

QUESTION

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 physical examination is unremarkable, and his laboratory tests show a hemoglobin level of 10 g/dL, a hematocrit of 30%, and a ferritin level of 100 ng/mL. The patient's renal function is stable, and there is no evidence of iron deficiency or other causes of anemia. What is the most likely cause of the patient's anemia?

- A) Iron deficiency anemia
- B) Vitamin B12 deficiency
- C) Folate deficiency
- D) Chronic kidney disease
- E) Hemolytic anemia

ANSWER: B

EXPLANATION: The patient's anemia is most likely due to a deficiency of vitamin B12. The patient's hemoglobin level is 10 g/dL, which is below the normal range for a male patient. The hematocrit is 30%, which is also below the normal range. The ferritin level is 100 ng/mL, which is within the normal range. The patient's renal function is stable, and there is no evidence of iron deficiency or other causes of anemia. The patient's symptoms of increasing fatigue and weakness over the past few weeks are consistent with a deficiency of vitamin B12. The patient's long history of hypertension and recent diagnosis of type 2 diabetes mellitus are not likely to be the cause of the anemia.

QUESTION

A 45-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 physical examination is unremarkable, and his laboratory tests show a hemoglobin level of 10 g/dL, a hematocrit of 30%, and a ferritin level of 100 ng/mL. The patient's renal function is stable, and there is no evidence of iron deficiency or other causes of anemia. What is the most likely cause of the patient's anemia?

- A) Iron deficiency anemia
- B) Vitamin B12 deficiency
- C) Folate deficiency
- D) Chronic kidney disease
- E) Hemolytic anemia

ANSWER: B

EXPLANATION: The patient's anemia is most likely due to a deficiency of vitamin B12. The patient's hemoglobin level is 10 g/dL, which is below the normal range for a male patient. The hematocrit is 30%, which is also below the normal range. The ferritin level is 100 ng/mL, which is within the normal range. The patient's renal function is stable, and there is no evidence of iron deficiency or other causes of anemia. The patient's symptoms of increasing fatigue and weakness over the past few weeks are consistent with a deficiency of vitamin B12. The patient's long history of hypertension and recent diagnosis of type 2 diabetes mellitus are not likely to be the cause of the anemia.