INTERIM UPDATE

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN SUMMARY

CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN–GYNECOLOGISTS

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(Replaces Practice Bulletin Number 127, June 2012)

**For a comprehensive overview of management of preterm labor, the full-text version of this Practice Bulletin is available at http://dx.doi.org/10.1097/AOG.0000000000001265.**

**Scan this QR code with your smart phone to view the full-text version of this Practice Bulletin.**

**Committee on Practice Bulletins—Obstetrics.** This Practice Bulletin was developed by the Committee on Practice Bulletins—Obstetrics with the assistance of Hyagriv N. Simhan, MD, MS. The information is designed to aid practitioners in making decisions about appropriate obstetric and gynecologic care. These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

INTERIM UPDATE: This Practice Bulletin is updated to reflect a limited, focused change in gestational age at which to consider antenatal corticosteroids.

# Management of Preterm Labor

*Preterm birth is the leading cause of neonatal mortality and the most common reason for antenatal hospitalization (1–4). In the United States, approximately 12% of all live births occur before term, and preterm labor preceded approximately 50% of these preterm births (5, 6). Although the causes of preterm labor are not well understood, the burden of preterm births is clear—preterm births account for approximately 70% of neonatal deaths and 36% of infant deaths as well as 25–50% of cases of long-term neurologic impairment in children (7–9). A 2006 report from the Institute of Medicine estimated the annual cost of preterm birth in the United States to be $26.2 billion or more than $51,000 per premature infant (10). However, identifying women who will give birth preterm is an inexact process. The purpose of this document is to present the various methods proposed to manage preterm labor and to review the evidence for the roles of these methods in clinical practice. Identification and management of risk factors for preterm labor are not addressed in this document.*

## Clinical Management Questions

- *Which tests can be used to stratify risk for preterm delivery in patients who present with preterm contractions?*
- *Which patients with preterm labor are appropriate candidates for intervention?*
- *Should women with preterm contractions but without cervical change be treated?*
- *Does the administration of antenatal corticosteroids improve neonatal outcomes?*
- *What is the role for magnesium sulfate for fetal neuroprotection?*
- *Does tocolytic therapy improve neonatal outcomes?*
- *Should tocolytics be used after acute therapy?*

- *Is there a role for antibiotics in preterm labor?*
- *Is there a role for nonpharmacologic management of women with preterm contractions or preterm labor?*
- *Is preterm labor managed differently in women with multiple gestations?*

# Summary of Recommendations

***The following recommendations and conclusions are based on good and consistent scientific evidence (Level A):***

- A single course of corticosteroids is recommended for pregnant women between 24 weeks and 34 weeks of gestation, and may be considered for pregnant women starting at 23 weeks of gestation, who are at risk of preterm delivery within 7 days.
- Accumulated available evidence suggests that magnesium sulfate reduces the severity and risk of cerebral palsy in surviving infants if administered when birth is anticipated before 32 weeks of gestation. Hospitals that elect to use magnesium sulfate for fetal neuroprotection should develop uniform and specific guidelines for their departments regarding inclusion criteria, treatment regimens, concurrent tocolysis, and monitoring in accordance with one of the larger trials.
- The evidence supports the use of first-line tocolytic treatment with beta-adrenergic agonist therapy, calcium channel blockers, or NSAIDs for short-term prolongation of pregnancy (up to 48 hours) to allow for the administration of antenatal steroids.
- Maintenance therapy with tocolytics is ineffective for preventing preterm birth and improving neonatal outcomes and is not recommended for this purpose.
- Antibiotics should not be used to prolong gestation or improve neonatal outcomes in women with preterm labor and intact membranes.

***The following recommendations and conclusions are based on limited and inconsistent scientific evidence (Level B):***

- A single repeat course of antenatal corticosteroids should be considered in women whose prior course of antenatal corticosteroids was administered at least 7 days previously and who remain at risk of preterm birth before 34 weeks of gestation.
- Bed rest and hydration have not been shown to be effective for the prevention of preterm birth and should not be routinely recommended.
- The positive predictive value of a positive fetal fibronectin test result or a short cervix alone is poor and should not be used exclusively to direct management in the setting of acute symptoms.

# Proposed Performance Measure

The proportion of women with preterm labor at less than 34 weeks of gestation who receive corticosteroid therapy

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force. Based on the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Level A—Recommendations are based on good and consistent scientific evidence.

Level B—Recommendations are based on limited or inconsistent scientific evidence.

Level C—Recommendations are based primarily on consensus and expert opinion.



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