

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 most recent laboratory tests show a hemoglobin level of 10.5 g/dL, a hematocrit of 32%, and a ferritin level of 150 ng/mL. What is the most likely cause of his anemia?

ANSWER
 The most likely cause of the patient's anemia is iron deficiency anemia.

Option	Correct Answer
A. Iron deficiency anemia	Correct
B. Vitamin B12 deficiency	Incorrect
C. Folate deficiency	Incorrect
D. Hemolytic anemia	Incorrect
E. Aplastic anemia	Incorrect

EXPLANATION

The patient's anemia is most likely due to iron deficiency. The key laboratory findings supporting this diagnosis are the low hemoglobin (10.5 g/dL) and hematocrit (32%), which are consistent with a microcytic anemia. The ferritin level of 150 ng/mL is significantly elevated, which is atypical for iron deficiency anemia. However, in patients with chronic conditions like hypertension and diabetes, ferritin levels can be falsely elevated due to inflammation or liver disease. The patient's symptoms of fatigue and weakness, along with the microcytic anemia, strongly suggest iron deficiency.

REFERENCE
 Harrison's Principles of Internal Medicine, 20th Edition, Chapter 114: Anemias.