

Abnormalities of growth hormone secretion

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- Gigantism
- Dwarfism
- Acromegaly

Gigantism

- Hyper secretion of growth hormone in childhood before fusion of epiphysis of bone with shaft.
- Tumor of acidophilic cells of ant. Pituitary.
- Signs and symptoms-
- Height-7to8feet
- Hyperglycemia and pituitary diabetes.
- Headache
- Visual field disturbances- bitemporal hemianopia
- Large hands and feet.

Gigantism

7 feet 8 inches
Pituitary gland tumor



Acromegaly

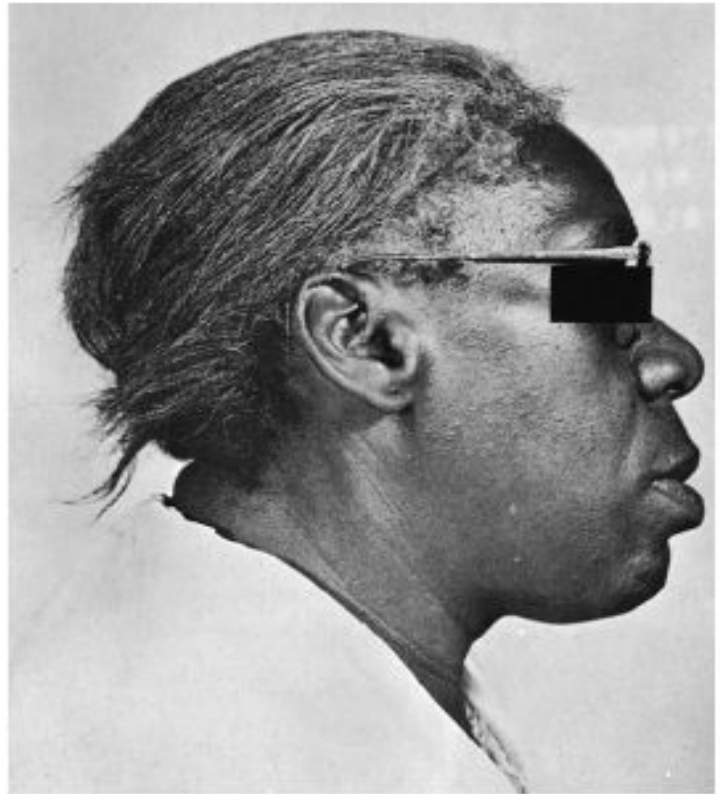
- Enlargement, thickening of bones in the extremities of the body
- Hyper secretion of growth hormone in adults after the fusion of epiphysis.
- Usually due to acidophilic cell tumor of anterior pituitary .

Characteristic features

- Elongation and widening of mandible-prognathism
- Enlargement of frontal, mastoid, ethmoid and maxillary sinuses-prominent brow.
- Thickening of skin, coarsening of facial features- acromegalic facies.
- Kyphosis -growth of vertebrae producing bowing of spine

- Hypertrophy of body soft tissues producing cardiomegaly, hepatomegaly, renomegaly, splenomegaly.

Acromegaly:



Acromegaly – ↑ in bone thickness and soft tissues



Acromegaly - Wide sole of foot



Acromegaly – Large skull, lower jaw, prominent nose and bulging forehead



Dwarfism

- Due to growth hormone deficiency in immature individual-secondary to decrease in GHRH, also called as pituitary dwarf.
- Characteristic features-
 - Short stature
 - Fatness
 - Small genitalia
 - Delayed skeletal and dental development.
 - Body proportion according to chronological age.