PIPADOR REVISION

MRCOG Part 1 Revision Notes

Amenorrhoea

CLINICAL MANAGEMENT • LECTURE 456

VISUAL EXAMINATION REVISION NOTES

2026 Edition

456

MRCOG PART 1 REVISION NOTES | CLINICAL MANAGEMENT

Amenorrhoea

Primary and secondary amenorrhoea — definitions, causes, investigation and management

Pregnancy	PCOS	POI	Prolactin
Exclude first	Commonest secondary cause	< 40, FSH > 25 IU/L	Check in all

■ KEY FACTS: Learning objectives

- Define primary and secondary amenorrhoea, oligomenorrhoea and premature ovarian insufficiency.
- Describe the causes and a structured investigation.
- Describe management of common causes (PCOS, hypothalamic amenorrhoea, hyperprolactinaemia, POI).

456.1 Key definitions

Term	Definition
Primary amenorrhoea	No periods by age 15 with normal secondary sexual characteristics, or by 13 with no secondary sexual development
Secondary amenorrhoea	Cessation of periods for ≥ 3 months in a woman with previously regular cycles, or ≥ 6 months with previously irregular cycles
Oligomenorrhoea	Infrequent periods (cycles > 35 days)
Premature ovarian insufficiency (POI)	Loss of ovarian function before 40: oligo/amenorrhoea + raised FSH (> 25 IU/L) — NICE NG23 uses two samples 4–6 weeks apart
Functional hypothalamic amenorrhoea	Suppressed GnRH due to low energy availability, exercise or stress

■ IN PLAIN ENGLISH: Amenorrhoea

Think of the menstrual axis from top to bottom: **hypothalamus → pituitary → ovary → uterus/outflow tract**. Always exclude **pregnancy** first; then FSH, prolactin, TSH and testosterone usually point to the level of the problem.

456.2 Causes

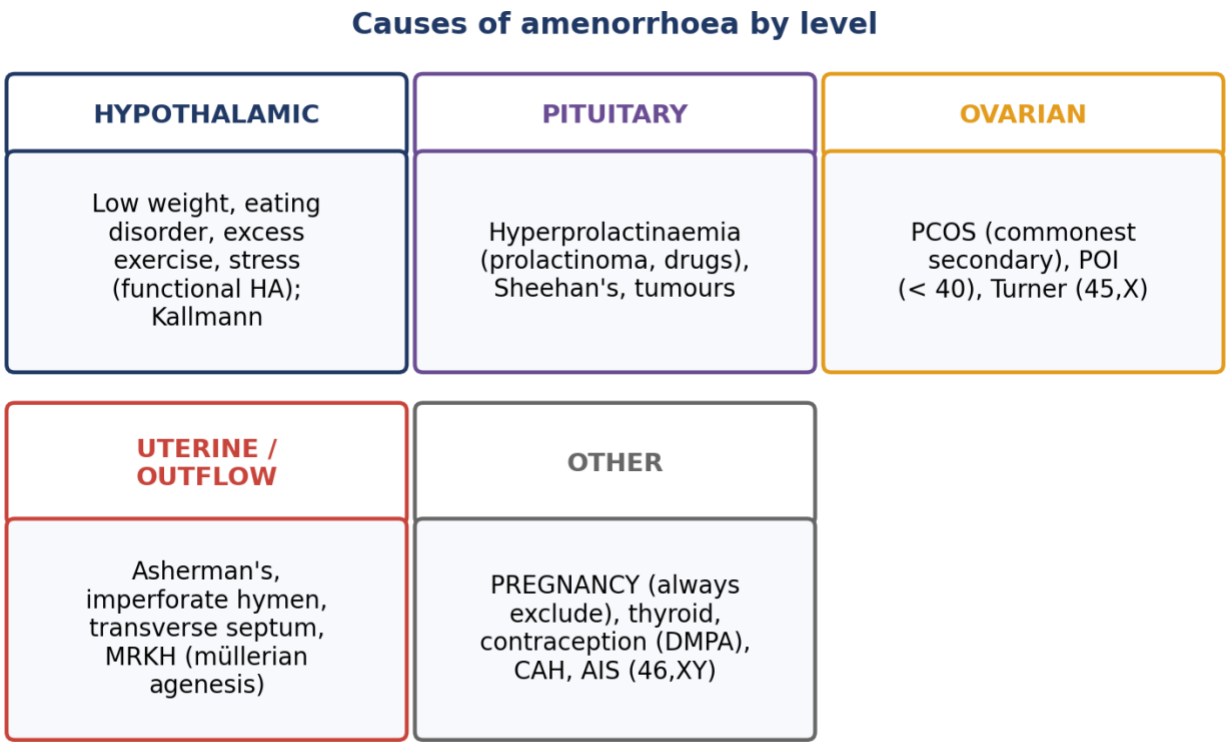


Figure 456.1 — Causes of amenorrhoea by level

456.3 Investigation

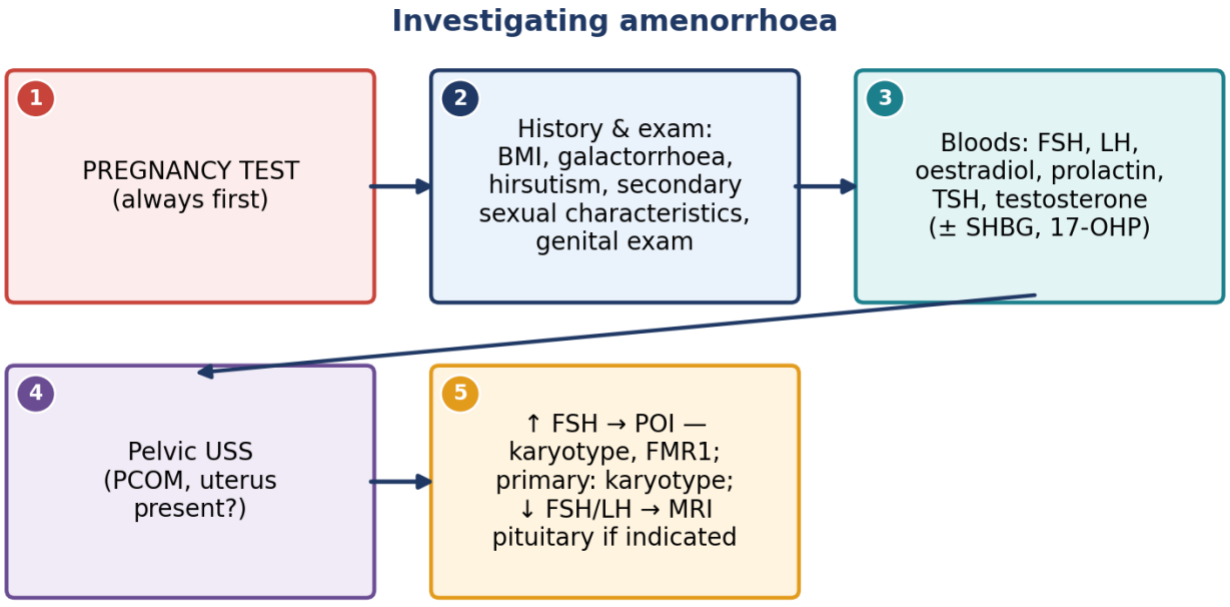


Figure 456.2 — Investigating amenorrhoea

Result pattern	Likely cause
↑ FSH/LH, ↓ oestradiol	Ovarian failure — POI, Turner syndrome (karyotype)
↓/normal FSH and LH, ↓ oestradiol	Hypothalamic (low weight, exercise, stress) or pituitary

Result pattern	Likely cause
↑ Prolactin	Prolactinoma (MRI pituitary), drugs (antipsychotics), hypothyroidism
↑ LH:FSH, ↑ testosterone, PCOM	PCOS (Rotterdam criteria)
Very ↑ testosterone (> 5 nmol/L) / rapid virilisation	Androgen-secreting tumour — urgent imaging
Normal hormones, previous uterine surgery	Asherman's syndrome — hysteroscopy
Primary amenorrhoea, absent uterus	MRKH (46,XX) or androgen insensitivity (46,XY) — karyotype

456.4 Management

Cause	Management
PCOS	• Weight loss/lifestyle • COC or cyclical progestogen (endometrial protection — withdrawal bleed ≥ every 3–4 months) • Letrozole for ovulation induction • Metabolic screening (OGTT)
Functional hypothalamic	• Restore energy balance/weight, reduce exercise, psychological support (eating disorder services) • Bone protection (HRT or COC if needed) • Pulsatile GnRH/gonadotrophins for fertility
Hyperprolactinaemia	Stop causative drug; dopamine agonist (cabergoline) for prolactinoma
POI	• HRT (or COC) until ≈ 51 for symptoms, bone and cardiovascular protection • Fertility counselling (donor eggs) • Karyotype and FMR1 premutation testing • Psychological support
Outflow obstruction	Surgery (imperforate hymen incision, septum resection)

■ COMMON PITFALLS

Not doing a pregnancy test.

Missing an eating disorder.

Diagnosing POI on a single FSH taken on the COC or during menses.

456.5 Must-know summary

■ EXAM TIP

- Primary: no periods by 15 (with secondary sexual characteristics) or 13 (without); secondary: ≥ 3 months (regular) or ≥ 6 months (irregular).
- Pregnancy first; then FSH/LH, oestradiol, prolactin, TSH, testosterone, pelvic USS.
- High FSH → ovarian (POI, Turner); low FSH/LH → hypothalamic/pituitary; high prolactin → prolactinoma/drugs.
- POI: HRT until ≈ 51; PCOS: endometrial protection and metabolic care.

■ **MNEMONIC / MEMORY AID**

Levels — 'Hypothalamus, Hypophysis, Ovary, Outflow'.