

The Hematologic System ATI (drills & post-test) Exam Questions with Correct Answers and Rationales 2023-2024.

You are talking to a patient who is about to begin taking liquid ferrous sulfate (Feosol) to treat iron-deficiency anemia. Which of the following instructions should you include about the drug? - **Correct ANS:** Drink it

through a straw

Dilute it first with water

You are caring for a patient who is about to begin taking cyanocobalamin (Nascobal), a vitamin B12 preparation. You should understand that the drug treats which of the following types of anemia?

- **Correct ANS:** Pernicious

Cyanocobalamin, a vitamin B12 preparation, treats pernicious anemia.

This type of anemia is a vitamin B12 deficiency due to the lack of intrinsic factor, which the body needs to absorb vitamin B12.

Cyanocobalamin also treats vitamin B12 deficiency from gastric surgery or enteritis. Sickle cell anemia is a genetic disease with which RBCs are crescent-shaped and reduced in number. The sickle cells do not carry oxygen well, and they die prematurely. Aplastic anemia is a disorder from too few stem cells, which the body needs to produce new blood

cells. With iron-deficiency anemia, too little iron results in too few red blood cells.

Folic acid therapeutic use. - **Correct ANS:** treats megaloblastic anemia due to malabsorption syndrome, alcohol abuse, or hepatic disease.

Factor VIII therapeutic use. - **Correct ANS:** treats hemophilia A on demand for bleeding episodes or prophylactically to prevent bleeding.

Filgrastim (Neupogen) therapeutic use - **Correct ANS:** treats severe chronic neutropenia and reduces the infection risk associated with bone marrow transplantation.

Heparin (Lovenox) therapeutic use. - **Correct ANS:** reduces clotting for an evolving CVA, pulmonary embolism, and deep-vein thrombosis. It prevents postoperative venous thrombosis and treats acute myocardial infarction and disseminated intravascular coagulation.

Before administering IV folic acid, you should explain to the patient that the drug can cause which of the following adverse effects? - **Correct**

ANS: Flushing

IV folic acid can cause flushing and warmth with injection, so you should tell the patient to expect these effects. IV folic acid is unlikely to cause nausea. Ferrous sulfate (Feosol) is an example of a hematologic drug that can cause nausea and constipation. IV folic acid is unlikely to cause a headache or dizziness. Alteplase (Activase), a thrombolytic, is an example of a hematologic drug that can cause a headache. Oprelvekin (Interleukin-11), a thrombopoietic growth factor, is a hematologic drug that can cause dizziness, headache, and nervousness.

You are reviewing the history of a patient who is about to begin therapy with Factor VIII (advate) to treat hemophilia A. Which of the following drugs that the patient takes should alert you to take further action? -

Correct ANS: Aspirin (Ecotrin)

Patients who have hemophilia should not take aspirin or other NSAIDs because they increase the risk for bleeding. Patients may take albuterol,

phenytoin, and phenelzine. A second-generation NSAID, such as celecoxib (Celebrex), would pose less risk for bleeding.

You are caring for a patient who is taking warfarin (Coumadin) to prevent venous thrombosis. You should explain that taking the drug requires daily blood samples to monitor for which of the following laboratory tests? - **Correct ANS: PT/INR**

At the start of warfarin therapy, you should monitor prothrombin time (PT) and international normalized ratio (INR) daily and adjust the dosage to maintain an INR of 2 to 3. Monitor the patient for indications of bleeding such as abdominal pain, black tarry stools, or nosebleeds. Warfarin does not affect fibrinogen level, a parameter to assess prior alteplase (Activase) therapy. Warfarin does not affect platelets. Aspirin (Ecotrin) is an example of a drug that inhibits platelet aggregation. Warfarin does not affect fibrinogen level, a parameter to assess prior to alteplase (Activase) therapy. Warfarin does not affect activated partial thromboplastin time (aPTT), a parameter to assess every 4 to 6 hr initially and then daily for patients receiving continuous IV heparin.

You are caring for a patient who is receiving alteplase (Activase) to dissolve a thrombosis. Which of the following should you include in the care plan for the patient? - **Correct ANS:** Monitor blood pressure.

Limit venipunctures.

Check level of consciousness.

Apply pressure to oozing sites.

Filgrastim (Neupogen) pharmacologic action. - **Correct ANS:** a leukopoietic growth factor, stimulates leukocyte (WBC) production for patients who are myelosuppressed due to chemotherapy or disease.

Alteplase (Activase) pharmacologic action. - **Correct ANS:** thrombolytic drug, dissolves a thrombi or blood clot that is already formed.

Epoetin alfa (Procrit) pharmacologic action. - **Correct ANS:** stimulates RBC production in the bone marrow. It treats anemia from renal failure, malignancies, or AIDS.

Clopidogrel (Plavix) pharmacologic action. - **Correct ANS:** an antiplatelet drug, inhibits platelet aggregation and reduces thrombus formation.