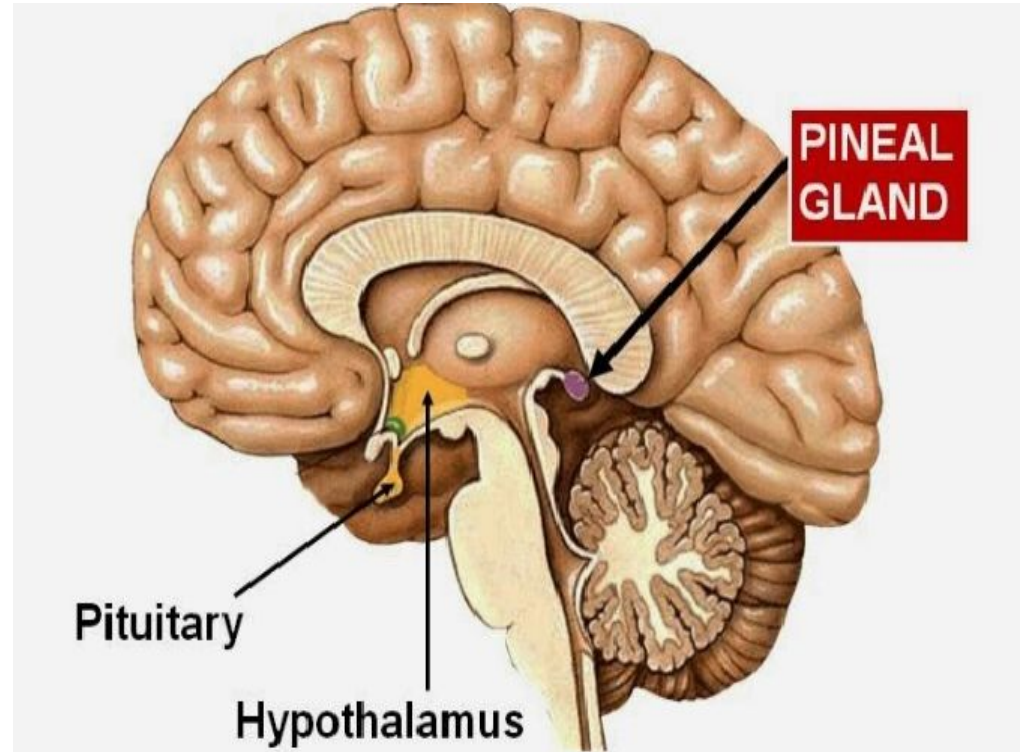
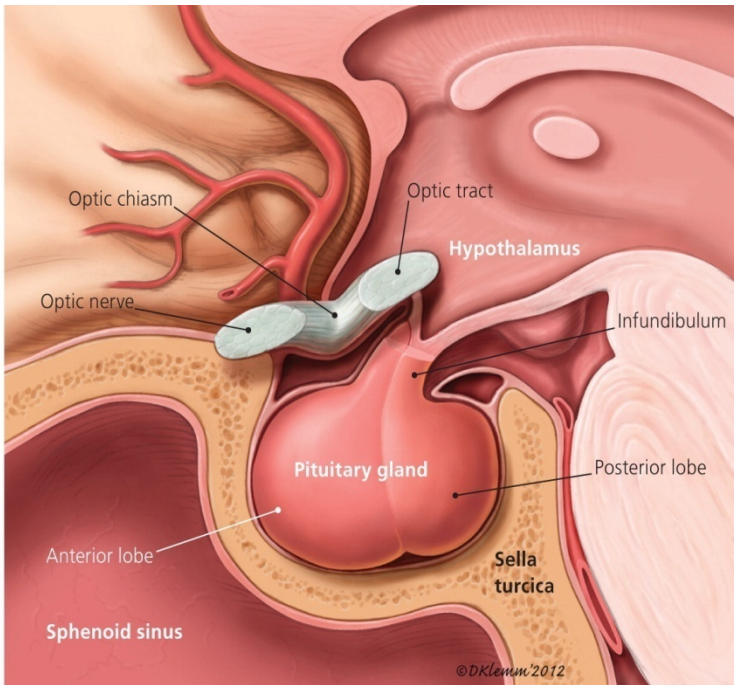


ENDOCRINE SYSTEM DISEASES

Pituitary gland



Pituitary Gland Diseases

- **Hyperpituitarism : due to pituitary adenoma**
 - Hypersecretion of growth hormone (GH) by the Pituitary will lead to :
 - 1- Gigantism : GH hypersecretion during puberty and growth
 - 2- Acromegaly
 - – GH hypersecretion during adulthood
 - – Disfiguring overgrowth of bones & soft tissue

- **Hypopituitarism**

Deficiency of any or all of the pituitary hormones

Usually involve GH and gonadotropin

– LH, FSH, Prolactin, Oxytocin

Less commonly involved:

– ACTH and TSH

- **Panhypopituitarism:**

All hormones are deficient

- **Diabetes Insipidus**

Hyposecretion of vasopressin ADH (antidiuretic hormone)

S/S: extreme polyuria, thirst, very dilute

- urine produced, leads to dehydration

Etiology: anything that destroys the pituitary or idiopathic

Thyroid Gland Diseases

- **Goiter:**

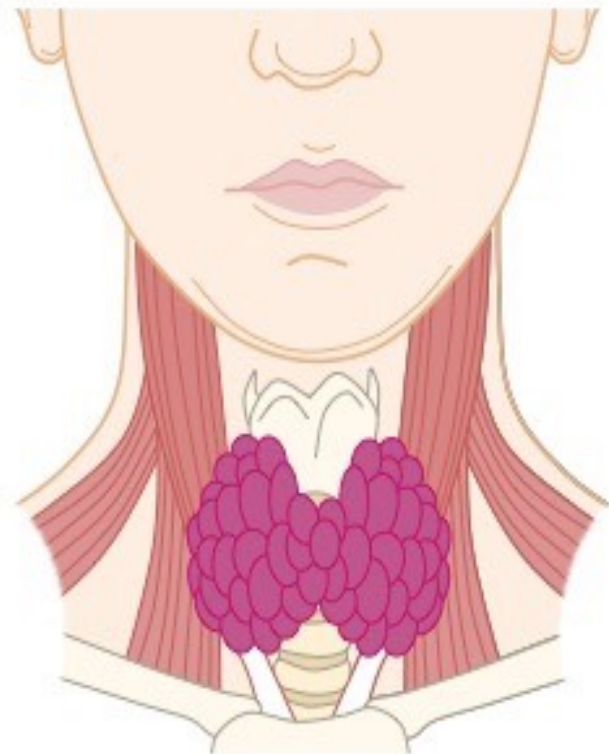
- – Enlargement or hyperplasia of thyroid gland
- Simple goiter:
- Multinodular goitre

Goiter not caused by infection, tumor, other hypo- or hyperthyroid condition

- More common in females
- Sporadic and endemic types



Normal Thyroid



Goitre

Goitre



- **Thyroiditis:**

- Inflammation of thyroid gland
- Females more than males

Etiology & types:

- 1– Autoimmune: Antibodies to thyroid hormones
 - Grave's disease : lead to Thyrotoxicosis
 - Hashimoto's thyroiditis (lymphocytes infiltrate)
- 2– Subacute granulomatous thyroiditis
 - Follows an infection (mumps, adenovirus)

Hypothyroidism:

Hyposecretion of thyroid hormones

Etiology:

– Dietary, metabolic, iatrogenic, congenital, inflammatory

More common in women, esp. over 40

Two versions:

a– Cretinism : when happen in children

b - Myxedema

Starts in in older childhood or adulthood

Thyroid tumors

- **Benign Thyroid adenomas:**

Thyroid adenomas are small growths (nodules).

The adenoma itself may secrete thyroid hormone-Hyperthyroidism

- **Thyroid cancer**
- The first sign of a cancerous nodule in the thyroid gland is usually a painless lump or nodule

Types of thyroid cancer

1- Papillary thyroid cancer

accounting for about 80 percent of all cases. affects more women than men

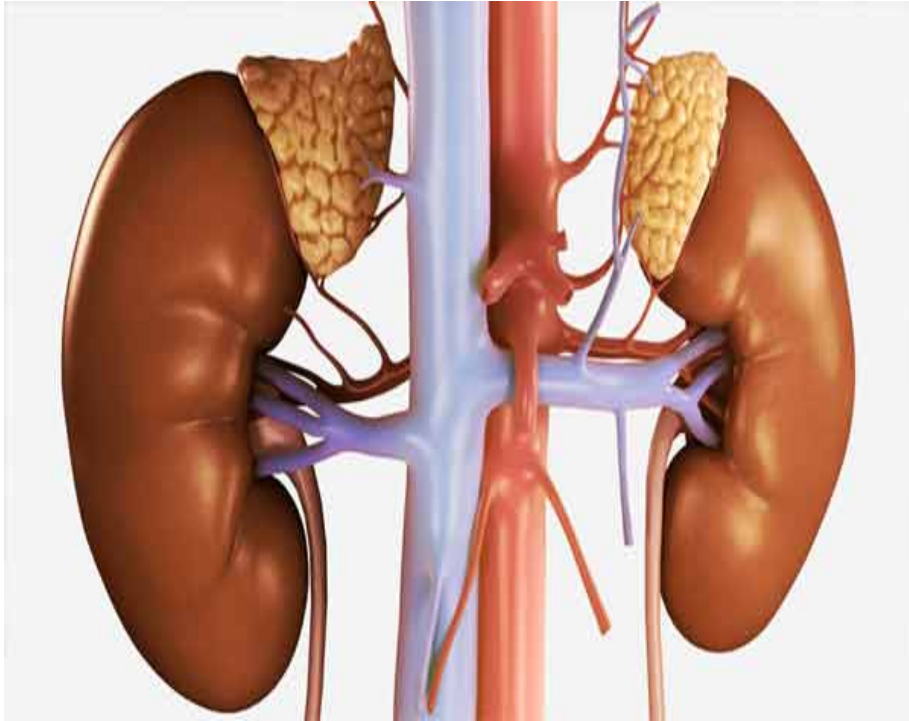
2- Follicular thyroid cancer

accounts for about 10 percent of thyroid cancer cases. This type of thyroid cancer is more aggressive and tends to spread through the bloodstream

3- Anaplastic type: 2% ,quick growth

4- Medullary carcinoma: 4% ,secrete calcitonin hormone-hypercalcemia

Cushings syndrome



Adrenal (supra renal glands) Diseases

Cushing's Syndrome:

- – Hypersecretion of hormones by the adrenal Cortex, Cortisol excess

Etiology :

- Benign or malignant neoplasm of adrenal cortex- Oversecretion of ACTH :
- Iatrogenic (prolonged steroid treatment)

- **Addison's Disease**

Hyposecretion of adrenal cortex hormones

- **Pheochromocytoma**

- Tumors of adrenal medulla , hyper secretion of adrenalin and nor adrenalin

- increases blood pressure, heart rate, skin flushing