

**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, potassium of 3.8 mEq/L, and a creatinine of 1.2 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 presence of lower-extremity edema and a clear lung field suggests a right-sided heart failure. The patient's blood pressure is significantly elevated, and his heart rate is within the normal range. The laboratory tests show a normal serum sodium and potassium level, but a slightly elevated creatinine level, which may indicate renal impairment.

**EXPLANATION**  
 The patient's symptoms and physical findings are consistent with fluid overload, likely due to the combination of hypertension and heart failure. The presence of lower-extremity edema and a clear lung field suggests a right-sided heart failure. The patient's blood pressure is significantly elevated, and his heart rate is within the normal range. The laboratory tests show a normal serum sodium and potassium level, but a slightly elevated creatinine level, which may indicate renal impairment.

## ANSWERS

