

### 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 progressive weakness and fatigue. 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 and has experienced frequent falls. He has no chest pain, shortness of breath, or changes in bowel habits. He has a past medical history of coronary artery disease, treated with aspirin and statins, and a history of alcohol abuse. He is currently on lisinopril, amlodipine, and atorvastatin. His physical examination reveals a thin, frail man with a heart rate of 100 beats per minute, blood pressure of 160/90 mmHg, and a respiratory rate of 18 breaths per minute. He has a bounding carotid pulse and a normal lung examination. His abdomen is soft and non-tender, with no organomegaly. His lower extremities show bilateral lower-extremity edema and a normal neurological examination. His electrocardiogram (ECG) shows a sinus tachycardia with a heart rate of 100 beats per minute and a normal interval. His chest X-ray is unremarkable. His laboratory studies are as follows:

Test	Result	Reference Range
Complete Blood Count (CBC)		
Hemoglobin (Hb)	11.5 g/dL	13.5-16.5 g/dL
Hematocrit (Hct)	35%	41%-53%
White Blood Cell Count (WBC)	12,000 cells/mm <sup>3</sup>	4,000-11,000 cells/mm <sup>3</sup>
Platelet Count	150,000 cells/mm <sup>3</sup>	150,000-450,000 cells/mm <sup>3</sup>
Basic Metabolic Panel (BMP)		
Serum Sodium (Na <sup>+</sup> )	135 mEq/L	136-145 mEq/L
Serum Potassium (K <sup>+</sup> )	3.8 mEq/L	3.5-5.0 mEq/L
Serum Calcium (Ca <sup>2+</sup> )	8.5 mg/dL	8.8-10.0 mg/dL
Serum Creatinine	1.2 mg/dL	0.7-1.3 mg/dL
Serum Urea Nitrogen (BUN)	18 mg/dL	7-20 mg/dL
Serum Glucose	100 mg/dL	70-100 mg/dL
Liver Function Tests (LFTs)		
Aspartate Aminotransferase (AST)	15 U/L	0-37 U/L
Alanine Aminotransferase (ALT)	12 U/L	0-40 U/L
Gamma-Glutamyl Transaminase (GGT)	25 U/L	0-50 U/L
Alkaline Phosphatase (ALP)	100 U/L	30-120 U/L
Bilirubin	1.2 mg/dL	0.1-1.2 mg/dL
Thyroid Function Tests (TFTs)		
Free Thyroxine (T <sub>4</sub> )	0.8 ng/dL	0.8-1.8 ng/dL
Free Triiodothyronine (T <sub>3</sub> )	2.8 pmol/L	2.3-4.2 pmol/L
Thyroid-Stimulating Hormone (TSH)	0.05 mIU/L	0.4-4.0 mIU/L
Thyroid-Stimulating Hormone-Releasing Hormone (TRH) Test	Suppressed	Not suppressed
Thyroid Ultrasound	Normal	
Antithyroid Antibodies	None detected	

ECG: Sinus tachycardia, heart rate 100 bpm, normal intervals.

Chest X-ray: Unremarkable.

### ANSWER



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