

Hypothyroidism

General

- From asymptomatic to myxedema coma
- “Like everything is slowed down”
- Low exercise tolerance
- Hyperlipidemia
- Cold intolerance

Neuro

- Depression
- Memory loss
- Fatigue

Face/Neck

- Hair is coarse, brittle and is lost
- Thinning of lateral 1/3 of eye brows
- Puffy Face
- Enlarged tongue
- Hoarseness
- ± Goitre

- Weight gain (modest)

Cardiovascular

- bradycardia
- cardiomegaly
- pericardial effusion
- hypertension

GI

- Constipation

Gu:

- Menorrhagia

Skin

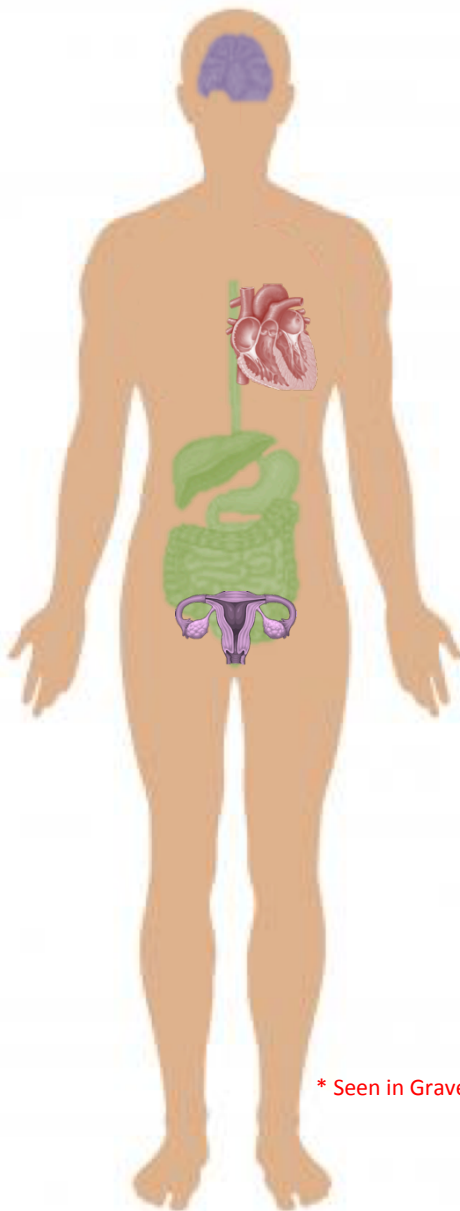
- Skin is dry, coarse, thick, cold, pale

Muscles

- Weakness, cramps

- Tendon Reflex Delay (relaxation phase)

Symptoms and Signs



* Seen in Graves

Hyperthyroidism

General

- “Like running a marathon all the time”
- Appear to have high energy but are fatigued
- poor exercise tolerance
- Heat intolerance

Neuro

- Nervousness
- Restlessness
- Insomnia
- Tremour

Face/Neck

- ophthalmopathy
 - ocular changes (periorbital swelling, lid retraction and lid lag, stare and infrequent blinking)
 - infiltrative (**proptosis/exophthalmos**, increased edema of lids and conjunctiva, **chemosis**, ophthalmoplegia)
- ± Diffuse goitre
- **Bruit** (when auscultating over thyroid)

- Weight loss (despite appetite)

Cardiovascular

- Palpitations, Afib

GI

- Diarrhea

Gu:

- Infertility, amenorrhea

Skin

- Sweating
- Warm, moist skin
- **Dermatopathy**
 - **Hands: Acropachy**
 - **Legs: “pretibial myxedema**

- Increased Reflexes

Other: Onycholysis, gynecomastia, palmar erythema, spider angiomas, myopathy, periodic paralysis, vitiligo

Approach to Thyroid Masses

HPI

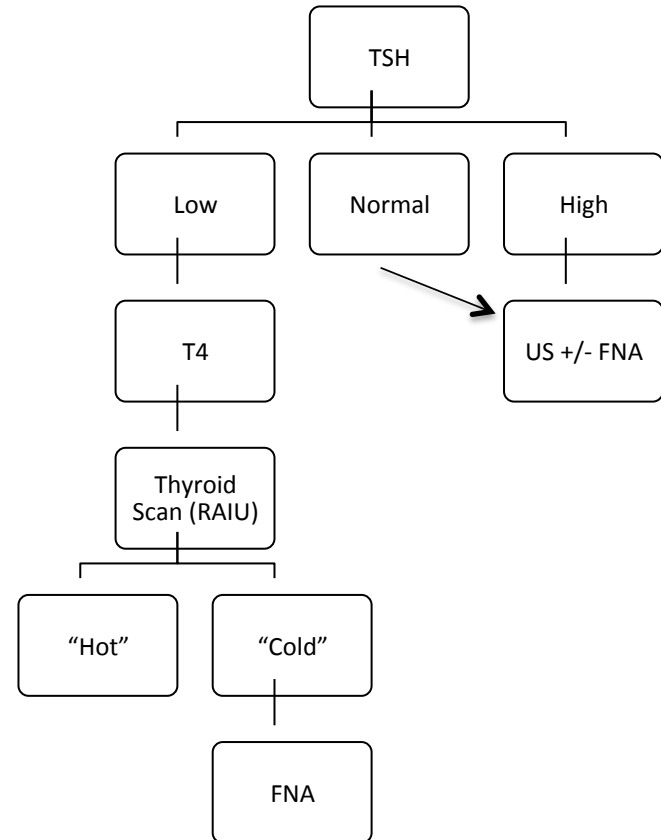
- History of Significant Radiation Exposure (Chernobyl nuclear accident in 1986, external beam radiation treatment to the head and neck for other cancers like lymphoma, radiation facial acne treatment in 1950s)
- Voice change (neck mass compressing the recurrent laryngeal nerve)

FH:

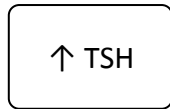
- Family history (esp. medullary thyroid cancer)

PE:

- physical findings associated with an increased risk malignancy:
- Size >4 cm
- Male
- Age <20 or >60
- Rapid growth
- Lymphadenopathy
- Hoarse voice, voice change, or vocal cord paralysis
- Mass is fixed or tethered and does not move with swallowing

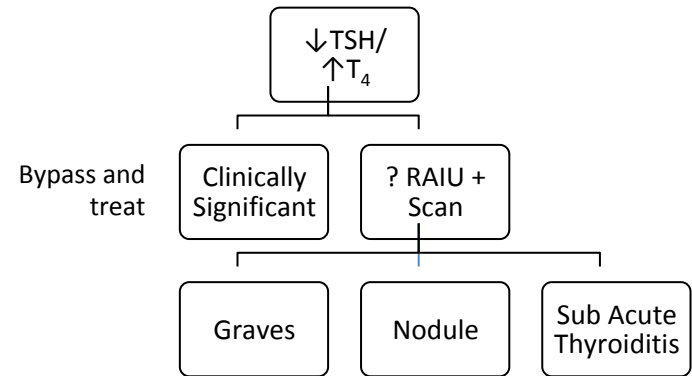


Approach to Hypothyroid

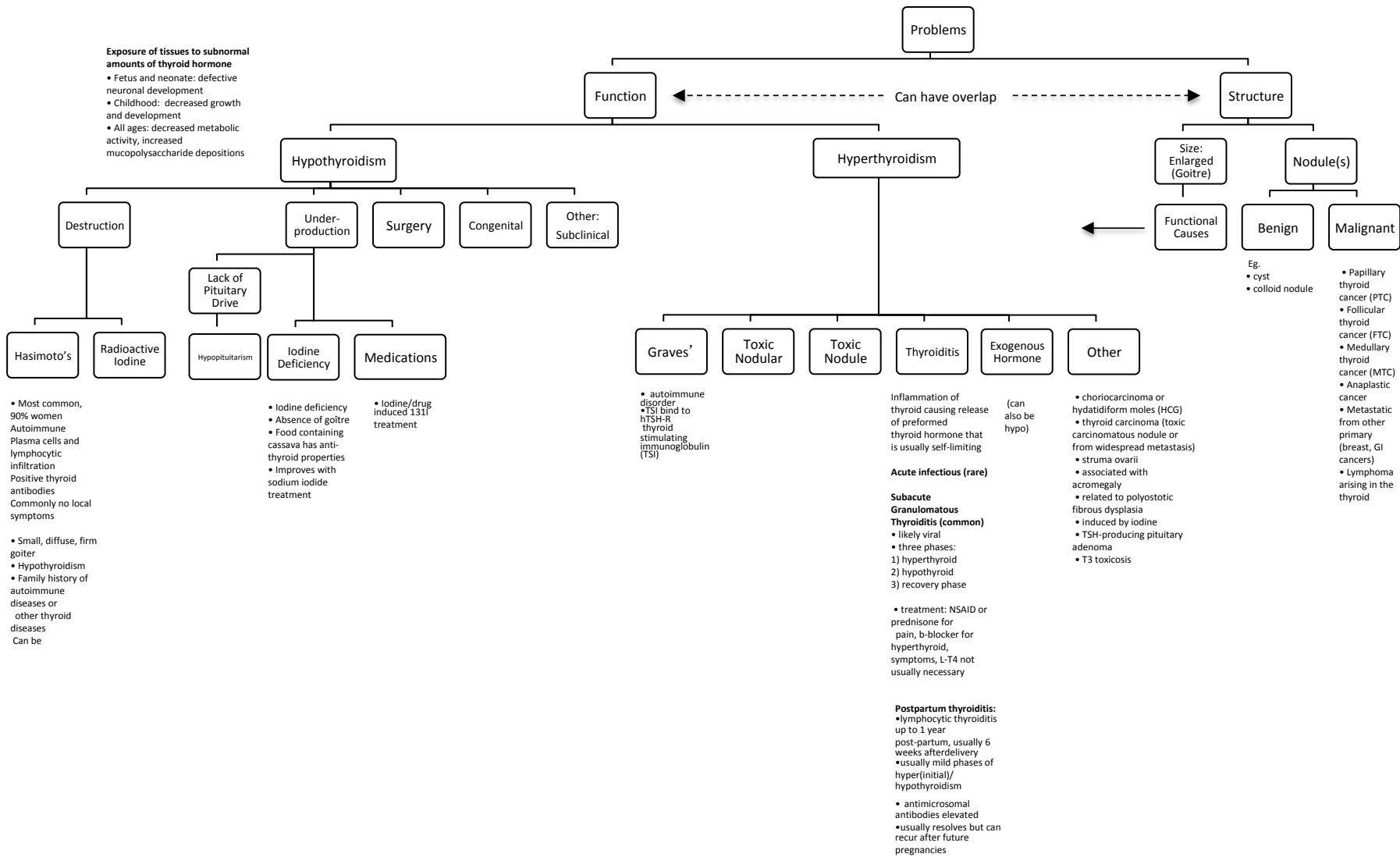


No other tests needed → Likely Hashimotos

Approach to Hyperthyroid



Uptake	↑	↑	↓
Scan	Diffuse	Hot Nodule	N



←----- Can have overlap ----->

- Most common, 90% women
- Autoimmune
- Plasma cells and lymphocytic infiltration
- Positive thyroid antibodies
- Commonly no local symptoms
- Small, diffuse, firm goiter
- Hypothyroidism
- Family history of autoimmune diseases or other thyroid diseases
- Can be

- Iodine deficiency
- Absence of goitre
- Food containing cassava has anti-thyroid properties
- Improves with sodium iodide treatment

- autoimmune disorder
- TSI bind to TSH-R thyroid stimulating immunoglobulin (TSI)

- Inflammation of thyroid causing release of preformed thyroid hormone that is usually self-limiting
- Acute infectious (rare)**
- Subacute Granulomatous Thyroiditis (common)**
- likely viral
- three phases:
 - 1) hyperthyroid
 - 2) hypothyroid
 - 3) recovery phase
- treatment: NSAID or prednisone for pain, b-blocker for hyperthyroid, symptoms, L-T4 not usually necessary

- Postpartum thyroiditis:**
- lymphocytic thyroiditis up to 1 year
- post-partum, usually 6 weeks after delivery
- usually mild phases of hyper(initial)/hypothyroidism
- antimicrosomal antibodies elevated
- usually resolves but can recur after future pregnancies