CASE 43 THYROID DISEASE

**History:** A 35-year-old female nurse complained of nervousness, weakness, and palpitations with exertion for the past 6 months. Recently, she noticed excessive sweating and wanted to sleep with fewer blankets than her husband. She had maintained a normal weight of 120 pounds but was eating twice as much as she did 1 year ago. Menstrual periods have been regular but there was less bleeding.

**Physical examination:** Pulse was 92/minute and BP was 130/60. She appeared anxious, with a smooth, warm, and moist skin, a fine tremor, a bounding cardiac apical impulse, a pulmonic flow murmur, and she couldn't rise from a deep knee bend without aid. Her thyroid contained 3 nodules, 2 on the right and one on the left with a total gland size of 60 grams (3 times normal size), all nodules being of firm consistency and there was no lymphadenopathy. Her eyes were not prominent (proptotic) and she had no focal skin thickening.

**Laboratory studies:** Serum T4=15.6 ug/dl and serum T3=250 ng/dl (N=80-160).

1. What is the level of thyroid function in this patient? Are additional diagnostic tests necessary to define the level of thyroid function and if so which one(s)?
   Answer: hyperthyroidism, and Yes

2. What are the symptoms that made you consider that diagnosis? Answer

3. What physical findings supported the diagnosis? Answer

4. Which lab data supported the diagnosis? Answer

   Explain-Hypothalamic-Pituitary-Thyroid axis and interrelationship.

5. What are the most likely causes? Answer

6. What additional aspects of the history and physical examination could provide relevant information to help in the clinical diagnosis? Answer

7. What is the most likely cause of this patient's illness? What tests are necessary to confirm its cause? Are antithyroid antibodies helpful? Answer

8. What are the treatment options? Answer