

## QUESTION

A 60-year-old man with a 30-year history of type 2 diabetes mellitus and a 10-year history of hypertension presents with a 2-week history of increasing fatigue and weakness. He reports that he has lost about 10 pounds (4.5 kg) over the past few months. He also reports that he has been experiencing frequent urination and increased thirst. His medical history is significant for chronic kidney disease (CKD) stage 3, which was diagnosed 5 years ago. He is currently taking metformin, lisinopril, and insulin.

On physical examination, he appears frail and has a body mass index (BMI) of 22. His vital signs are stable. There is no tachycardia or tachypnea. His lungs are clear to auscultation. His heart rate is regular, and there are no murmurs, rubs, or gallops. His abdomen is soft, and there is no hepatosplenomegaly. His lower extremities show no edema. His laboratory studies are as follows:

Parameter	Value	Reference Range
Hemoglobin (Hb)	10.5 g/dL	13.8–17.2 g/dL
Hematocrit (Hct)	31.5%	41%–53%
Mean Corpuscular Volume (MCV)	100 fL	82–101 fL
Red Blood Cell Count (RBC)	3.5 million/mm <sup>3</sup>	4.2–5.9 million/mm <sup>3</sup>
White Blood Cell Count (WBC)	12,000/mm <sup>3</sup>	4,800–10,800/mm <sup>3</sup>
Differential WBC Count		
Neutrophils	75%	57%–76%
Lymphocytes	15%	20%–40%
Monocytes	5%	2%–10%
Eosinophils	2%	1%–5%
Basophils	3%	0.5%–2%
Serum Creatinine	2.5 mg/dL	0.6–1.3 mg/dL
BUN	30 mg/dL	7–20 mg/dL
Serum Glucocorticoid Levels	Low	Normal

Based on the information provided, what is the most likely diagnosis?

## ANSWER



Based on the information provided, the most likely diagnosis is **Iron deficiency anemia**.