PIPADOR REVISION

MRCOG Part 1 Revision Notes

Anti-inflammatory Drugs

PHARMACOLOGY • LECTURE 386

VISUAL EXAMINATION REVISION NOTES

2026 Edition

386

MRCOG PART 1 REVISION NOTES | PHARMACOLOGY

Anti-inflammatory Drugs

NSAIDs and corticosteroids — mechanisms, adverse effects and use in pregnancy

COX-1/2	≥ 20 wk	11β-HSD2	2 × 12 mg
NSAID targets	Avoid NSAIDs (oligohydramnios)	Inactivates prednisolone	Betamethasone for fetal lungs

■ KEY FACTS: Learning objectives

- Describe the mechanisms and adverse effects of NSAIDs and corticosteroids.
- Describe their use and safety in pregnancy and breastfeeding.
- Describe antenatal corticosteroids and steroid cover.

386.1 Mechanisms

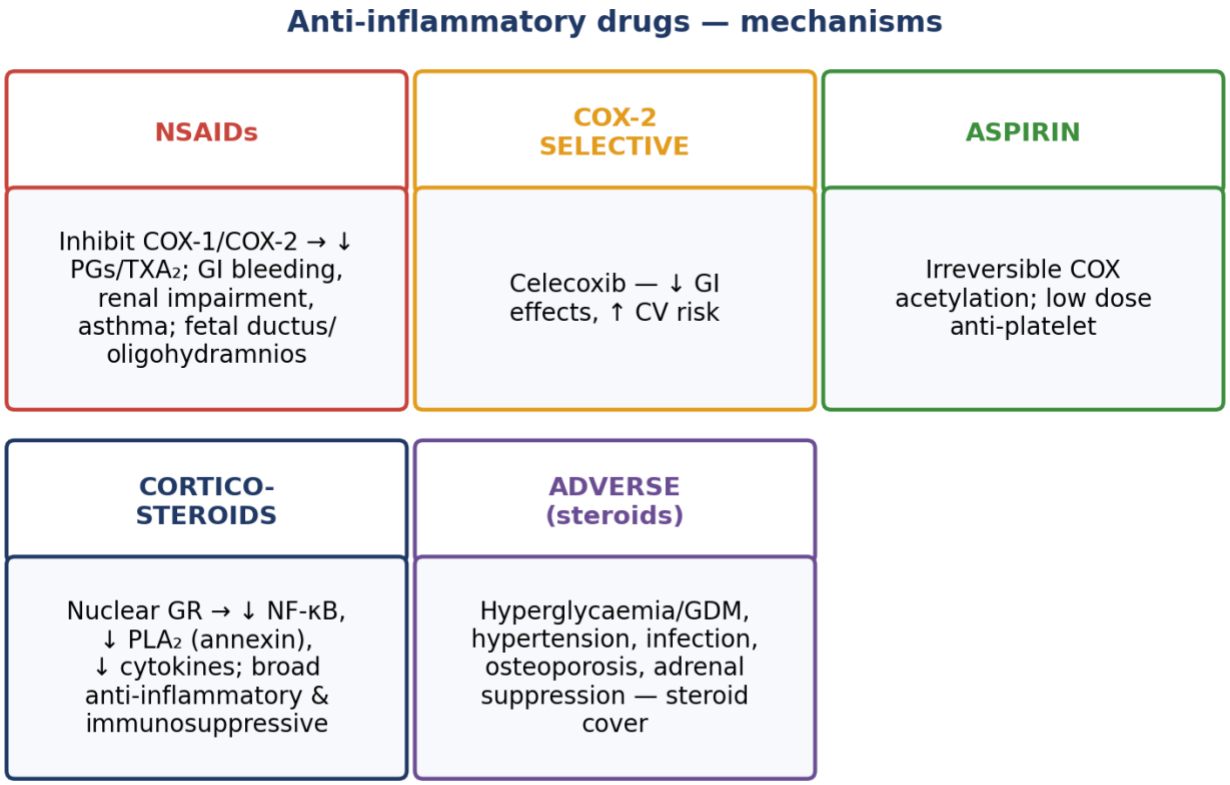


Figure 386.1 — Anti-inflammatory drugs

- **NSAIDs in pregnancy**: avoid from 20 weeks (fetal renal impairment, oligohydramnios) and in the 3rd trimester (premature closure of the ductus arteriosus, pulmonary hypertension)
  - Avoid around conception if possible (possible ↑ miscarriage). Compatible with breastfeeding (ibuprofen).
- Avoid NSAIDs in **pre-eclampsia with renal impairment**, PPH-related AKI, asthma sensitivity and peptic ulcer.

386.2 Corticosteroids

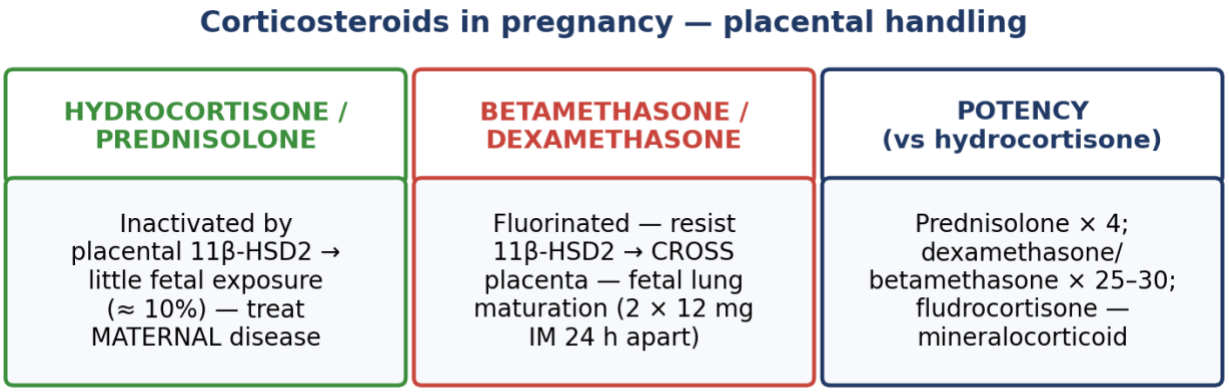


Figure 386.2 — Corticosteroids and the placenta

Use	Details
Antenatal corticosteroids	• Betamethasone 12 mg IM × 2 (24 h apart) or dexamethasone — 24+0–33+6 weeks if preterm birth expected (consider 34–35+6 and before elective CS < 39 wk) • ↓ RDS, IVH, NEC, death • Maternal hyperglycaemia (diabetes — VRIII)
Maternal disease	• Prednisolone (asthma, IBD, SLE, ITP, hyperemesis) — little fetal exposure • GDM screening
Steroid cover	Long-term steroids → adrenal suppression — IV hydrocortisone in labour/CS and acute illness (Society for Endocrinology)
Breastfeeding	Prednisolone compatible

386.3 Must-know summary

■ EXAM TIP

- NSAIDs inhibit COX → ↓ PGs; avoid ≥ 20 wk/3rd trimester (ductus, oligohydramnios).
- Steroids: GR → ↓ NF-κB, PLA_2; hyperglycaemia, infection, adrenal suppression.
- Prednisolone/hydrocortisone inactivated by placental 11β-HSD2; betamethasone/dexamethasone cross → fetal lungs.
- Steroid cover for women on long-term steroids at birth.

■ MNEMONIC / MEMORY AID

'Pred for Pregnant mum; Beta for Baby's lungs'.