

Introduction to Evidence Based Medicine:

Examination of the Thyroid Gland

- **JAMA recommendations on the detection of a goiter (Siminoski K. Rational clinical examination: Does this patient have a goiter? JAMA. 1995;273(10),813-817.):**
 - **Palpation**
 - palpation of the thyroid can be performed from in front of or behind the patient. No study has shown superiority of either method (Simonoski K. The rational clinical examination: Does this patient have goiter? JAMA 273:813-817, 1995)
 - **Detection of a goiter**
 - categorize thyroid size as normal or goiter
 - subcategorize goiter as small (1-2x normal) or large (>2x normal)
 - if you believe that the patient has a small goiter, consider whether you overestimated the size
 - determine whether there is any prominence in the profile of the neck where the thyroid is located when the neck is viewed laterally. If a prominence is present:
 - using a ruler, determine whether the prominence is >2mm
 - determine if the gland is visible from the front with the neck extended
 - from this information, place your patient in 1 of 3 categories:
 - Goiter ruled out
 - normal thyroid size, thyroid not visible with neck extended

- Goiter ruled in
 - large goiter present or a lateral prominence of >2mm
- Inconclusive
 - all other findings
- **Advice from McGee** (McGee S. Evidence-Based Physical Diagnosis. Phil: WB Saunders Co, 2001):
 - **Inspection**
 - when observing the patient swallow, a neck mass is likely not the thyroid gland if (1) the mass does not move, (2) the mass does not hesitate before descending to its original position, (3) the mass returns to its original position before complete descent of the thyroid cartilage (Simonoski K. Differential movement during swallowing as an aid in the detection of thyroid pseudonodules. Head Neck 16:21-24, 1994)
 - **Auscultation**
 - a thyroid bruit is a common feature of Graves' disease but is sometimes found in elderly patients with toxic nodular goiter. However, it should be noted that in these elderly patients, this 'thyroid bruit' may in fact be a carotid bruit that is accentuated by the increase in cardiac output seen with hyperthyroidism (Dobyns BM. Goiter, Curr Prob Surg 2-60, 1969) (Davis PJ & Davis FB. Hyperthyroidism in patients over the age of 60 years: clinical features in 85 patients, Medicine 53:161-181, 1974) (McGee S. Evidence-Based Physical Diagnosis. Phil: WB Saunders Co, 2001)