SMFM Preterm Birth Toolkit

Late Preterm Antenatal Corticosteroids

Pregnancies at high risk for late preterm (LPT) delivery from 34-36 weeks of gestation are candidates for antenatal corticosteroids. This recommendation has come after the Antenatal Late Preterm Steroids (ALPS) trial, which was conducted by the Eunice Kennedy Shriver Maternal Fetal Medicine Units (MFMU) Network. Women with a singleton gestation at high-risk for preterm delivery between 34 weeks 0 days -36 weeks 5 days of gestation were eligible if they presented in preterm labor with a cervix that was at least 3 cm dilated or 75% effaced, if they had preterm premature rupture of the membranes, or if a planned delivery was scheduled in the LPT period, with the indication at the discretion of the provider. Betamethasone was the steroid evaluated in the trial. The authors found significant decreases in respiratory morbidity, the need for neonatal resuscitation, the use of post-natal surfactant, and bronchopulmonary dysplasia at 28 days. There was also an increase in neonatal hypoglycemia in the group exposed to betamethasone. The primary difference in the utilization of LPT antenatal corticosteroids is that delivery should not be delayed, such as with tocolytics, until the steroids administration is completed. This is particularly important for women who present with an acute change in status, such as preeclampsia with severe features or HELLP syndrome, during this period. Based on these findings, the following has been recommended by the Society for Maternal-Fetal Medicine (SMFM):

1. In women with a singleton pregnancy between 34 weeks 0 days -36 weeks 6 days of gestation who are at high risk for PTB within the next 7 days (but before 37 weeks of gestation), we recommend treatment with betamethasone (two doses of 12 mg IM twenty four hours apart).

2. In women with preterm labor symptoms in the LPT period, we recommend waiting for evidence of true labor, such as a cervical dilatation of at least 3 cm or effacement of at least 75%, before treatment with betamethasone.

3. In women with LPT pregnancies receiving betamethasone, we recommend against use of tocolysis in an attempt to delay delivery to complete the steroid course since it is unclear if the benefits of betamethasone administration are outweighed by the risks of attempts to delay.

4. In women with LPT pregnancies with a potential medical indication for delivery, we recommend betamethasone not be given unless there is a definitive plan for LPT delivery.

5. We recommend that institutions utilize standard guidelines for assessment
and management of neonatal hypoglycemia in LPT newborns.

6. We recommend against implementation of the ALPS protocol for conditions not studied* in the RCT unless performed as part of research or quality improvement.

*Women excluded by trial design and thus unstudied include the following: twin gestations, pregestational diabetics, women with planned term cesareans, and women with clinical chorioamnionitis.

References:


This algorithm and key driver material was written by a group of experts in the field of Preterm Birth. It was then reviewed by the Society for Maternal-Fetal Medicine’s (SMFM’s) Publications Committee, Executive Committee and Risk Management. Standardization of healthcare processes and reduced variation has been shown to improve outcomes and quality of care. SMFM developed these documents to help facilitate the standardization process. These algorithms and key driver documents are “tools” to assist clinicians and practices. The practice of medicine continues to evolve, and individual circumstances may vary. They reflect clinical and scientific advances as of the date issued and are subject to change. They are not intended to dictate a certain management or course of action. We encourage users to adapt them to their particular situation, environment and patient population. This publication is not expected to reflect the opinions of all members of the Society for Maternal-Fetal Medicine.

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