

QUESTION

1. A 65-year-old male patient with a long history of hypertension and a recent diagnosis of type 2 diabetes mellitus is being treated with lisinopril and metformin. He has been experiencing increasing fatigue and weakness over the past few weeks. His blood pressure is well-controlled, and his blood glucose levels are stable. Physical examination reveals mild anemia and no other significant findings. Laboratory tests show a hemoglobin level of 11 g/dL, a hematocrit of 33%, and a mean corpuscular volume (MCV) of 85 fL. The reticulocyte count is 0.5%. The patient's renal function is normal, and there are no signs of iron deficiency or vitamin B12 deficiency. What is the most likely cause of his anemia?

- A. Iron deficiency anemia
- B. Vitamin B12 deficiency
- C. Chronic kidney disease
- D. Hemolytic anemia
- E. Anemia of chronic disease

ANSWER: E

EXPLANATION: The patient's anemia is most likely due to anemia of chronic disease (ACD), also known as anemia of inflammation. This condition is characterized by a normochromic, normocytic anemia with a reticulocyte count that is inappropriately low for the degree of anemia. The patient's long history of hypertension and recent diagnosis of type 2 diabetes mellitus are chronic conditions that can lead to ACD. The anemia is not due to iron deficiency (A), vitamin B12 deficiency (B), chronic kidney disease (C), or hemolytic anemia (D) because the MCV is normal and the reticulocyte count is low.

QUESTION



2. A 60-year-old male patient with a long history of hypertension and a recent diagnosis of type 2 diabetes mellitus is being treated with lisinopril and metformin. He has been experiencing increasing fatigue and weakness over the past few weeks. His blood pressure is well-controlled, and his blood glucose levels are stable. Physical examination reveals mild anemia and no other significant findings. Laboratory tests show a hemoglobin level of 11 g/dL, a hematocrit of 33%, and a mean corpuscular volume (MCV) of 85 fL. The reticulocyte count is 0.5%. The patient's renal function is normal, and there are no signs of iron deficiency or vitamin B12 deficiency. What is the most likely cause of his anemia?

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