CORTICOSTEROIDS

Corticosteroids: Preterm labor (PTL)

SUMMARY: At least one course of corticosteroids is recommended for pregnant women between 24 0/7 weeks and 34 0/7 weeks of gestation who are at risk of preterm delivery and may be considered for pregnant women as early as 23 0/7 weeks of gestation and as late as 36 5/7 weeks of gestation.

Rationale: Preterm birth is defined as birth between 20 0/7 weeks of gestation and 36 6/7 weeks of gestation and accounts for approximately 12% of live births in the United States. It is the leading cause of neonatal mortality and the most common reason for antenatal hospitalization. The most beneficial intervention for improvement of neonatal outcomes among patients who give birth preterm is the administration of antenatal corticosteroids. Neonates whose mothers receive antenatal corticosteroids have significantly lower severity, frequency, or both of respiratory distress syndrome, intracranial hemorrhage, necrotizing enterocolitis, and death, compared with neonates whose mothers did not receive antenatal corticosteroids. A Cochrane meta-analysis concludes that a single course of antenatal corticosteroids should be considered routine for all preterm deliveries.

Eligible patients: Administer steroids (preferably betamethasone) at 24-34 weeks and strongly consider steroids for those as early as 23 0/7 weeks and as late as 35 5/7 weeks if the risk for delivery within the next 7 days appears substantial. For very high risk patients, in consultation with Neonatology and Maternal Fetal Medicine, initiation of steroids at 22 5/7 weeks may be advised. In this way, the maximum benefit of the steroids is accrued by 23 0/7 weeks. In general, these situations will involve hospitalized patients.

Contraindications: Rare. Allergy to steroids.

Technique: Administer Betamethasone 12 mg IM q 24 hrs x 2 doses. This is considered one course of steroids. The alternative course is Dexamethasone, 6 mg IM q 12 hrs x 4 doses.

Special Considerations:

Because treatment with corticosteroids for less than 24 hours is still associated with significant reductions in neonatal morbidity and mortality, a first dose of antenatal corticosteroids should still be administered even if the ability to give the second dose is unlikely, based on the clinical scenario. However, no additional benefit has been demonstrated for courses of antenatal steroids with dosage intervals shorter than those outlined previously, often referred to as accelerated dosing, even when delivery appears imminent.


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