

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 reports feeling increasingly fatigued and has noticed some swelling in his lower extremities. His blood pressure is 150/95 mmHg, heart rate is 78 bpm, and oxygen saturation is 96% on room air. Physical examination reveals bilateral lower extremity edema and a clear lung field. Laboratory tests show a serum sodium of 132 mEq/L, serum potassium of 3.8 mEq/L, and a serum creatinine of 1.8 mg/dL.

ANSWER
 The patient's symptoms and physical findings are consistent with fluid overload, likely due to the combination of hypertension and heart failure. The elevated blood pressure and lower extremity edema suggest a volume overload state. The clear lung fields indicate that the edema is primarily peripheral. The laboratory findings, including hyponatremia and a slightly elevated creatinine, further support the diagnosis of heart failure.

EXPLANATION
 The patient's clinical presentation is characteristic of heart failure with volume overload. The combination of hypertension and heart failure can lead to fluid retention, resulting in symptoms such as fatigue and peripheral edema. The physical examination findings of lower extremity edema and clear lung fields are typical of this condition. The laboratory results, including hyponatremia and a slightly elevated creatinine, are also consistent with heart failure.

KEY POINTS

- 1. Hypertension and heart failure can lead to fluid overload, resulting in symptoms such as fatigue and peripheral edema.
- 2. Physical examination findings of lower extremity edema and clear lung fields are typical of heart failure with volume overload.
- 3. Laboratory results, including hyponatremia and a slightly elevated creatinine, are also consistent with heart failure.