

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 blood pressure is well-controlled, and his blood glucose levels are stable. The patient is concerned about the possibility of a heart attack or stroke. The physician orders a complete blood count (CBC) and a comprehensive metabolic panel (CMP). The CBC shows a hemoglobin level of 10 g/dL and a hematocrit of 30%. The CMP shows a serum ferritin level of 100 ng/mL and a serum iron level of 100 µg/dL. The patient's physician is considering the possibility of iron deficiency anemia.

Parameter	Value	Reference Range
Hemoglobin	10 g/dL	13.5-15.5 g/dL
Hematocrit	30%	37-47%
Serum Ferritin	100 ng/mL	20-200 ng/mL
Serum Iron	100 µg/dL	50-150 µg/dL

What is the most likely cause of the patient's anemia?

ANSWER

The patient's anemia is most likely caused by iron deficiency. The patient's hemoglobin level is 10 g/dL and his hematocrit is 30%, which is consistent with iron deficiency anemia. The patient's serum ferritin level is 100 ng/mL and his serum iron level is 100 µg/dL, which are both low. The patient's physician is considering the possibility of iron deficiency anemia because of the patient's symptoms and the laboratory findings. The patient's long history of hypertension and recent diagnosis of type 2 diabetes mellitus are not likely to be the cause of his anemia. The patient's blood pressure is well-controlled and his blood glucose levels are stable. The patient's physician is considering the possibility of iron deficiency anemia because of the patient's symptoms and the laboratory findings.