Acromegaly vs GH Deficiency

Growth hormone can be in excess or lacking: the tests show the axis does not suppress or does not stimulate

ACR Acromegaly

- GH and IGF-1 high
- a glucose load does NOT suppress GH
- MRI: pituitary adenoma (somatotropinoma)
- surgery, octreotide, pegvisomant, radiotherapy

DEF GH deficiency

- IGF-1 low
- stimulation test (insulin or GHRH-arginine): GH does not rise
- MRI if a central cause is suspected
- recombinant GH

Acromegaly
Glucose does not suppress GH

GH deficiency
The stimulus does not raise GH

Screening
IGF-1 is the most reliable test

Suspect acromegaly with growing hands, feet and facial features, and carpal tunnel syndrome