PIPADOR REVISION

MRCOG Part 1 Revision Notes

Acromegaly

ENDOCRINOLOGY • LECTURE 199

VISUAL EXAMINATION REVISION NOTES

2026 Edition

199

MRCOG PART 1 REVISION NOTES | ENDOCRINOLOGY

Acromegaly

Pathophysiology, features, diagnosis, treatment and pregnancy considerations

> 95%	IGF-1 ↑	No GH suppression	Rare
GH-secreting pituitary adenoma	Screening test	On 75 g OGTT	Pregnancy (↓ fertility)

■ KEY FACTS: Learning objectives

- Describe the pathophysiology and clinical features of acromegaly.
- Describe diagnosis (IGF-1, OGTT) and the effect of pregnancy on GH and IGF-1 measurement.
- Describe treatment and management of pregnancy in women with acromegaly.

199.1 Pathophysiology and features

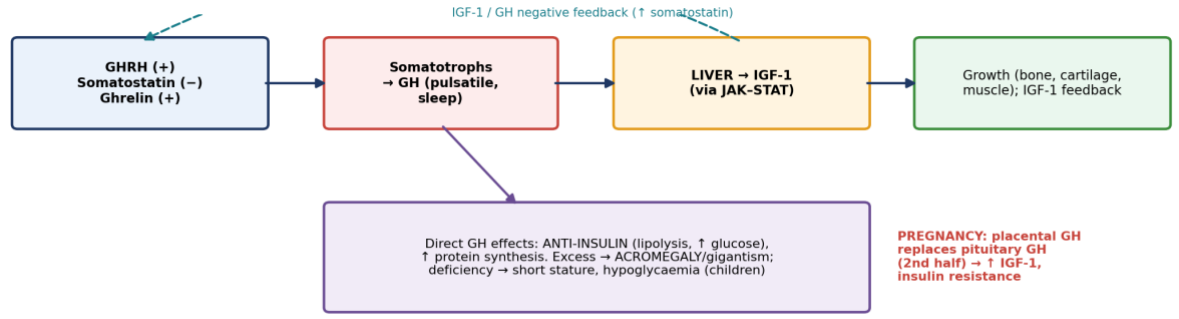


Figure 199.1 — The GH–IGF-1 axis

System	Features
Appearance	Coarse facial features, frontal bossing, prognathism, macroglossia, enlarged hands and feet (ring/shoe size), skin thickening, sweating, skin tags
Metabolic	Insulin resistance/diabetes, hypertension
Cardiorespiratory	Cardiomyopathy, arrhythmia, obstructive sleep apnoea (difficult airway)
Musculoskeletal	Arthropathy, carpal tunnel syndrome
Mass effect	Headache, bitemporal hemianopia, hypopituitarism; co-secretion of prolactin (≈ 30%)
Other	Colonic polyps/cancer; goitre; ↓ fertility (hypogonadism, hyperprolactinaemia)

199.2 Diagnosis

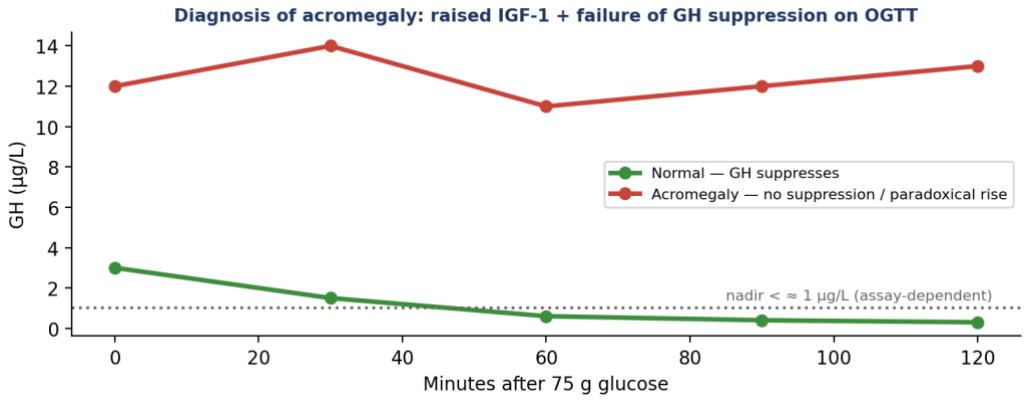


Figure 199.2 — OGTT GH suppression test

- **Serum IGF-1** (age- and sex-adjusted) is the screening test; confirm with **failure of GH suppression on a 75 g OGTT**; pituitary MRI; visual fields; assess other pituitary hormones.
- **Pregnancy**: **placental GH** progressively replaces pituitary GH and raises IGF-1 (some GH assays cross-react); oral oestrogen lowers IGF-1 — **biochemical monitoring is unreliable**; clinical monitoring predominates.

199.3 Treatment

Treatment	Notes
Transsphenoidal surgery	First-line for most adenomas
Somatostatin analogues (octreotide, lanreotide, pasireotide)	↓ GH secretion; gallstones, GI effects, hyperglycaemia (pasireotide)
Pegvisomant	GH-receptor antagonist — normalises IGF-1
Dopamine agonists	Cabergoline — mild disease/prolactin co-secretion
Radiotherapy	Resistant/residual disease; hypopituitarism

199.4 Pregnancy

Issue	Management
Pre-conception	Achieve disease control (ideally surgery); ovulation induction often needed
Medication	Stop somatostatin analogues and pegvisomant at conception if possible (limited data; analogues cross placenta); restart only for tumour growth/headache
Disease course	Often stable or improves (oestrogen-induced GH resistance); tumour growth uncommon (mainly macroadenomas) — visual fields if macroadenoma
Complications	↑ GDM and hypertension/pre-eclampsia; cardiomyopathy; airway difficulty (macroglossia, OSA) — anaesthetic review
Postpartum	Reassess biochemistry after delivery (and weaning); breastfeeding generally possible

199.5 Must-know summary

■ EXAM TIP

- GH excess (pituitary adenoma) → ↑ IGF-1 → acral growth, insulin resistance, cardiomyopathy, OSA, carpal tunnel.
- Diagnose: **↑ IGF-1 + no GH suppression on OGTT**; MRI.
- Pregnancy: placental GH confounds tests; stop somatostatin analogues/pegvisomant; watch for GDM, hypertension, airway problems.

■ MNEMONIC / MEMORY AID

Acromegaly — 'ABCDEF': Arthralgia/Acral growth, BP ↑, Carpal tunnel, Diabetes, Enlarged organs, Field defect.