learning Objective: 6 Cognitive Level: Apply

Client Needs: Physiological Integrity: Physiological Adaptation

Integrated Process: Clinical Problem-solving Process (Nursing Process)

Reference: p. 657, Preadministration Assessment