

Antenatal corticosteroids

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1 A single course of antenatal corticosteroids should be offered to all women at risk of delivery between 24 and 34 weeks

Antenatal corticosteroids accelerate fetal lung maturation and reduce rates of neonatal death, respiratory distress syndrome, intraventricular hemorrhage and early neonatal infections. These benefits are seen in neonates born up to seven days after the first dose¹ (Box 1).

2 A single course of antenatal corticosteroids may be considered in women at risk of delivery between 34–36 and 22–24 weeks

A recent randomized controlled trial showed that antenatal corticosteroids reduce neonatal respiratory complications among women at risk of delivery between 34 weeks 0 days and 36 weeks 6 days (the number needed to treat to prevent one case of severe respiratory morbidity was 25).² Among women at risk of imminent delivery between 22 weeks 0 days and 24 weeks 0 days who choose perinatal resuscitation, a meta-analysis of cohort studies suggested that antenatal corticosteroids may reduce the risk of neonatal in-hospital mortality by 52%.³

3 The benefits of antenatal corticosteroids outweigh the risks

A single course of antenatal corticosteroids between 24 and 34 weeks is associated with a reduced risk of cerebral palsy and severe disability⁴ without an increase in maternal infections.¹ However, neonatal hypoglycemia has been observed when antenatal corticosteroids are administered after 34 weeks.² Adults exposed to antenatal corticosteroids in utero have higher rates of insulin resistance (but not diabetes).¹

4 A single course of “rescue” corticosteroids may be considered

A single additional course of antenatal corticosteroids can be considered, after specialist consultation, in women still at risk of preterm delivery seven days after completing the initial course.⁵ The 25% reduction in composite outcomes of serious neonatal morbidity is limited by the unclear effect on outcomes such as respiratory distress syndrome and intraventricular hemorrhage.⁵

5 Multiple repeated courses of antenatal corticosteroids are not recommended

Although repeated (more than two) courses of antenatal corticosteroids are associated with improvements in short-term respiratory morbidity, the unclear safety profile of repeated courses (including a possible birth-weight reduction) precludes their routine use.⁵

Box 1: Sample regimens for antenatal corticosteroids¹

Corticosteroid	Dosage
Betamethasone	12 mg intramuscularly every 24 hours for two doses
Dexamethasone	6 mg intramuscularly every 12 hours for four doses

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