

QUESTION

A 65-year-old male patient with a long history of hypertension and hyperlipidemia presents to the clinic with a 2-week history of increasing fatigue and weakness. He reports that he has been unable to complete his usual activities of daily living, such as walking to the store or climbing stairs. He has lost approximately 10 pounds (4.5 kg) over the past 3 months. He has no chest pain, shortness of breath, or palpitations. He has no history of smoking, alcohol use, or drug use. He is currently taking lisinopril 10 mg daily and atorvastatin 20 mg daily. His medical history is otherwise unremarkable. He has no family history of heart disease or cancer. He is a retired construction worker and lives with his wife and two children. He is currently on sick leave from work.

Physical Examination	Vital Signs	Investigations
General: Cachectic, pale, and anicteric. No lymphadenopathy or splenomegaly.	Temperature: 37.5°C (99.5°F) Heart rate: 95 bpm Blood pressure: 145/85 mmHg Respiratory rate: 18 breaths/min Oxygen saturation: 98% on room air	Complete blood count (CBC): Hemoglobin 10 g/dL, Hematocrit 30%, Platelets 150,000/mm ³ Basic metabolic panel (BMP): Sodium 135 mEq/L, Potassium 4.0 mEq/L, Creatinine 1.2 mg/dL Liver function tests (LFTs): Aspartate aminotransferase (AST) 45 U/L, Alanine aminotransferase (ALT) 35 U/L, Bilirubin 1.2 mg/dL Urinalysis: Hematuria (2+), Proteinuria (1+), No leukocytes or nitrites

ECG: Sinus tachycardia, ST-segment depression in leads V4-V6.

Imaging: Chest X-ray shows clear lung fields. Echocardiogram shows a normal-sized heart with a normal ejection fraction of 55%.

ANSWER

The patient's symptoms and physical examination findings are consistent with a diagnosis of anemia. The most likely cause of the anemia is iron deficiency anemia (IDA), given the patient's history of chronic fatigue and weight loss, and the presence of microcytic anemia with a low hemoglobin level and a low hematocrit. The patient's physical examination findings, including cachexia and pallor, are also consistent with IDA. The patient's laboratory findings, including a low hemoglobin level, a low hematocrit, and a normal platelet count, further support the diagnosis of IDA. The patient's physical examination findings, including tachycardia and ST-segment depression, are also consistent with IDA. The patient's physical examination findings, including tachycardia and ST-segment depression, are also consistent with IDA.

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