

**Hyperthyroidism
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Samatha Boyd is a 50-year-old bank teller without significant past medical history who presents for an urgent care visit to your IMS clinic with complaints of fatigue over the last 4 months. She reports that she's gained 8 pounds in the last 6 months, but thinks she's been eating normally. She's been a bit depressed lately, noting that her chronic insomnia has become much worse.

- **What is your differential diagnosis? What other questions do you want to ask her?**

Ms. Boyd admits that her hair has thinned and that she has been having "hot flashes." Additionally, her periods have become irregular. She tells you that she has already mentioned this to her PMD who reassured her that these are common menopausal symptoms. She denies other symptoms.

- **What part of the physical examination will be most relevant?**

Physical exam is notable for HR 98, BP 143/90, temp 37.1. Hair is uniformly thin. No obvious exophthalmos is noted but, you think you may detect a hint of lid lag. The thyroid gland is palpable and non-tender, with no nodules. Cardiac exam is notable for occasional premature beats. Reflexes are brisk. You suspect hyperthyroidism.

- **What lab studies will you order?**

You explain your differential diagnosis to the patient, and she seems skeptical. She says she has gained, not lost weight, and she knows weight gain is associated with hypothyroidism.

- **How would you respond?**

Ms. Boyd's labs are as follows; TSH $<.02$, Free thyroxine is high. You confirm the diagnosis of hyperthyroidism.

- **What are the causes of hyperthyroidism?**
- **How would you establish a diagnosis of Graves' disease?**
- **What are your options for treatment of Graves' disease? Discuss the pros and cons for each.**
- **You decide to start on PTU at 100 mg PO tid. What side effects should you inform her about?**

You see the patient in follow-up two weeks, and she feels much better and has gained 5 pounds. She thanks you for your excellent care.

References:

- The New England Journal of Medicine, "Graves' Disease", October 26, 2000
- Volume 343, No. 17, Pages 1236-1248
- The New England Journal of Medicine, "The management of Hyperthyroidism", June 16, 1994
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