Elective delivery before 39 weeks: reason for caution

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This issue includes 8 Fast-Track articles given as oral presentations at the Annual Meeting of the Society for Maternal-Fetal Medicine in February 2010. Three of these articles focus on an important issue in obstetrics: elective delivery <39 completed weeks of gestation.

Bailit et al report data on >200,000 births from the Consortium on Safe Labor, a National Institutes of Health–funded initiative. The results of their study broadly suggest that neonatal outcome is optimal at 39-40 weeks’ gestation for all types of labor. Wilmink et al use data from The Netherlands Perinatal Registry to assess whether the timing of elective cesarean influences perinatal outcomes. These authors used a composite outcome of clinically relevant endpoints. Overall, this study suggests that elective delivery >39 weeks was associated with the most favorable outcome. These 2 studies support prior work suggesting that elective delivery <39 weeks (in the absence of fetal lung maturity) is not a good strategy.

Still, there are many practitioners who perform elective deliveries <39 weeks (as evidenced in the Wilmink et al article), and a logical question is whether there are interventions that can alter physician behavior. That is precisely where the article by the Ohio Perinatal Quality Collaborative fits. The Ohio Perinatal Quality Collaborative reports a multisite initiative to reduce elective deliveries between 36-38.6 weeks in Ohio. The intervention tested was actually tailored specifically to the needs of a specific hospital. The results of this study were quite impressive, with a reduction in elective deliveries between 36-38.6 weeks from 25-5%. Importantly, this is not an artifact of increased documentation of a “reason” for early delivery, as there was an observed increase in deliveries >39 weeks.

Taken together, these 3 excellent articles suggest that not only do elective deliveries <39 weeks lead to worse neonatal outcomes, but that there are likely interventions to change this practice.