

QUESTION

A 68-year-old woman with a 10-year history of rheumatoid arthritis is on chronic low-dose prednisone. She has been experiencing increasing fatigue and weakness over the past 3 months. She has lost 10 pounds (4.5 kg) and has difficulty climbing stairs. She has no chest pain, shortness of breath, or palpitations. She has no history of smoking or alcohol use.

On physical examination, she has a heart rate of 68 beats per minute, blood pressure of 110/70 mm Hg, and oxygen saturation of 98% on room air. Her lungs are clear to auscultation. There is no jugular venous distention. Her abdomen is soft and non-tender. She has mild lower-extremity edema. Her electrocardiogram is normal. Her hemoglobin is 10.5 g/dL, hematocrit is 32%, and hemoglobin A_{1c} is 5.8%. Her serum sodium is 128 mEq/L, potassium is 3.2 mEq/L, calcium is 8.8 mg/dL, and creatinine is 1.2 mg/dL. Her thyroid-stimulating hormone level is 0.05 mIU/L.

Which of the following is the most likely cause of her symptoms?

Options:

- A. Anemia
- B. Hypothyroidism
- C. Hypokalemia
- D. Hypoparathyroidism
- E. Heart failure

Correct answer: B

ANSWER

Explanation: The patient's symptoms of fatigue and weakness, along with weight loss and mild lower-extremity edema, are consistent with hypothyroidism. The patient's low thyroid-stimulating hormone level (0.05 mIU/L) confirms this diagnosis. The patient's anemia (hemoglobin 10.5 g/dL, hematocrit 32%) is likely a result of the hypothyroidism. The patient's hypocalcemia (calcium 8.8 mg/dL) is also consistent with hypothyroidism, as thyroid hormone deficiency can lead to decreased parathyroid hormone-related protein production and subsequent hypocalcemia.

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