

# ANTENATAL CORTICOSTEROIDS

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### 1. STEROIDS USED:

Betamethasone and Dexamethasone

### 2. DOSAGE AND ROUTE OF ADMINISTRATION:

**Betamethasone acetate phosphate:** Two 12-mg doses of betamethasone given intramuscularly 24 hours apart

**Dexamethasone sodium phosphate:** four 6-mg doses of dexamethasone administered intramuscularly every 12 hours (plain betamethasone phosphate salt available in India and most parts of world)

The benefit of corticosteroid administration is greatest at 2–7 days after the initial dose

### 3. DEXAMETHASONE OVER BETAMETHASONE:

- Dexamethasone sodium phosphate is preferred over betamethasone.

- Efficacy similar to betamethasone
- Widely available, low cost, and often prioritized in some guidelines
- More rapid onset and shorter duration of action
- More stable
- Also prevents Intraventricular haemorrhage

#### 4. PURPOSE

- Antenatal maternal administration of steroids in premature labour reduces the incidence of Respiratory Distress Syndrome (RDS), Necrotising Enterocolitis and Intra-ventricular Haemorrhage in neonates resulting in reduced perinatal mortality and morbidity rates.
- RDS is known to affect 40-50% of babies born before 32 weeks gestation.
- The efficacy of neonatal surfactant therapy is enhanced by antenatal exposure to corticosteroids

#### 5. INDICATIONS FOR ANTENATAL CORTICOSTEROIDS

- Threatened pre-term labour
- Antepartum haemorrhage if considered to be at risk of preterm delivery
- Preterm rupture of membranes

#### 6. ANTENATAL STEROIDS ACCORDING TO GESTATIONAL AGE

- **24w to 33w+6/7d:** A single course of corticosteroids is recommended for pregnant women between 24 0/7 weeks and 33 6/7 weeks of gestation, and may be considered for pregnant women starting at 23 0/7 weeks of gestation who are at risk of preterm delivery within 7 days
- **34w to 36w+6/7d:** A single course of corticosteroid is recommended for pregnant women between 34 0/7 weeks and 36 6/7 weeks of gestation at risk of preterm birth within 7 days, and who have not received a previous course of antenatal corticosteroids

## 7. RESCUE COURSE:

- Two doses of 12 mg betamethasone or four doses of 6 mg dexamethasone
- Consider a single repeat course for women under 34 0/7 weeks if they are at risk of preterm birth within seven days and
- Their previous course was more than 14 days ago.
- A rescue course can be provided as early as seven days after the prior dose if indicated by the clinical situation.

## 8. ELECTIVE LSCS:

Elective Caesarean Section is planned prior to 38+6 weeks of gestation after discussing with parents

## 9. REFERENCES

- RCOG-Antenatal corticosteroids to reduce neonatal morbidity and mortality (Green-top Guideline No. 74)
- Use of antenatal steroid for preterm labour-FOGSI
- ACOG- antenatal steroid therapy

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<b>Guideline accepted date</b>	<b>November 2025</b>
<b>Guideline review date</b>	<b>November 2027</b>