

COMMON NECK SWELLINGS

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THYROID

Causes of Goiter

- Thyroid cyst
- Physiological goiter
- Multinodular goiter
- Inflammatory
- Benign tumor
- malignancy

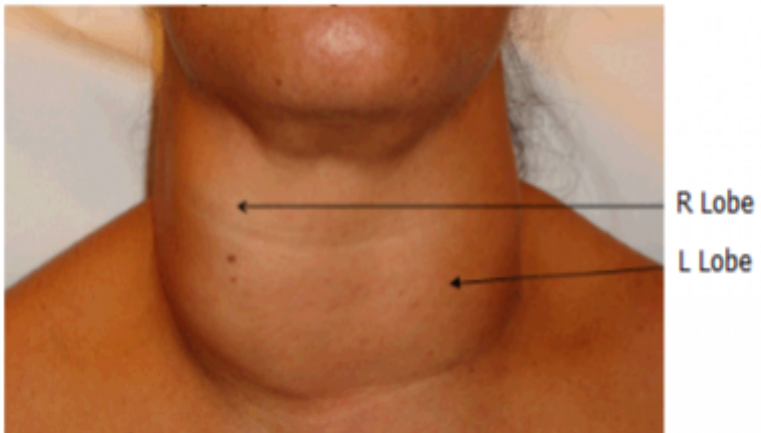
Causes of a solitary thyroid nodule

- Thyroid cyst
- Dominant nodule in a multinodular goiter
- Degeneration or hemorrhage into a colloid cyst or nodule
- Benign tumor
- malignancy

Thyroid cyst

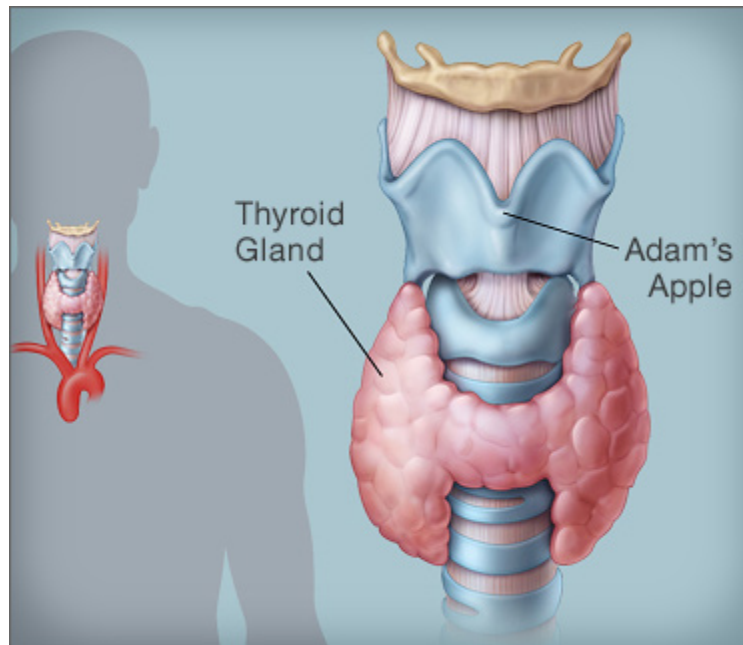


Multinodular Goiter



Inflammatory Thyroiditis

- Commonest is Hashimoto's Thyroiditis



MALIGNANT TUMORS OF THE THYROID

Characteristics

- Painless enlarging nodule
- Lymphadenopathy
- Hoarseness of voice
- Dysphagia
- **Function is usually normal**

Thyroid Malignancy

Papillary	85%
Follicular	10%
Lymphoma	< 5%
Medullary	
Undifferentiated	1%

Papillary Carcinoma

- Commonest
- Incidence is increasing
- Exposure to radiation
- Familial types
- Painless nodule

Papillary Carcinoma

- Young age
- F : M 3:1
- Spreads to lymphatics
- Mets to lung & bone
- Good prognosis

Follicular Carcinoma

- Older patients than papillary
- Mets by blood to lung & bone
- Takes radio-nuclear iodine

Lymphoma

- Approximately 1-5% of all thyroid malignancy
- Risk increased in Hashimoto's thyroiditis
- Usually diagnosed by pathology
- Treat as lymphoma any where

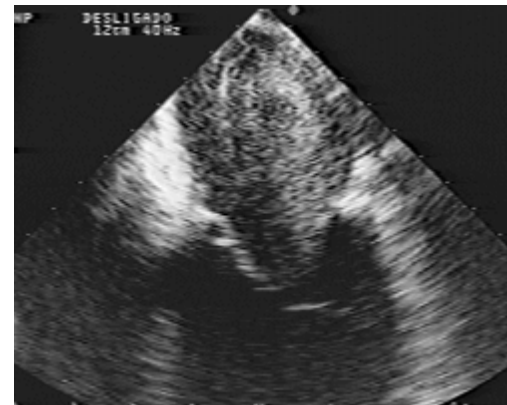
Medullary Carcinoma

- From C-cells
- 25% hereditary
- MEN 2 syndrome
- Bad prognosis

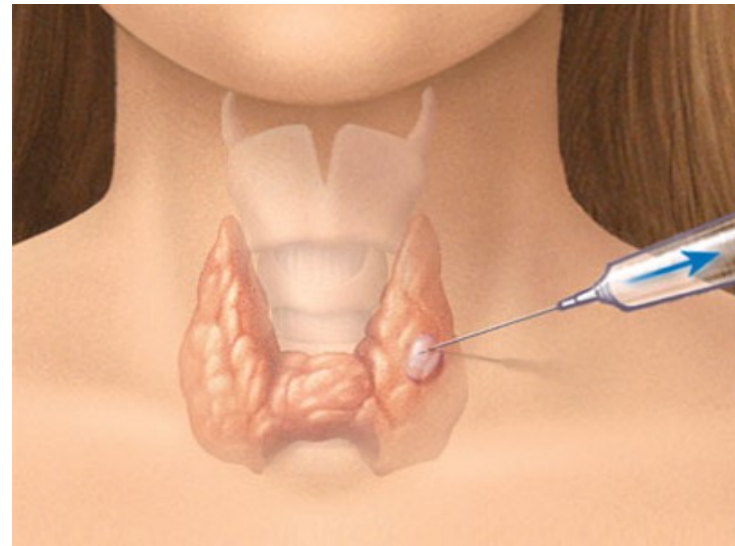
Undifferentiated

- Elderly patients
- Locally invasive
- Worst prognosis

INVESTIGATIONS



Fine Needle Aspiration (FNA)



FNA

Bethesda System

Diagnostic Category	Risk (%)
Non-diagnostic	1-4
Benign	0-3
Atypia of undetermined significance or Follicular lesion of undetermined Significance	5-15
Follicular Neoplasms or Suspicious for a Follicular Neoplasm	15-30
Suspicious for Malignancy	60-75
Malignant	97 -99



% Thyroid Uptake = 13.63
Normal Uptake Range = 0.5 - 3.5%



PRIMARY HYPERPARATHYROIDISM

- Statistics from Western countries indicate a 0.1-0.5% prevalence rate for PHP.
- No evidence for geographical variation

Physiology

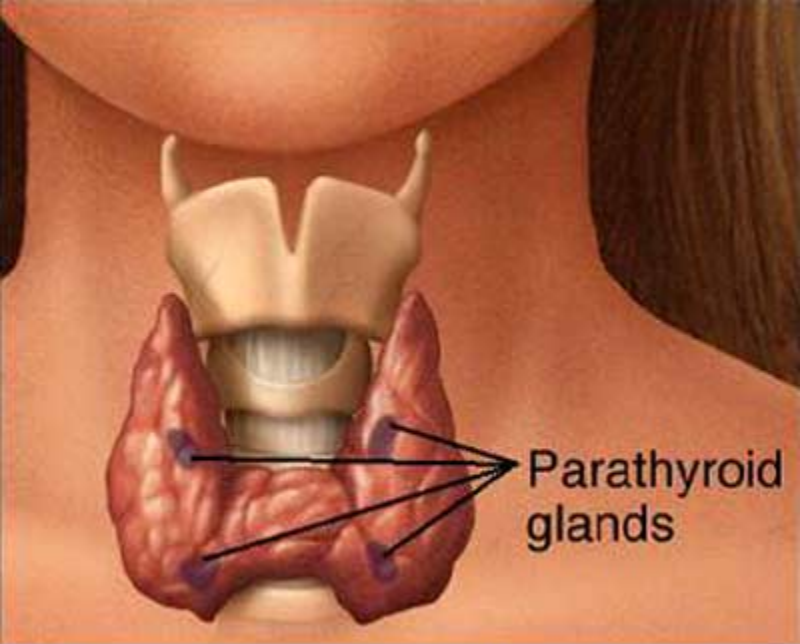
- Parathormone hormone
- Vitamin D

↑
ca

Clinical presentation

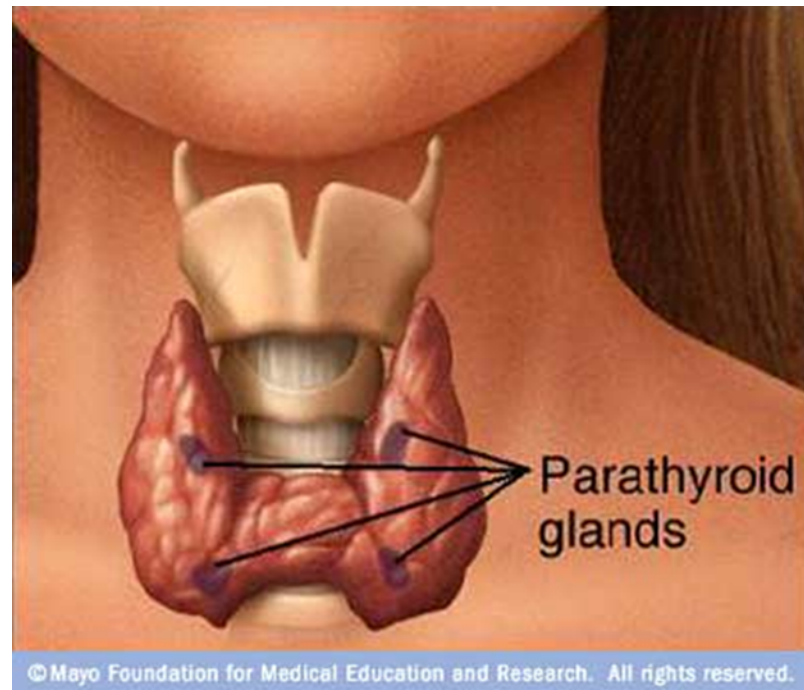
- In the west 60 - 70% detected by routine screening.
- Many are asymptomatic

- 40 y old lady
- # Lt humerous
- Lt Ureteric stone removed 6 y back
- Rt Ureteric stone removed 3 y back
- Non functioning Lt kidney
- S Ca 11.2mg/dl P 2.2mg/ dl



Parathyroid
glands

Adenoma	84%
Hyperplasia	15%
Carcinoma	1%



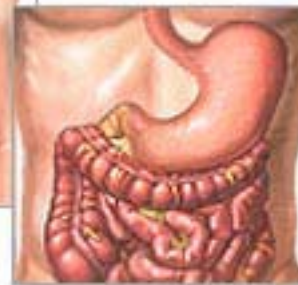
Bone loss



Psychiatric disturbances



Kidney disease



Abdominal symptoms

Clinical manifestations

- Renal stones
- Bone and joint pains
- Abdominal groans
- Psychic moans
- Fatigue overtones



No symptoms

Mild symptoms

Renal symptoms

Bone symptoms

- Commonest cause of Hypercalcaemia in society
- Uncommon in children
- 2-3 times in females

Investigations

- Serum Calcium ↑
- PTH ↑
- Serum Phosphate ↓
- Chloride ↑





Management

- All symptomatic patients should be treated
- Asymptomatic ??
 - Ca Increased +++
 - Bone density Decreased +++

Recommendations

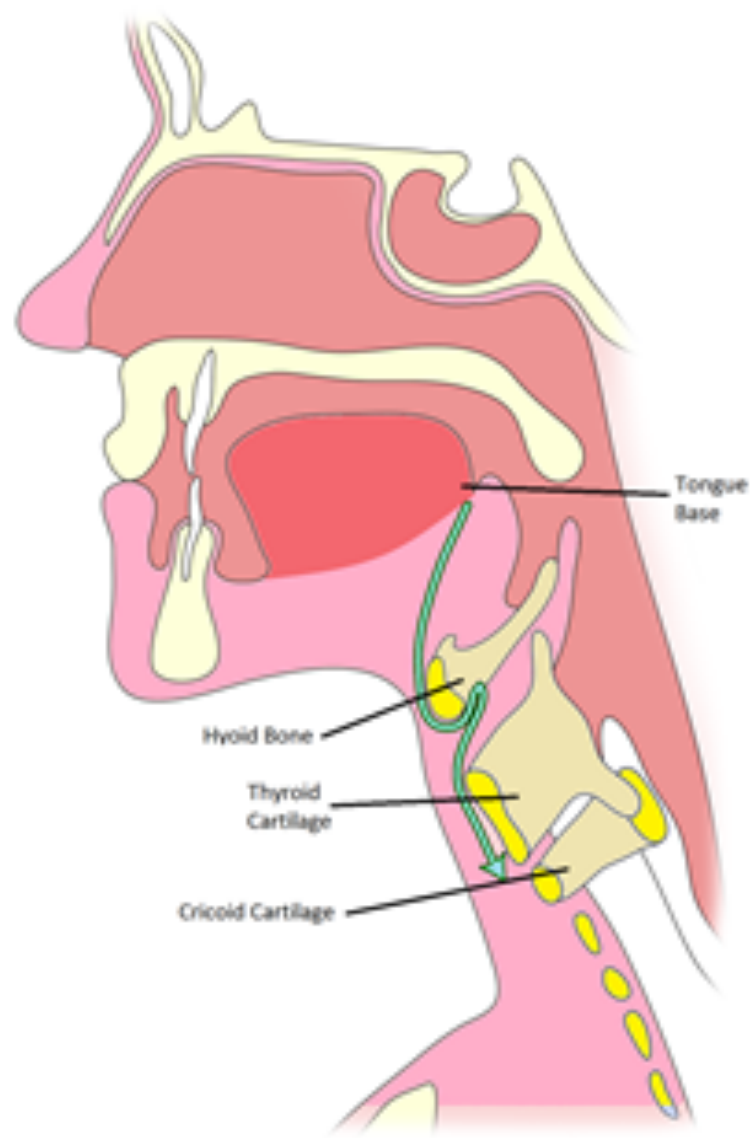
- PHP is a very underdiagnosed disease in Saudi Arabia.
- Patients are not diagnosed early
- Complications could be serious and these are avoidable.

Recommendations

- Specifically the diagnosis should be considered in patients with
 - bilateral or recurrent renal stones
 - patients with suggestive radiological bone changes
 - and naturally in patients with high serum calcium level



THYROGLOSSAL CYST



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Thank you

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Hyperthyroidism

- Nervousness
- Wt loss + Increased appetite
- Heat intolerance
- Sweating
- Muscular weakness
- Menstrual irregularities

Hyperthyroidism

- Goiter
- Tachycardia +/-Arrhythmias
- Warm moist skin
- Bruit & thrill
- Eye signs

Laboratory

- Increases T4, T3
- Decreased TSH

Case 1

Fatima is a 30-year old Saudi lady that presented to the Outpatient clinic, complaining of a swelling in the midline of her neck that she had for 2 months.



Case 1

- What could this be?
- Is it a thyroid swelling?

Movement with swallowing

Thyroid •



Thyroglossal cyst •



Case 1

- What could this be?
- Is it a thyroid swelling?
- If it is a thyroid swelling, what could be the cause of this swelling?

Case 2

Ahmed (age 28 years) came to the Outpatient clinic complaining of nervousness, palpitations, sweating, and weight loss. Clinical examination revealed the presence of a goitre.



- Graves disease
- Toxic multinodular goiter
- Toxic follicular adenoma
- Others

Management

- Medical
- Radio-nuclear iodine
- Surgery

Agenda

- Thyroid
- Parathyroid
- Thyroglossal cyst
- Others

Causes of neck swellings

Midline

- Goiter
- Thyroglossal cyst
- Submental lymph nodes
- Parathyroid gland (very rare)

Lateral

- Lymph nodes
- Salivary glands (stones, tumor)
- Skin (sebaceous cyst, lipoma)
- Lymphatics (cystic hygroma)
- Carotid body tumor
- Pharynx (pharyngeal pouch, branchial cyst)

Multiple Endocrine Neoplasia Syndrome

MEN type 1

- Parathyroid
- Pituitary
- Pancreas

Multiple Endocrine Neoplasia Syndrome

MEN type 2

MEN 2a

- Hyperparathyroidism
- Medullary thyroid carcinoma
- Pheochromocytoma

MEN 2b

- Medullary thyroid carcinoma
- Pheochromocytoma
- Marfanoid habitus
- Multiple neuromas
- Rarely hyperparathyroidism