The risk of infant and fetal death by each additional week of expectant management in intrahepatic cholestasis of pregnancy by gestational age

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Objective

The objective of the study was to characterize the risk of infant and fetal death by each additional week of expectant management vs immediate delivery in pregnancies complicated by cholestasis.

Study Design

This was a retrospective cohort study of 1,604,386 singleton, nonanomalous pregnancies of women between 34 and 40 weeks' gestation with and without intrahepatic cholestasis of pregnancy (ICP) in the state of California during the years of 2005-2008. *International Classification of Diseases*, 9th version, codes and linked hospital discharge and vital statistics data were utilized. For each week of gestation, the following outcomes were assessed: the risk of stillbirth, the risk of delivery (represented by the risk of infant death at a given week of gestation), and the composite risk of expectant management for 1 additional week. Composite risk combines the risk of stillbirth at this gestational age week plus the risk of infant death if delivered at the subsequent week of gestation.

Results

Among women with ICP, the mortality risk of delivery is lower than the risk of expectant management at 36 weeks' gestation (4.7 vs 19.2 per 10,000). The risk of expectant management remains higher than delivery and continues to rise by week of gestation beyond 36 weeks. The risk of expectant management in women with ICP reaches a nadir at 35 weeks (9.1 per 10,000; 95% confidence interval, 1.4–16.9) and rises at 36 weeks (19.2 per 10,000; 95% confidence interval, 7.6–30.8).

Conclusion

Among women with ICP, delivery at 36 weeks' gestation would reduce the perinatal mortality risk as compared with expectant management. For later diagnoses, this would also be true at gestational ages beyond 36 weeks. Timing of delivery must take into account both the reduction in stillbirth risk balanced with the morbidities associated with preterm delivery.