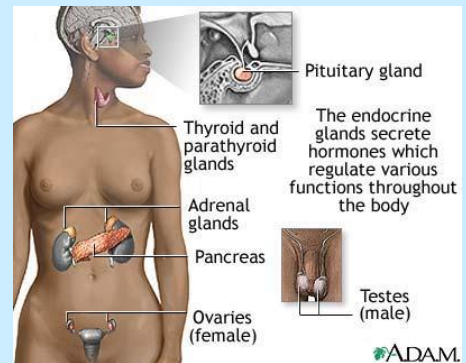
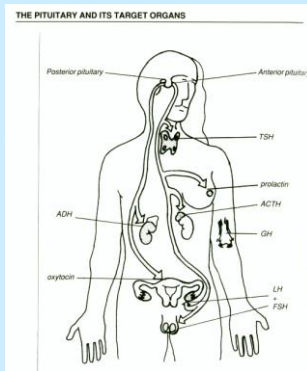


# Pituitary Tumours

## Definition

A growth, either malignant or benign, that originates from the Pituitary gland.



## Causes, Incidence & Risks

- Pituitary tumours constitutes 10% of all primary brain tumours.
- Most affect the anterior pituitary. (Adenohypophysis)
- Most are malignant.

- In some cases, the tumour causes destruction of hormone secreting cells causing undersecretion of pituitary hormones (Hypopituitarism)
- 90% of malignant pituitary tumours are adenomas and may cause oversecretion of hormones dependent upon the cell type of the adenoma.
- Secreting adenomas have the capability of causing several diseases associated with oversecretion of hormones

- These oversecretion diseases may include:
  - Giantism
  - Acromegaly (GH)
  - Cushing's Syndrome (ACTH)
  - Hyperthyroidism (Thyrotoxicosis-TSH)
  - Prolactinoma (Prolactin)
- Cause of pituitary tumours are unknown
- Incidence is 1 in 10,000

## Symptoms

- Headaches
- Visual Change
- Diplopia
- Eyelid ptosis
- Personality Change
- Seizures
- Nasal Drainage
- Cessation of menses
- Decreased Libido
- Impotence
- Skin changes
- Loss of body hair
- Weakness
- Lethargy
- Intolerance to heat
- Irritability
- Constipation
- Nausea

## Symptoms

- Vomiting
- Low Blood Pressure
- Milk flow unrelated to childbirth
- Breast development in males (gynaecomastia)
- Impaired sense of smell
- The nature and extent of symptoms will be dependent upon the size of the tumour, whether it causes over- or undersecretion and which hormone/s are affected.

## Investigations

- CAT scan
- Skull X-ray
- CSF analysis
- Endocrine function tests
- MRI scan

## Treatment

- Surgical removal of the tumour if the tumour is large and compressing the optic chiasm.
- Transphenoidal resection can be used to remove smaller tumours. (via the nasal cavity and sinuses)
- Radiotherapy can be used in combination with surgery or as the sole form of treatment in patients who are poor surgical candidates.

## Prognosis

The prognosis is fair to good dependent upon the spread of the tumour.

## **Complications**

- Metastatic spread of the tumour to other areas of the brain
- Permanent hormonal imbalances due to the tumour or as a result of surgical resection. (This may require permanent HRT)