**AHD OBJECTIVES 4-2-19 - ENDOCRINOLOGY MONTH**

**Thyroid Function Test Interpretation:**

1. Describe the normal physiology of the hypothalamus-pituitary-thyroid-target tissue axis. (It may help to draw a diagram and label it with feedback loops.)
2. Know the single best test to evaluate thyroid function in most cases.
3. Know and understand the differential diagnoses for the following thyroid function tests in the described clinical scenario:
   1. Asymptomatic; Normal TSH; Normal FT4
   2. Fatigue, constipation:High TSH; Low FT4
   3. Palpitations,sweating: High TSH; High FT4
   4. Asymptomatic: High TSH; High FT4
   5. Fatigue, constipation; Normal TSH; Low FT4
   6. Asymptomatic; Low TSH; Normal FT4; Normal TT3
   7. Palpitations, sweating: High FT4; High TT3
4. Describe the changes to thyroid physiology in pregnancy and know what happens to the requirement for thyroxine supplementation in hypothyroid women who become pregnant.

**Thyroid Nodules:**

1. Know the rate of malignancy in thyroid nodules that are detected on imaging performed for a non-thyroid related reason.
2. List and describe several risk factors for thyroid cancer.
3. Know the first test(s) to order in the step-wise evaluation of a thyroid nodule.
4. Know the next test to order in a patient who has a low (suppressed) TSH.
5. Know the indications for FNA in patients with a thyroid nodule less than 1 cm in diameter whose TSH is normal or high. (4 indications)
6. Know the 4 possible pathologic results of a thyroid nodule FNA and the correct clinical management of each of these results.

**Endocrine emergencies:**

1. List the 5 major components of DKA management, and roughly quantify each
2. Know the three major mechanisms of hypoglycemia.
3. Know the first two drugs we reach for in thyroid storm.
4. Name the hallmark symptom of myxedema coma.
5. Describe the lab profile of acute AI.