Acromegaly

>99% due to growth hormone secreting pituitary macroadenoma.

Clinical features

- Pituitary enlargement symptoms
  - Hypopituitarism
  - Bitemporal hemianopia
  - Headache
- Excessive soft tissue growth
  - Increased hand and feet size
  - Coarsening of facial features
  - Macroglossia
  - Hoarse voice
  - Osteoarthritis and arthralgia
  - Carpal tunnel syndrome
- Active acromegaly signs
  - Excessive sweating
  - Hypertension

Investigations

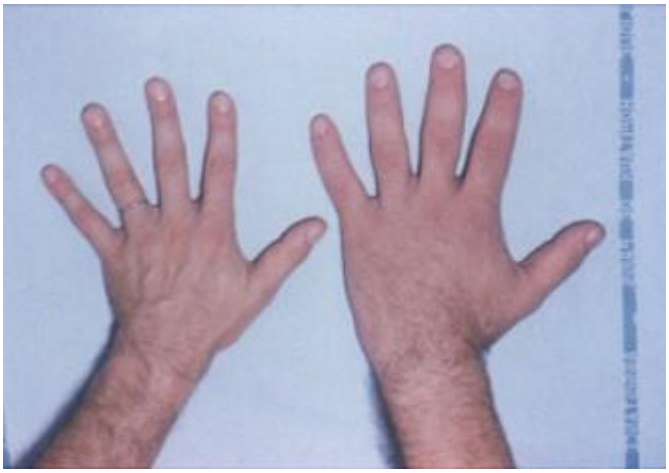
- Confirm acromegaly
  - Insulin-like growth factor 1 (initial screen test)
  - Failure to suppress GH during glucose tolerance test (diagnostic)
- Pituitary function tests and serum prolactin (detect hypopituitarism)
- MRI pituitary (visualise tumour)

Complications

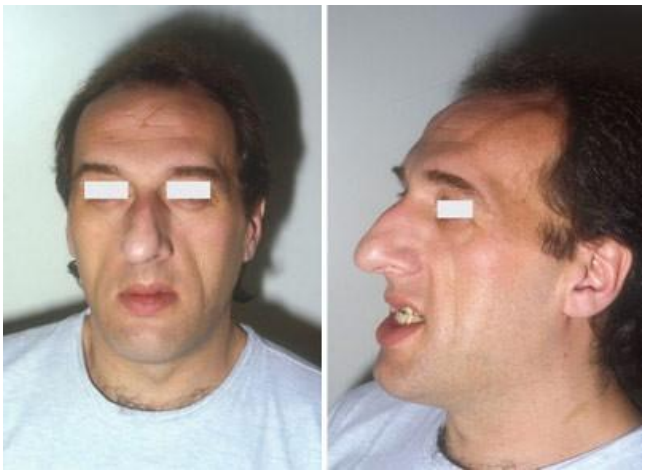
- Impaired glucose tolerance (40%) and diabetes mellitus
- Cardiomyopathy
- Colon cancer (colonoscopy at 50 years)

Management

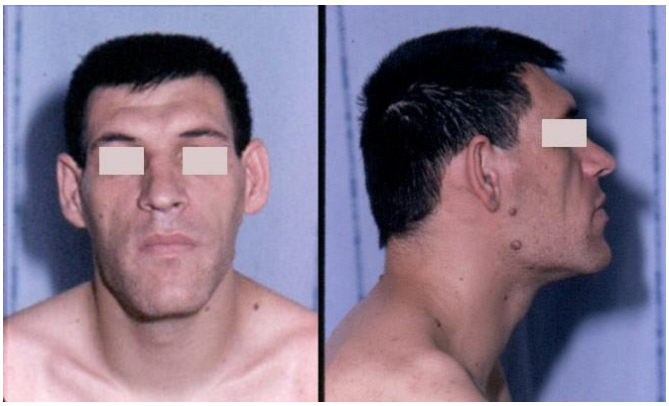
- Transsphenoidal resection
- Somatostatin analogues (e.g. octreotide) if needed
- Radiotherapy if needed



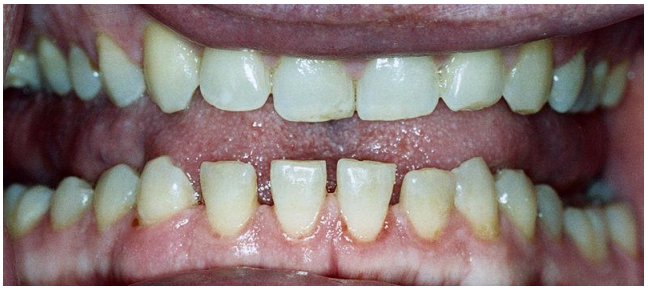
Normal hand **Acromegalic hand**



Mandibular prognathism: protrusion of the lower jaw



Facial features of acromegaly: coarse facial features, prominent supra-orbital ridges, large nose and ears, macrognathia



Wide spaces between teeth