## **XXIII.** Diseases of the Endocrines

# Cushing's syndrome.

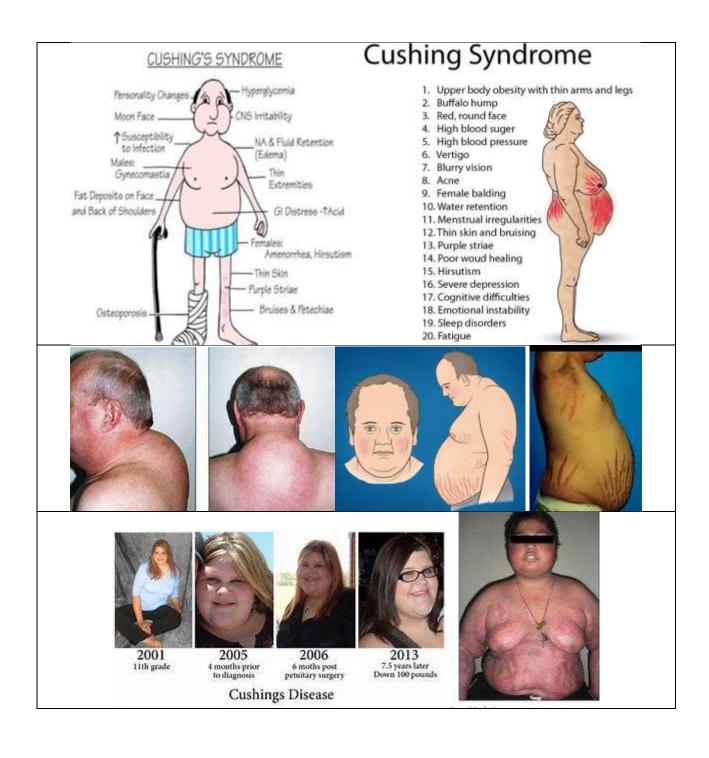
#### Causes:

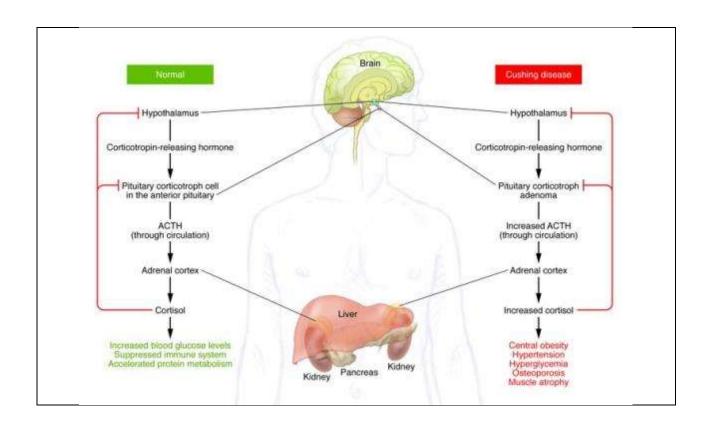
- 1. Basophil adenoma of the pituitary gland.
- 2. Adenoma or hyperplasia of the adrenal cortex.
- 3. Tumours of the **thymus.**
- **4.** Arrhenoblastoma of the **ovary.**

#### Features:

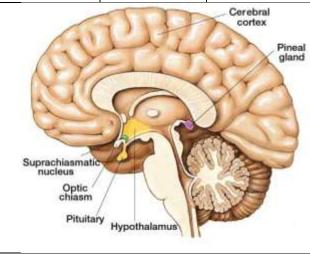
- 1. More in children and young adults (5-25 years), especially females.
- 2. **Rapid painful adiposity** (central obesity of the buffy fat type) confined to the upper part of body (face, neck and trunk); and, not in the limbs
- 3. Atrophy of skin and dermis; and, peculiar dusky striations of the skin.
- 4. Muscle-wasting and weakness.
- 5. Hirsutism of face and trunk in females and pre-adolescent males.
- 6. Menstrual disorders.
- 7. Osteoporosis of vertebrae and long bones → backache and tendency to kyphosis.
- 8. Tendency to polycythaemia and to **diabetes mellitus**.
- 9. Vascular hypertension of an unknown cause.



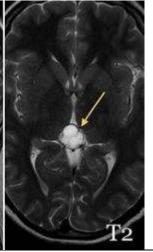




Pinealoma			
Brain:	Is exposed to show the pineal body at left hemisphere		
	Pineal body:	Shows a tumour	
		The tumour:	Is small in size
			Haemorrhagic







## *N.B.*

*Histologically*, it proved to be a Pinealoma.

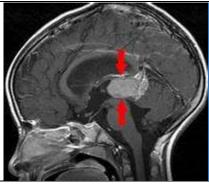
• It is an invasive locally-malignant tumour.

#### It may lead to:

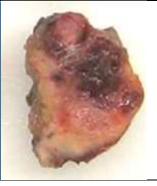
- 1. Obstruction of aqueduct of Sylvius,
- 2. Internal hydrocephalus.
- Pinealoma is the commonest type of pineal tumours.
- It occurs at young adult age.

## Other tumours which may occur in the pineal body are:

- 1. Glioma (astrocytoma and ependymoma).
- 2. Teratoma (which occurs in children and may be accompanied by precocious puberty).



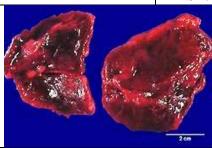


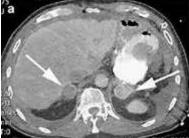


## Haemorrhage

Adrenal gland:

- Is enlarged
- Shows marked haemorrhage







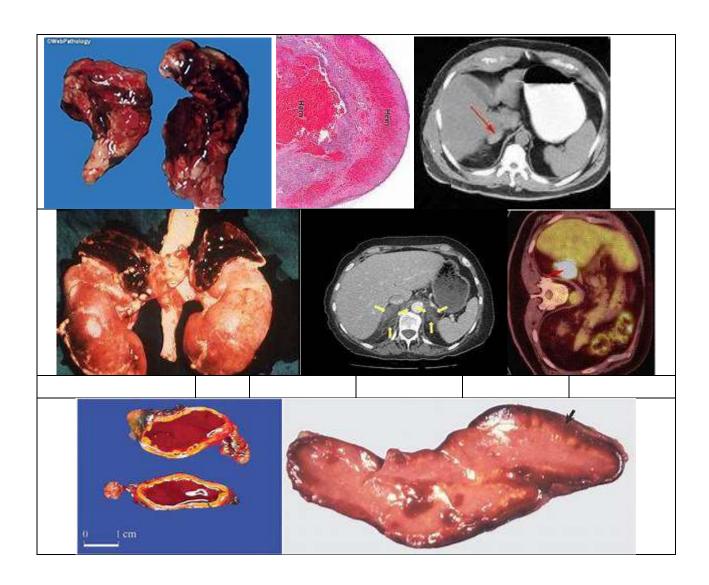
**N.B.**:

Causes of haemorrhage in the adrenal gland:

- 1. Trauma (in new-born infants).
- 2. Extensive burns and intoxications.
- 3. Infections such as diphtheria.
- 4. Sudden withdrawal of the female sex hormones from the new-born → massive haemorrhage, which if bilateral, may end by death.
- 5. Toxic action on the capillary walls→:
  - Adrenal haemorrhage.
  - Collapse.
  - Heart-failure.
  - Hyperpyrexia.
- 6. **Profound destruction of both adrenal glands by sudden vascular lesion** (haemorrhage or thrombosis) leads to acute adrenal insufficiency appearing in the following forms:
  - 1. Abdominal.
  - 2. Cerebral.
  - 3. Asthenic.
  - 4. No premonitory symptoms.

## (Waterhouse Frederickson syndrome).





# CAUSES

- Abrupt adrenal failure usually from
  - Bilateral adrenal infarction
  - Bilateral adrenal Hemorrhage
- Primary Adrenal Insufficiency
  - Serious infection
  - Acute stress in previously undiagnosed cases
  - No extra glucocorticoid therapy during infection
- Secondary adrenocortical insufficiency -Abrupt withdrawal from glucocorticoids
- Catastrophic HPA axis failure
  - Head trauma
  - · Hemorrhage of pituitary adenoma
  - Post-partum herniation (Sheehan syndrome)