



# What is the optimal time to deliver a woman who has placenta previa?

**36 WEEKS**, provided steroids were administered at 35 weeks and 5 days, with or without amniocentesis to confirm fetal lung maturity, according to this decision analysis.

*Zlatnick MG, Little SE, Kohli P, Kaimal AJ, Stotland NE, Caughey AB. When should women with placenta previa be delivered? A decision analysis. J Reprod Med. 2010;55(9-10):373-381.*

## ► EXPERT COMMENTARY

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Although placenta previa is relatively rare—affecting one in every 200 to 300 singleton gestations—it is associated with significant maternal morbidity and death. Between 1979 and 1992, for example, 6.6% of maternal deaths were caused by bleeding

associated with placenta previa. Perinatal mortality is also high—occurring at a rate that is three to four times higher than in normal pregnancies.<sup>1,2</sup>

Zlatnick and colleagues have tackled a difficult issue in obstetrics, one that continues to spark debate among obstetricians—namely, when to optimally time the delivery of a patient who has placenta previa. They use a mathematical model that yields specific results based on very specific assumptions. Change the assumptions and the conclusions change, too. Although Zlatnick and colleagues have attempted to remain as fair and unbiased in their assumptions as possible, the reader must interpret their conclusions with caution.

## FAST TRACK

Despite the conclusions of Zlatnick and colleagues, there is insufficient evidence to recommend any particular time of delivery for placenta previa

## WHAT THIS EVIDENCE MEANS FOR PRACTICE

I think that most clinicians would agree that 1) carrying a pregnancy complicated by placenta previa to 39 weeks' gestation is not a good idea and 2) earlier delivery would certainly not be considered "elective." Moreover, it would be unwise to attempt to temporize in the setting of a bleeding previa in the late third trimester.

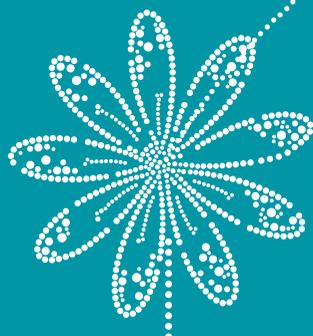
I would also caution against elective near-term or late preterm delivery on the basis of this model—although I would suggest that an alternative worthy of consideration would be to delay delivery until 37 weeks, when the definition of "term" has been fulfilled.

The role of steroids in this setting has not been established, and the role of amniocentesis seems equally unclear.

Ultimately, we need to use sound clinical judgment and information from decision analyses like this one in counseling and obtaining true informed consent from the patient, who must be an active partner in the decision-making process. Like the obstetrician, she must arrive at a decision without clear guidance from properly conducted and adequately powered clinical trials.

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### **Not all placenta previas are created equal**

The mathematical model presented in this study is most relevant for truly uncomplicated placenta previa in an otherwise healthy gravida. Not all placenta previas are alike.

Despite this decision analysis, the role of amniocentesis remains unclear. The risk of respiratory distress syndrome (RDS) in an infant who has mature chemical indices is not much different than the a priori risk of RDS at 36 weeks' gestation.

Another fact to consider: The role of maternal steroid administration to accelerate fetal lung maturity has not been firmly established beyond the 34th week of gestation.

### **Mathematical model is innovative but incomplete**

Use of the "quality-adjusted life-year model" in this study is innovative. However, in my

opinion, this decision analysis, although helpful, is incomplete.

The model has been used by two of the authors in a different decision analysis of optimal timing of delivery of women who have a prior classical cesarean section. Interestingly, in their conclusion, these authors arrived at exactly the same gestational age as the current study of placenta previa.<sup>3</sup> That is surprising, given the entirely different biologies of placenta previa and rupture of a prior classical incision. ❌

#### **References**

1. Crane JM, Van den Hof MC, Dods L, Armon BA, Liston R. Neonatal outcomes with placenta previa. *Obstet Gynecol.* 1999;93(4):541-544.
2. Ananth CV, Smulian JC, Vintzileos AM. The effect of placenta previa on neonatal mortality: a population-based study in the United States, 1989 through 1997. *Am J Obstet Gynecol.* 2003;188(5):1299-1304.
3. Stotland NE, Lipschitz LS, Caughey AB. Delivery strategies for women with a prior classic cesarean delivery: a decision analysis. *Am J Obstet Gynecol.* 2002;187(5):1203-1208.