

ACOG PRACTICE BULLETIN SUMMARY

Clinical Management Guidelines for Obstetrician–Gynecologists

NUMBER 227

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For a comprehensive overview of these recommendations, the full-text version of this Practice Bulletin is available at <http://dx.doi.org/10.1097/AOG.0000000000004251>.



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Committee on Practice Bulletins—Obstetrics and the Society for Maternal-Fetal Medicine. This Practice Bulletin was developed by the American College of Obstetricians and Gynecologists Committee on Practice Bulletins—Obstetrics and the Society for Maternal-Fetal Medicine Publications Committee with the assistance of Henry Galan, MD, and William Grobman, MD.

INTERIM UPDATE: The content in this Practice Bulletin has been updated as highlighted (or removed as necessary) to reflect a limited, focused change in the expanded definition of fetal growth restriction and delivery timing recommendations in the setting of fetal growth restriction. For complete details on these updates, please see the full-text version.

Fetal Growth Restriction

Fetal growth restriction, also known as intrauterine growth restriction, is a common complication of pregnancy that has been associated with a variety of adverse perinatal outcomes. There is a lack of consensus regarding terminology, etiology, and diagnostic criteria for fetal growth restriction, with uncertainty surrounding the optimal management and timing of delivery for the growth-restricted fetus. An additional challenge is the difficulty in differentiating between the fetus that is constitutionally small and fulfilling its growth potential and the small fetus that is not fulfilling its growth potential because of an underlying pathologic condition. The purpose of this document is to review the topic of fetal growth restriction with a focus on terminology, etiology, diagnostic and surveillance tools, and guidance for management and timing of delivery.

Recommendations and Conclusions

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

- ▶ Umbilical artery Doppler velocimetry used in conjunction with standard fetal surveillance, such as non-stress tests, biophysical profiles, or both, is associated with improved outcomes in fetuses in which fetal growth restriction has been diagnosed.
- ▶ Antenatal corticosteroids are recommended if delivery is anticipated before 33 6/7 weeks of gestation because they are associated with improved preterm neonatal outcomes. In addition, antenatal corticosteroids are recommended for women in whom delivery is anticipated between 34 0/7 and 36 6/7 weeks of gestation, who are at risk of preterm delivery within 7 days, and who have not received a previous course of antenatal corticosteroids.
- ▶ For cases in which delivery occurs before 32 weeks of gestation, magnesium sulfate should be considered for fetal and neonatal neuroprotection.



- ▶ Nutritional and dietary supplemental strategies for the prevention of fetal growth restriction are not effective and are not recommended.

The following recommendations and conclusions are based primarily on consensus and expert opinion (Level C):

- ▶ Fetal growth restriction alone is not an indication for cesarean delivery.

- ▶ The optimal timing of delivery of the growth-restricted fetus depends on the underlying etiology of the growth restriction (if known), the estimated gestational age, and other clinical findings such as antenatal fetal surveillance.

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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