

## 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 lost about 10 pounds (4.5 kg) and has noticed some swelling in his lower legs. He has no chest pain, shortness of breath, or changes in bowel or bladder habits. He has been taking lisinopril and atorvastatin for several years. His last physical examination was 6 months ago, when he was noted to have a normal physical examination. He has no known allergies and is not taking any other medications. He has a family history of heart disease and diabetes. He has a current smoking history of 20 pack-years and consumes alcohol occasionally. He has a current body mass index (BMI) of 28 kg/m<sup>2</sup>. His vital signs are: temperature 37.5°C (99.5°F), heart rate 98 beats per minute, blood pressure 150/95 mmHg, and respiratory rate 18 breaths per minute. His physical examination is notable for a normal heart and lungs, but there is a 2+ pitting edema in both lower legs. His laboratory studies are as follows:

Test	Result	Reference Range
Complete blood count (CBC)	Normal	
Basic metabolic panel (BMP)	Normal	
Comprehensive metabolic panel (CMP)	Normal	
Thyroid-stimulating hormone (TSH)	0.02 mIU/L	0.4-4.0 mIU/L
Free thyroxine (FT4)	0.1 ng/dL	0.8-1.8 ng/dL
Free triiodothyronine (FT3)	0.01 ng/dL	0.3-0.7 ng/dL
Antithyroid antibodies	Positive	

What is the most likely diagnosis?

## ANSWER



The patient's symptoms and physical findings are consistent with hypothyroidism. The laboratory studies show a significantly suppressed TSH level and low levels of FT4 and FT3, which are characteristic of primary hypothyroidism. The positive antithyroid antibodies further support this diagnosis. The most likely diagnosis is Hashimoto's thyroiditis, an autoimmune disease that causes chronic inflammation of the thyroid gland, leading to hypothyroidism. The patient's symptoms of fatigue, weight loss, and edema are common manifestations of this condition. The physical findings of a normal heart and lungs, but with 2+ pitting edema in both lower legs, are also consistent with hypothyroidism. The patient's history of hypertension and hyperlipidemia, along with his current BMI of 28 kg/m<sup>2</sup>, suggest that he may have other comorbidities that need to be addressed in addition to his thyroid disease.

What is the most appropriate next step in management?