PIPADOR REVISION

MRCOG Part 1 Revision Notes

Epithelial Ovarian Cancer

PATHOLOGY • LECTURE 353

VISUAL EXAMINATION REVISION NOTES

2026 Edition

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MRCOG PART 1 REVISION NOTES | PATHOLOGY

Epithelial Ovarian Cancer

Serous, mucinous, endometrioid and clear cell carcinomas — origins, genetics, spread and management

≈ 90%	HGSC ≈ 70%	BRCA	Stage III
Ovarian cancers are epithelial	From fallopian tube (STIC)	≈ 15–20% of HGSC	Most present advanced

■ KEY FACTS: Learning objectives

- Describe the histological subtypes of epithelial ovarian cancer and their origins.
- Describe molecular pathways, genetic predisposition and tumour markers.
- Describe spread, staging and management principles.

353.1 Subtypes

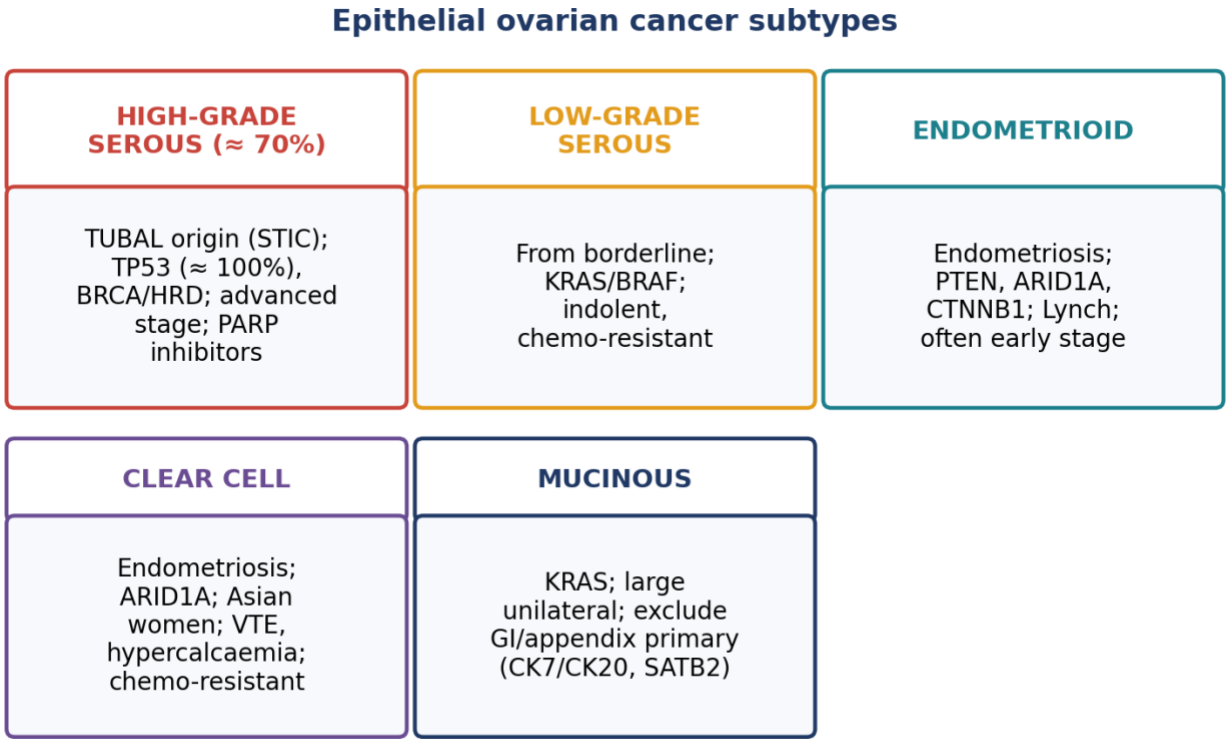


Figure 353.1 — Epithelial ovarian cancer subtypes

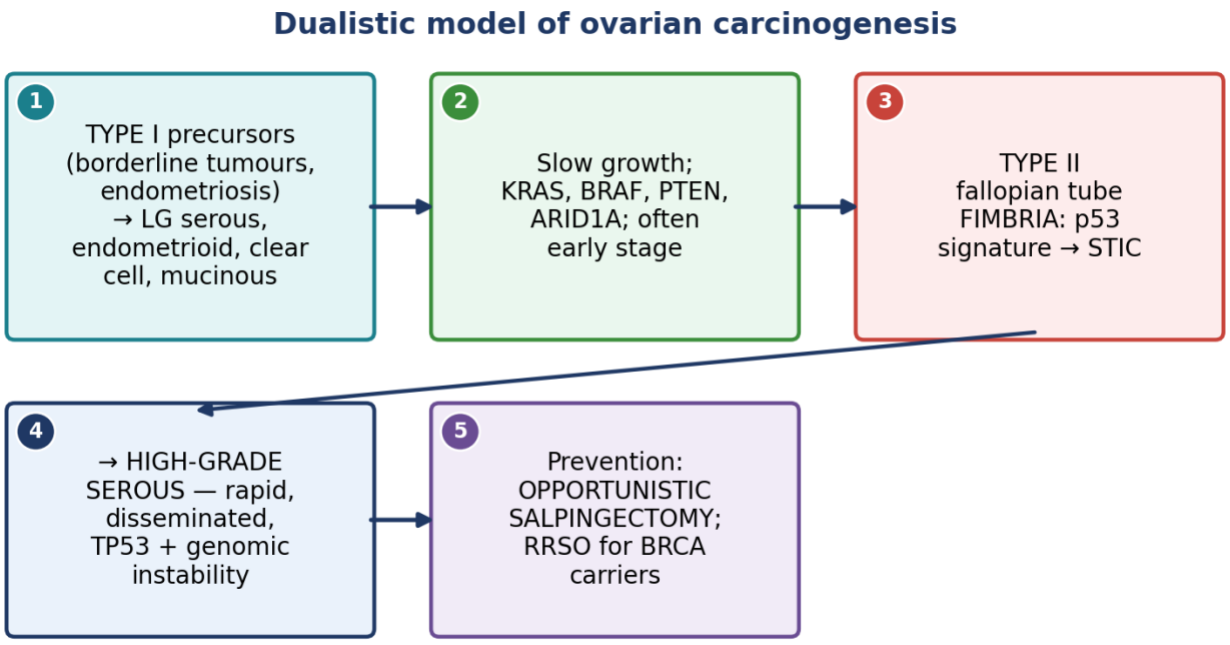


Figure 353.2 — Dualistic model of carcinogenesis

353.2 Risk and genetics

Factor	Details
BRCA1 / BRCA2	Lifetime ovarian cancer risk ≈ 40–45% / ≈ 15–20% → RRSO at 35–40 (BRCA1) / 40–45 (BRCA2)
Lynch syndrome	Endometrioid/clear cell (≈ 10% lifetime); also endometrial cancer
Other genes	RAD51C, RAD51D, BRIP1, PALB2
Reproductive	• Incessant ovulation: nulliparity, early menarche/late menopause, infertility • **COC, pregnancy, breastfeeding, tubal ligation, salpingectomy protective**
Endometriosis	Clear cell and endometrioid

353.3 Spread and management

- **Transcoelomic** spread to peritoneum, omentum, diaphragm (ascites, omental cake)
  - Lymphatic to para-aortic and pelvic nodes
  - Later pleural effusion (stage IVA).
- Diagnosis: CA-125 + ultrasound (RMI/IOTA), CT, biopsy/histology; mucinous tumours — exclude GI primary (CEA, CA19-9, endoscopy).
- **Cytoreductive surgery** aiming for no residual disease (primary or interval after neoadjuvant chemotherapy) + **carboplatin/paclitaxel**
  - Maintenance **PARP inhibitors** (BRCA/HRD) ± bevacizumab.
- All women with non-mucinous epithelial ovarian cancer should be offered **germline BRCA testing** (and tumour HRD testing).

353.4 Must-know summary

■ EXAM TIP

- HGSC (≈ 70%) — tubal STIC, TP53, BRCA/HRD, advanced, PARP inhibitors.
- LGSC (KRAS/BRAF), endometrioid & clear cell (endometriosis, ARID1A, Lynch), mucinous (exclude GI).
- Transcoelomic spread; CA-125; cytoreduction + platinum/taxane.
- COC and salpingectomy protective; RRSO for BRCA carriers.

■ MNEMONIC / MEMORY AID

EOC subtypes — 'Serious Men Eat Clean' (Serous, Mucinous, Endometrioid, Clear cell).