PIPADOR REVISION

MRCOG Part 1 Revision Notes

Anaesthetic Drugs

PHARMACOLOGY • LECTURE 397

VISUAL EXAMINATION REVISION NOTES

2026 Edition

397

MRCOG PART 1 REVISION NOTES | PHARMACOLOGY

Anaesthetic Drugs

Anaesthetic pharmacology, pregnancy considerations, anaesthesia for caesarean section and emergencies

Regional	RSI	↓ MAC ≈ 30%	Sugammadex
Preferred for CS	GA in pregnancy	Pregnancy	Reverses rocuronium

■ **KEY FACTS: Learning objectives**

- Describe the pharmacology of IV and inhalational anaesthetics, neuromuscular blockers, local anaesthetics and reversal agents.
- Describe physiological changes of pregnancy relevant to anaesthesia.
- Describe general and regional anaesthesia for caesarean section and anaesthetic emergencies.

397.1 Drugs

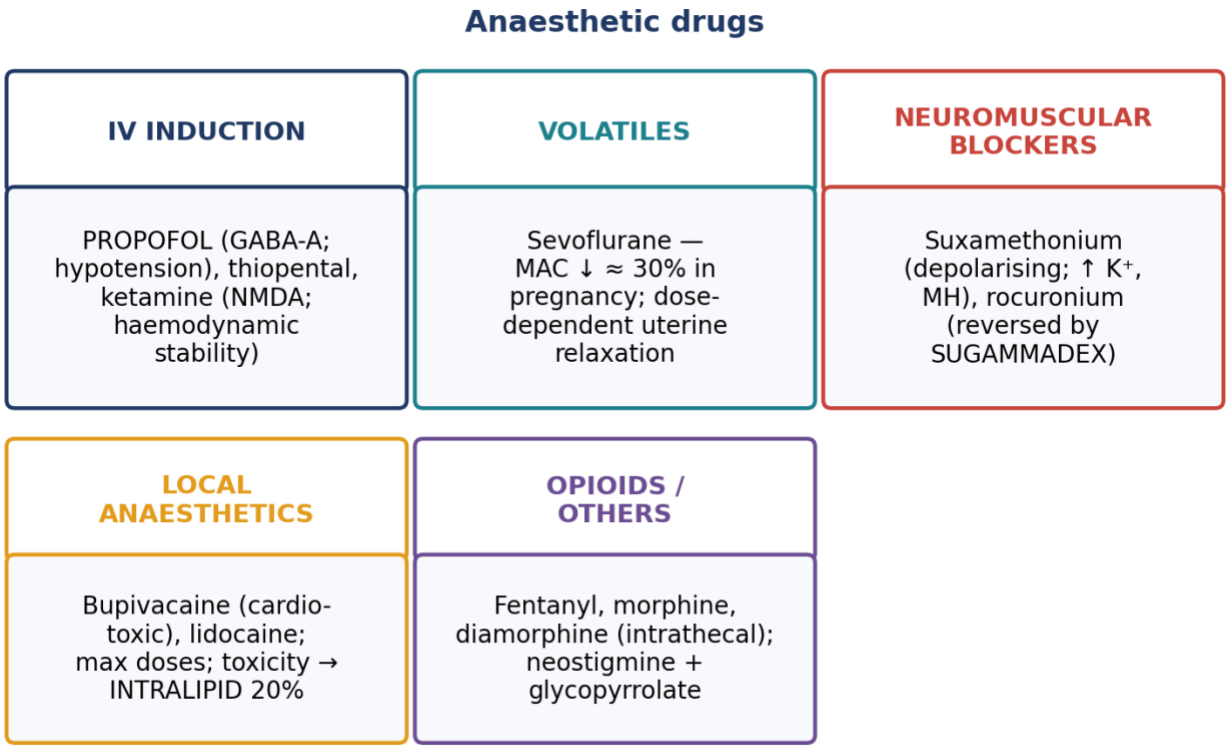


Figure 397.1 — Anaesthetic drugs

Topic	Details
Pregnancy changes	• ↓ FRC + ↑ O_2 consumption → rapid desaturation • Difficult airway (oedema, breasts) • ↑ aspiration risk (progesterone ↓ LOS tone) • ↓ MAC

Topic	Details
	• Aortocaval compression • ↓ LA requirement
Suxamethonium	• Fast onset (≈ 45 s) • Hyperkalaemia, malignant hyperthermia (dantrolene), prolonged block with pseudocholinesterase deficiency (↓ in pregnancy)
Rocuronium + sugammadex	• Rapid RSI alternative • Sugammadex encapsulates (reduces hormonal contraceptive efficacy — advise 7 days extra precautions)
Volatile agents	• Uterine relaxation (dose-dependent) → ↑ PPH at high concentrations • Useful for uterine relaxation
Local anaesthetics	• Bupivacaine (most cardiotoxic), levobupivacaine, lidocaine • Max doses • Toxicity → 20% lipid emulsion
Spinal opioids	• Intrathecal diamorphine/morphine — prolonged analgesia • Delayed respiratory depression (monitoring)

397.2 Anaesthesia for caesarean section

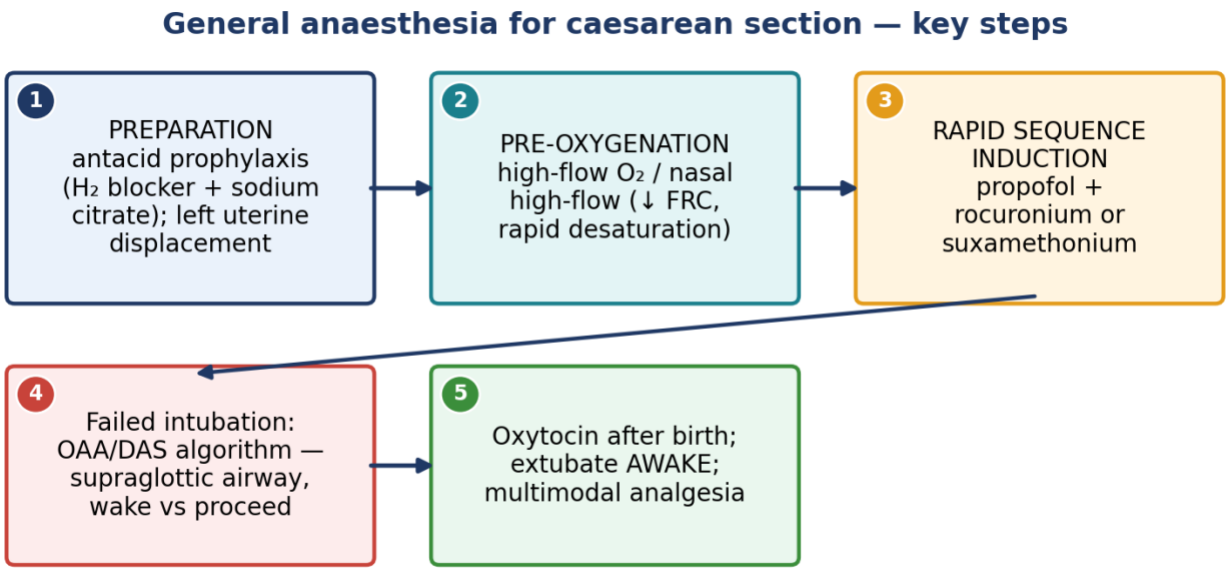


Figure 397.2 — General anaesthesia for CS

- **Regional (spinal/CSE/epidural top-up)** preferred: lower maternal mortality, awake mother
  - Target block T4
  - Spinal hypotension prevented with **phenylephrine infusion** and left uterine displacement.
- Category 1 CS: rapid sequence spinal or GA; decision-to-delivery target 30 min.
- Anaesthetic emergencies: failed intubation (OAA/DAS algorithm), aspiration, high spinal, LA toxicity, anaphylaxis
  - Malignant hyperthermia (dantrolene)
  - Accidental awareness (↑ in obstetric GA).

397.3 Must-know summary

■ EXAM TIP

- Pregnancy: rapid desaturation, difficult airway, aspiration risk, ↓ MAC.
- GA for CS: antacid prophylaxis, pre-oxygenation, RSI (propofol + rocuronium/suxamethonium), awake extubation.
- Regional preferred; phenylephrine for spinal hypotension; T4 block.
- Sugammadex reverses rocuronium (reduces hormonal contraception efficacy).

■ MNEMONIC / MEMORY AID

Obstetric airway risks — 'Fast to desaturate, Full stomach, Fat (oedematous) airway'.