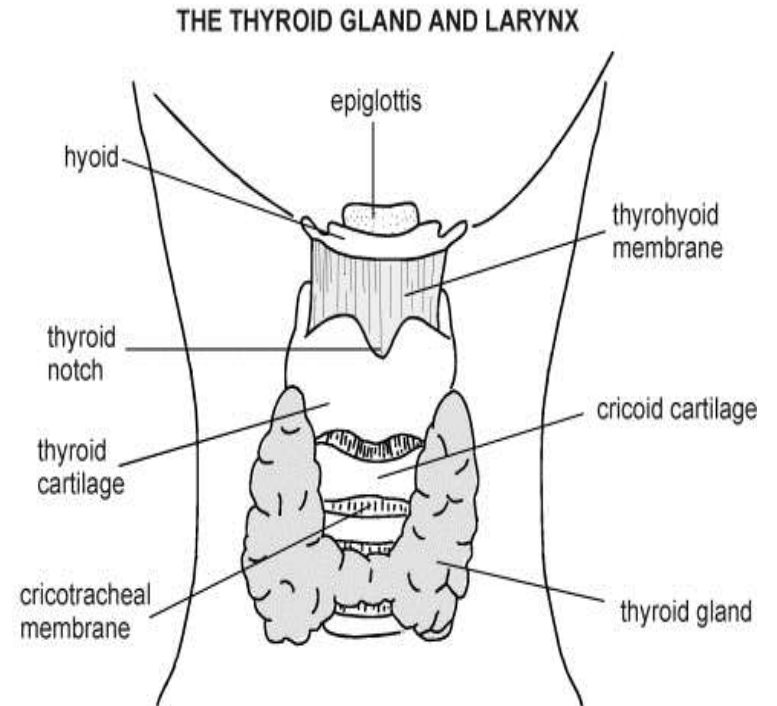
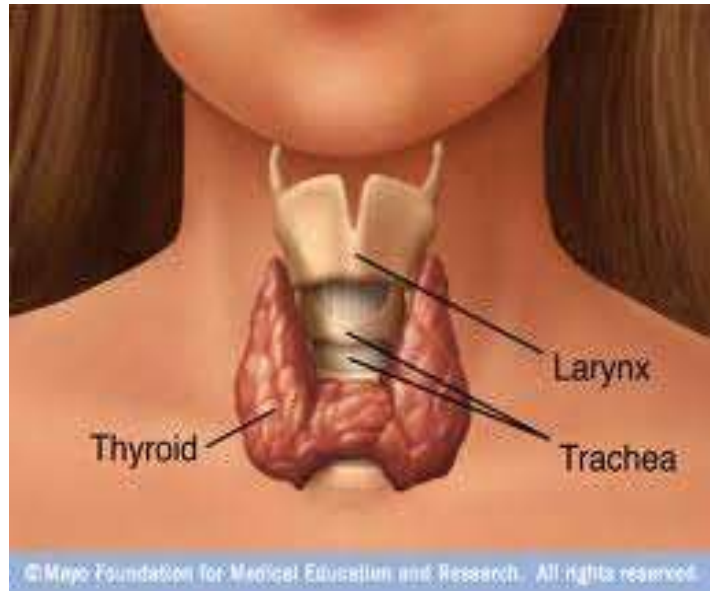


Thyroid Examination

DR. Mohamad KOURABI

Thyroid Anatomy



Examination of the Thyroid Gland

Inspection:

- You stand in front of the patient
- Have the patient swallow, with the neck hyper extended
- You look for the free mobility of the thyroid gland

Palpation:

- Stand behind the patient and now have the neck flexed
- Note the temperature over the gland and adjacent skin

Thyroid Gland: Palpation

- Locate the Cricoid cartilage & move 2/3 rings below the Cricoid
- As you palpate, feel for the thyroid isthmus
- Move laterally to both thyroid lobes
- Ask the patient to swallow while you palpate
- Note the surface consistency & borders/margins of each lobe
- The left lobe is pushed to the right as you feel the right lobe
- Do the opposite for palpation of the left lobe

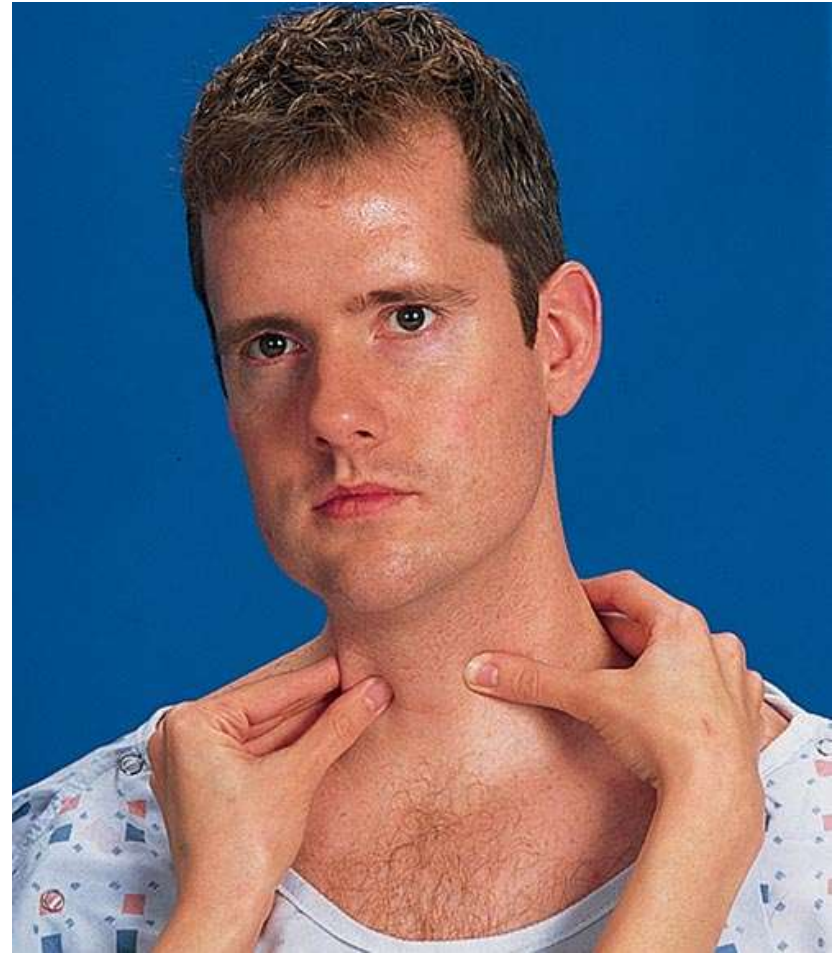
Inspection



Inspection

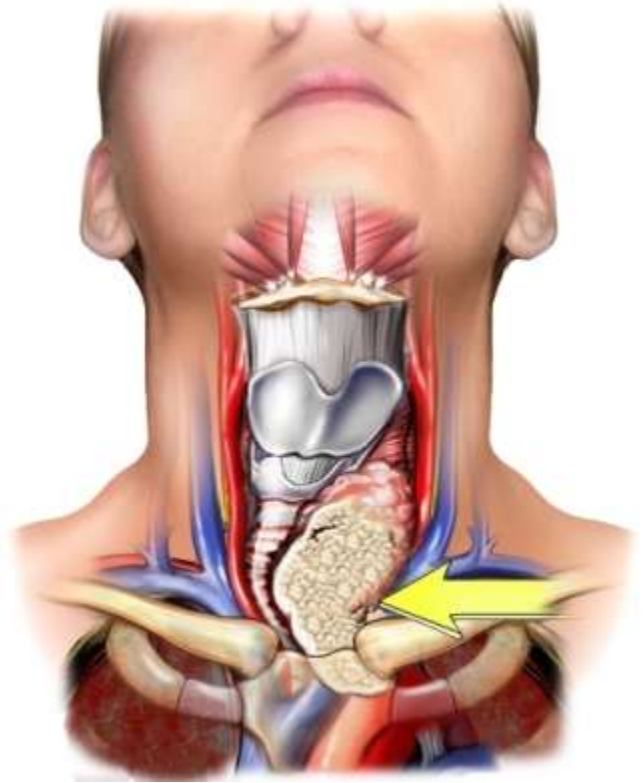


Palpation



Palpation







The Goiters

Hyperplastic epithelium?

Graves's
Iodine deficiency
Goitrogen / PTU effect

Colloid-filled follicles?

"Idiopathic" nodular goiter

Anaplastic cells?

Cancer

Lymphocytes?

Hashimoto's

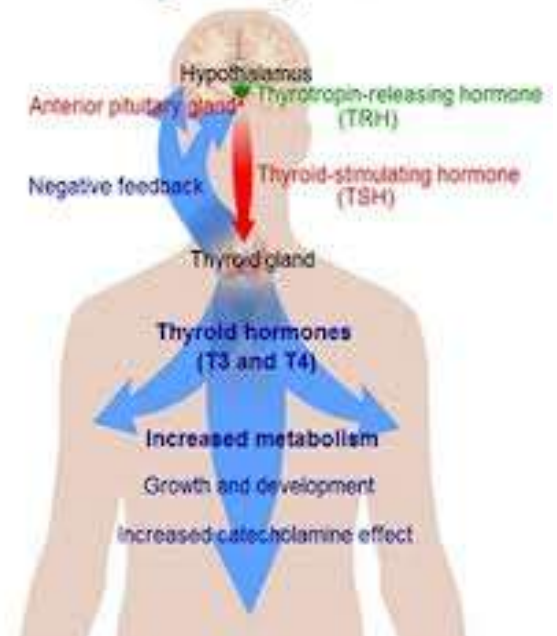
Foreign-body granulomas?

DeQuervain's

Fibrous tissue?

Riedel's

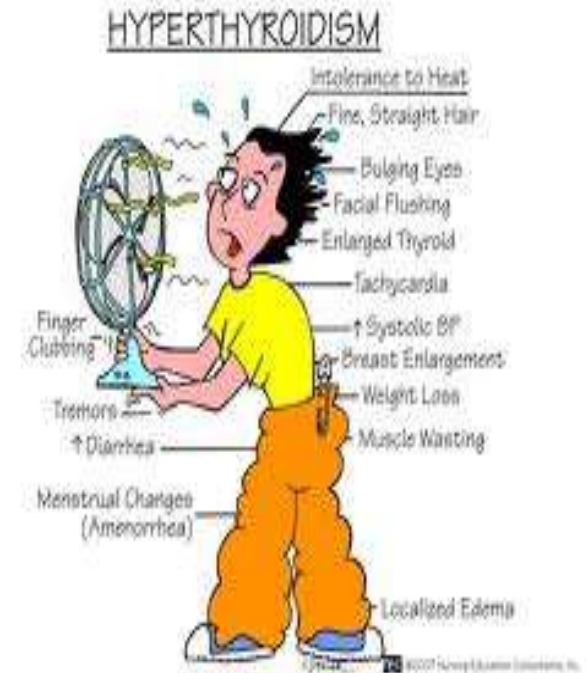
Thyroid system



Hyperthyroidism

Table 1 **Symptoms of Thyroid Disease**

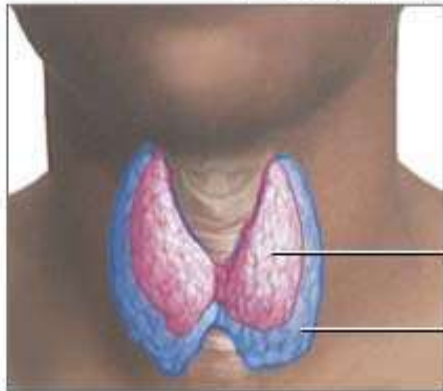
Hyperthyroidism (Overactive) % Cases		Hypothyroidism (Underactive) % Cases	
Rapid heart rate	100	Weakness	99
Goiter	100	Dry or coarse skin	97
Nervousness	99	Fatigue	91
Tremor	97	Slow speech	91
Increased swelling	91	Swelling of eyelids	90
Heat intolerance	89	Cold intolerance	89
Palpitation	89	Thick tongue	82
Fatigue	88	Slow movements	80
Weight loss	85	Swelling of face	79
Trouble breathing or shortage of breath	66	Memory impairment	75
Weakness	70	Constipation	61
Increased appetite	65	Weight gain	59
Eye complaints	40	Hair loss	57
Leg swelling	55	Trouble breathing or shortage of breath	35
Increased bowel habit	33	Ankle swelling	55
Poor appetite	9	Menstrual problems	32
Constipation	4	Goiter	30
Weight gain	2	Slowed heart rate	10



Graves' disease



Exophthalmos (bulging eyes)



Diffuse goiter

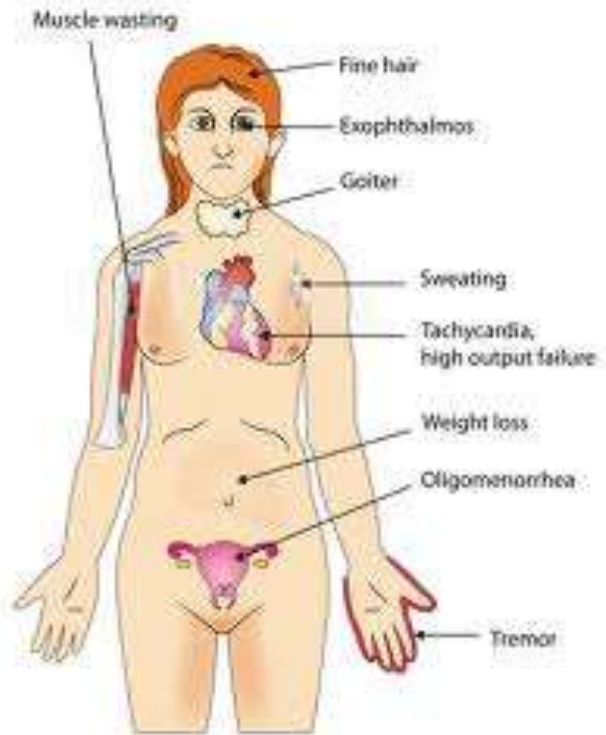
Graves' disease is a common cause of hyperthyroidism, an over-production of thyroid hormone, which causes enlargement of the thyroid and other symptoms such as exophthalmos, heat intolerance and anxiety

Normal thyroid

Enlarged thyroid

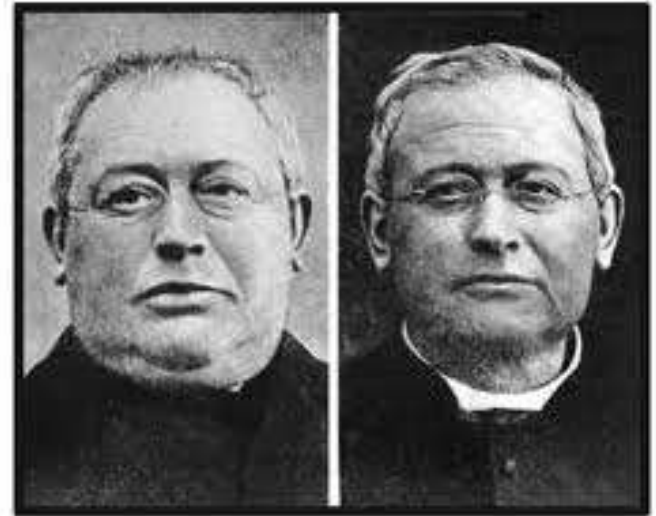


Graves' disease





hypothyroidism



Hypothyroidism

Hypothyroidism: Symptoms

- Tiredness, Weakness, Fatigue
- Social withdrawal and Depression
- Weight gain and Hoarseness
- Cold intolerance and Raynaud's phenomenon
- Decreased sweating
- Thick coarse hair
- Facial myxedema
- Loss of lateral third of the eyebrows
- Cold dry thickened skin
- Constipation



Hypothyroidism

Symptoms of Hypothyroidism



Table 3 : Common Signs and Symptoms of Hypothyroidism

Sign or symptom	Affected patients (%)
Weakness	99
Skin changes (dry or coarse skin)	97
Lethargy	91
Slow speech	91
Eyelid edema	90
Cold sensation	89
Decreased sweating	89
Cold skin	83
Thick tongue	82
Facial edema	79
Coarse hair	76
Skin pallor	67
Forgetfulness	66
Constipation	61