PIPADOR REVISION

MRCOG Part 1 Revision Notes

Paraneoplastic Syndromes

PATHOLOGY • LECTURE 338

VISUAL EXAMINATION REVISION NOTES

2026 Edition

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MRCOG PART 1 REVISION NOTES | PATHOLOGY

Paraneoplastic Syndromes

Definition, mechanisms and paraneoplastic syndromes associated with gynaecological tumours

Anti-NMDA	PTHrP	Anti-Yo	Trousseau
Encephalitis — ovarian teratoma	Hypercalcaemia	Cerebellar degeneration	Migratory thrombophlebitis

■ KEY FACTS: Learning objectives

- Define paraneoplastic syndromes and their mechanisms.
- Describe paraneoplastic syndromes associated with gynaecological tumours.
- Describe recognition and management.

338.1 Definition and mechanisms

- Paraneoplastic syndromes are symptoms or signs caused by a tumour but not by local invasion or metastasis.
- They may precede the diagnosis of cancer, reflect tumour activity (useful for monitoring) and resolve after tumour treatment.

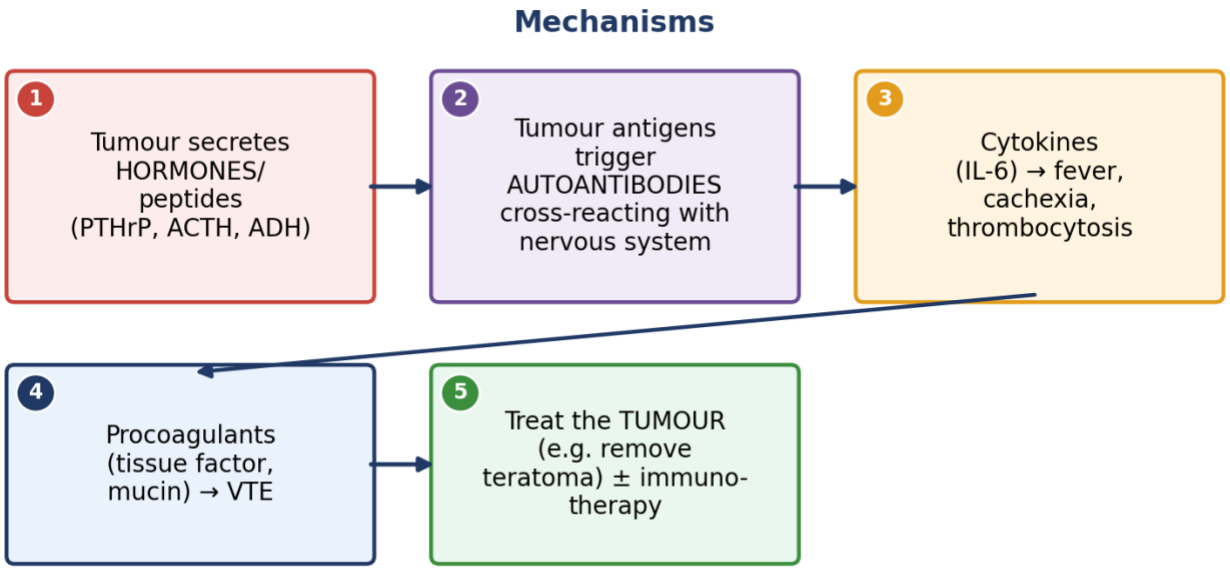


Figure 338.1 — Mechanisms

338.2 Gynaecological associations

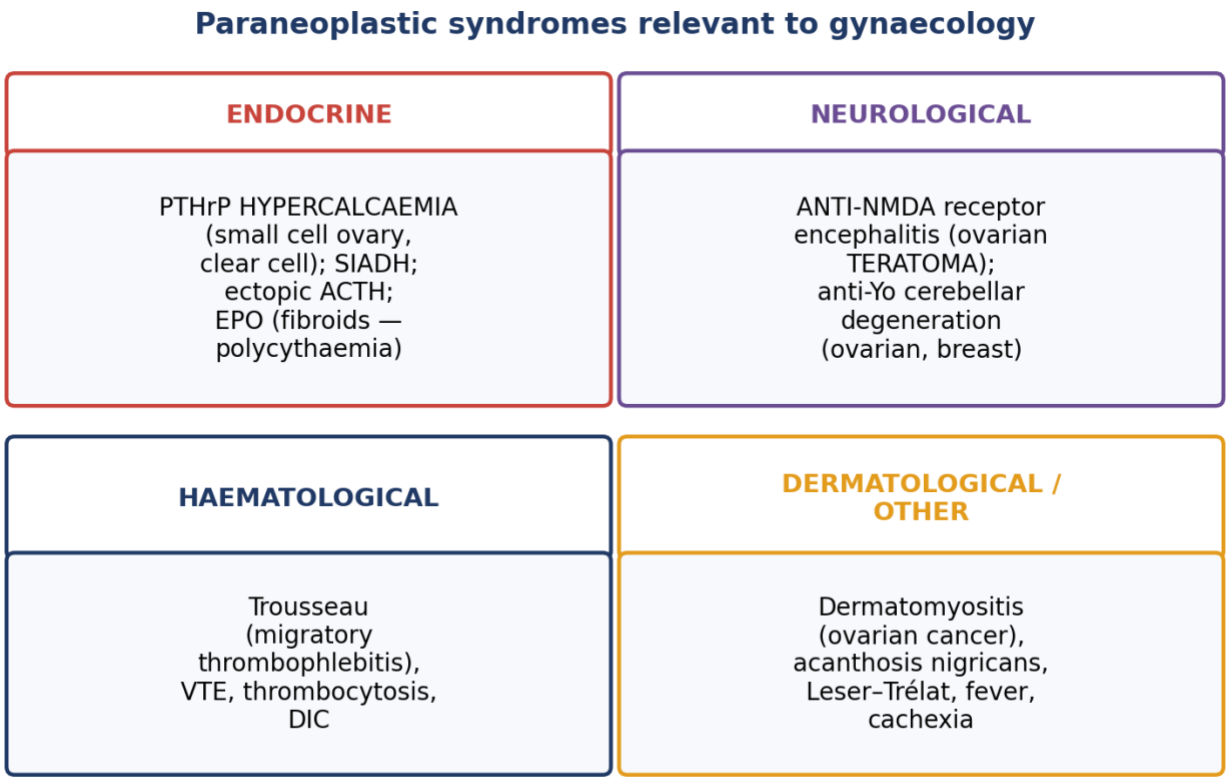


Figure 338.2 — Paraneoplastic syndromes in gynaecology

Syndrome	Key points
Anti-NMDA receptor encephalitis	• Young women • Psychiatric symptoms, seizures, dyskinesia, autonomic instability, ↓ consciousness • **Ovarian (mature) teratoma** in ≈ 40–50% of adult women — remove tumour + immunotherapy (steroids, IVIG, plasma exchange, rituximab) • Good recovery if treated early
Paraneoplastic cerebellar degeneration	• Anti-Yo (PCA-1) antibodies — ovarian, breast, uterine cancers • Ataxia, dysarthria • Poor neurological recovery
Hypercalcaemia	• PTHrP — **small cell carcinoma of the ovary (hypercalcaemic type)**, clear cell, squamous • Also bone metastases
Thrombosis	• Trousseau syndrome (mucinous adenocarcinomas — ovary, pancreas), VTE in ovarian clear cell carcinoma • LMWH
Polycythaemia	EPO from large uterine leiomyomas (myomatous erythrocytosis syndrome)
Dermatomyositis	↑ Ovarian cancer risk — screen with CA-125 and imaging
Others	• SIADH, ectopic ACTH (Cushing's) • Hyperthyroidism (struma ovarii, molar hCG) • Hypoglycaemia (large fibrous tumours) • Meigs' syndrome (fibroma + ascites + pleural effusion — resolves after removal)

338.3 Must-know summary

■ EXAM TIP

- Paraneoplastic = remote effects, not invasion/metastasis — hormones, antibodies, cytokines, procoagulants.
- **Anti-NMDA encephalitis → look for ovarian teratoma**; anti-Yo → ovarian/breast cancer.
- PTHrP hypercalcaemia (small cell ovarian), Trousseau (mucinous), EPO (fibroids), dermatomyositis (ovarian).
- Treat the tumour; immunotherapy for neurological syndromes.

■ MNEMONIC / MEMORY AID

'Teratoma Talks to the NMDA receptor'.