PIPADOR REVISION

MRCOG Part 1 Revision Notes

Sex Cord Stromal Tumours

PATHOLOGY • LECTURE 354

VISUAL EXAMINATION REVISION NOTES

2026 Edition

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MRCOG PART 1 REVISION NOTES | PATHOLOGY

Sex Cord Stromal Tumours

Classification, pathology, hormonal effects, markers and management of sex cord–stromal tumours

≈ 5–8%	Hormonally active	Inhibin	Meigs'
Ovarian tumours	Oestrogen or androgen	Granulosa cell marker	Fibroma + ascites + effusion

■ KEY FACTS: Learning objectives

- Classify sex cord–stromal tumours and describe their pathology.
- Describe hormonal effects and tumour markers.
- Describe management and follow-up.

354.1 Classification

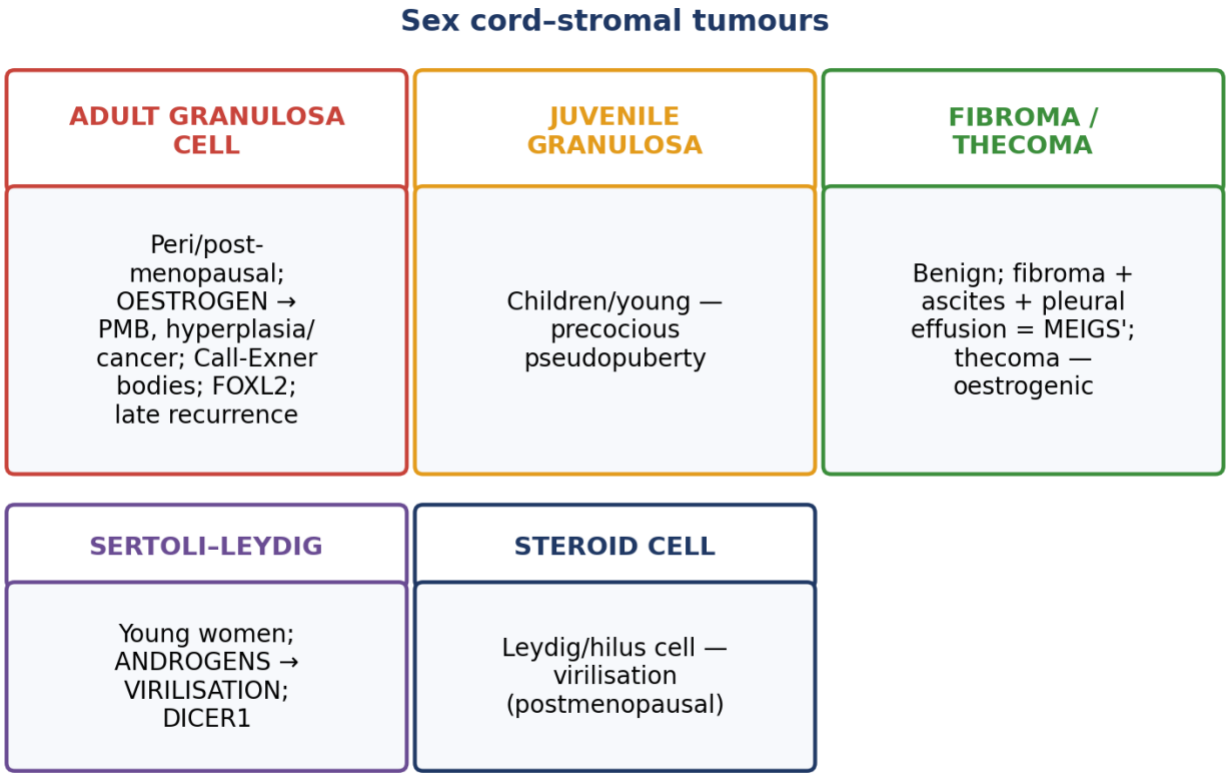


Figure 354.1 — Sex cord–stromal tumours

Tumour	Pathology / hormone effect
Adult granulosa cell tumour	• Call-Exner bodies, 'coffee-bean' grooved nuclei • **FOXL2 C134W** mutation • **Oestrogen** → PMB, endometrial hyperplasia/cancer, breast tenderness

Tumour	Pathology / hormone effect
	• May rupture (haemoperitoneum)
Juvenile granulosa	Precocious pseudopuberty in girls; associated with Ollier/Maffucci
Fibroma	• Spindle cells, collagen • Benign • **Meigs' syndrome** (ascites, pleural effusion — resolve after removal) • Gorlin syndrome (bilateral)
Thecoma	Lipid-rich theca cells; oestrogenic; postmenopausal
Sertoli–Leydig	• Young women • **Androgens** → amenorrhoea, hirsutism, clitoromegaly, deep voice • **DICER1** (pleuropulmonary blastoma family)
Steroid cell (Leydig/hilus)	Virilisation in older women; Reinke crystals (Leydig)
Sex cord tumour with annular tubules	Peutz–Jeghers syndrome

354.2 Clinical management

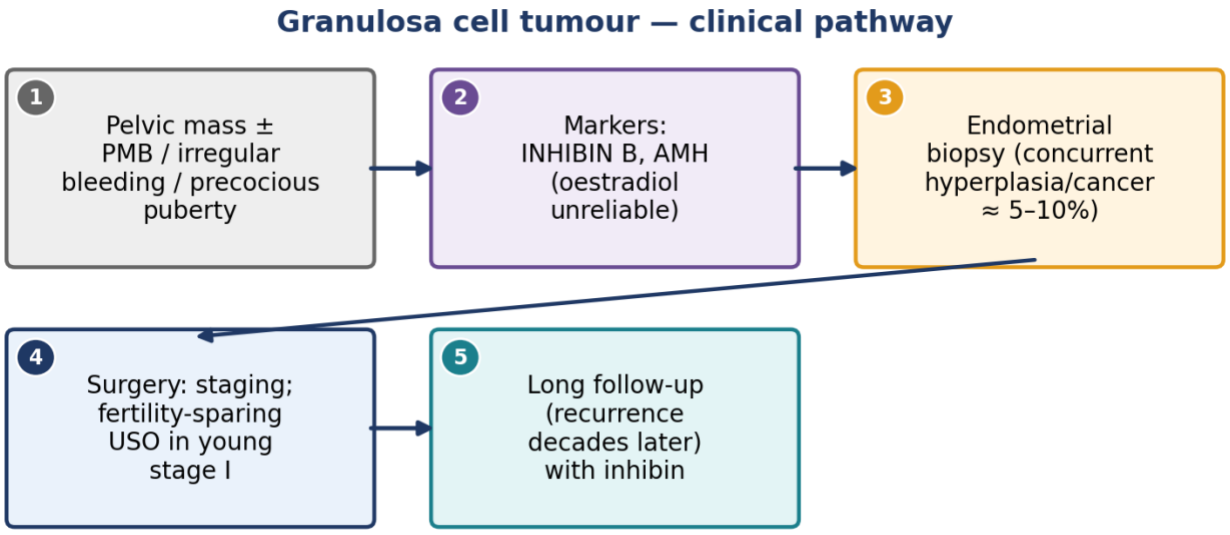


Figure 354.2 — Granulosa cell tumour pathway

- Most are stage I and have a good prognosis; adult granulosa cell tumours are low-grade malignant with **late recurrences** (up to 20–30 years).
- Virilising tumours: check testosterone (> 5 nmol/L raises suspicion), DHEAS (adrenal), imaging; rapid-onset virilisation suggests tumour.

354.3 Must-know summary

■ EXAM TIP

- Granulosa: oestrogen, Call-Exner bodies, FOXL2, inhibin/AMH, late recurrence, endometrial biopsy.
- Fibroma: Meigs' syndrome; thecoma oestrogenic.
- Sertoli–Leydig: androgens, DICER1, young women.
- Fertility-sparing surgery for young stage I; long follow-up.

■ MNEMONIC / MEMORY AID

'Granulosa Gives oestrogen; Sertoli–Leydig Supplies testosterone'.