Criteria for administration of late preterm corticosteroids (34-37 weeks): (Consider consulting OB if in doubt.) (2017)

1. Singleton pregnancy
2. Gestational age between 34w0d and 36w6d
3. Did not receive preterm antepartum corticosteroid therapy
4. At high risk for preterm birth within the next 7 days but before 37w0d, examples include preterm labor with 3 cm dilation or 75% effacement, PROM, gestational hypertension/preeclampsia, medical indication with definitive plan for late preterm delivery
5. The patient does not have any of the following conditions, pregestational diabetes, multiple gestation, fetal demise or known major fetal anomaly, maternal contraindication to betamethasone (hypersensitivity to any components of medication, ITP, systemic fungal infection, use of amphotericin B due to possibility of heart failure)

Department of OB/Gyn MFM team recommendation, Aug, 2016

Gyamfi-Bannerman C, Thom EA, Blackwell SC, et al. Antenatal Betamethasone for Women at Risk for Late Preterm Delivery.N Engl J Med. 2016 Apr 7;374(14):1311-20.

BACKGROUND: Infants who are born at 34 to 36 weeks of gestation (late preterm) are at greater risk for adverse respiratory and other outcomes than those born at 37 weeks of gestation or later. It is not known whether betamethasone administered to women at risk for late preterm delivery decreases the risks of neonatal morbidities.

METHODS: We conducted a multicenter, randomized trial involving women with a singleton pregnancy at 34 weeks 0 days to 36 weeks 5 days of gestation who were at high risk for delivery during the late preterm period (up to 36 weeks 6 days). The participants were assigned to receive two injections of betamethasone or matching placebo 24 hours apart. The primary outcome was a neonatal composite of treatment in the first 72 hours (the use of continuous positive airway pressure or high-flow nasal cannula for at least 2 hours, supplemental oxygen with a fraction of inspired oxygen of at least 0.30 for at least 4 hours, extracorporeal membrane oxygenation, or mechanical ventilation) or stillbirth or neonatal death within 72 hours after delivery.

RESULTS: The primary outcome occurred in 165 of 1427 infants (11.6%) in the betamethasone group and 202 of 1400 (14.4%) in the placebo group (relative risk in the betamethasone group, 0.80; 95% confidence interval [CI], 0.66 to 0.97; P=0.02). Severe respiratory complications, transient tachypnea of the newborn, surfactant use, and bronchopulmonary dysplasia also occurred significantly less frequently in the betamethasone group. There were no significant between-group differences in the incidence of chorioamnionitis or neonatal sepsis. Neonatal hypoglycemia was more common in the betamethasone group than in the placebo group (24.0% vs. 15.0%; relative risk, 1.60; 95% CI, 1.37 to 1.87; P<0.001).

CONCLUSIONS: Administration of betamethasone to women at risk for late preterm delivery significantly reduced the rate of neonatal respiratory complications.