

CLINICAL OBSTETRICS

Abstracts 27 – 35

Moderators: Carol Major, MD; Robert Silver, MD

27 Does elective delivery policy change affect maternal or fetal morbidity?

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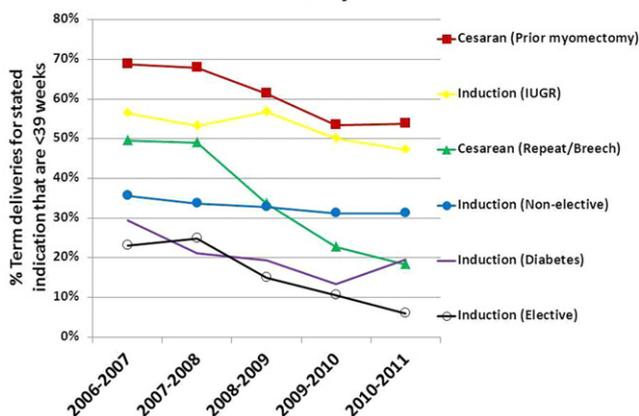
OBJECTIVE: Over the last 5 years, attention on both a national and institutional level has focused on the neonatal benefits of reducing elective deliveries prior to 39 weeks. We investigated whether this has impacted maternal or fetal risks.

STUDY DESIGN: We reviewed all singleton term births at a tertiary care center between 2006 and 2011. We categorized inductions as elective if the stated indication was elective, history of fast labor, advanced cervical exam, maternal discomfort, unstable lie or macrosomia. We considered cesarean deliveries elective if they were scheduled repeat or breech deliveries.

RESULTS: There were 33,662 term deliveries. Between 2006 and 2011, there was no change in the mean gestational age (39.51 to 39.52 weeks; p=0.38) but there was a reduction in the overall proportion of 37-38 week deliveries (29.9% to 25.4%; p<0.01). The reduction in early term deliveries was seen amongst both elective inductions (23.0% to 5.3%; p<0.01) and elective cesareans (49.5% to 18.3%; p<0.01). Of note, this reduction in early term deliveries was also seen for delivery indications that were not considered elective (Figure). There were no significant changes in the rate of macrosomia (1.4% to 1.0%), shoulder dystocia (0.4% to 0.4%), uterine rupture (0.4% to 0.5%), postpartum hemorrhage (3.2% to 2.8%), severe laceration (2.0% to 1.4%), pre-eclampsia (6.3% to 6.7%), or nighttime deliveries (52.3% to 53.0%). There was a non-significant increase in the rate of stillbirths after 37 weeks from 8.6 per 10,000 (CI 4-20 per 10,000) to 12.1 (CI 6-24 per 10,000); in order to have 80% power to detect a two-fold increased risk in stillbirth we would have needed four times the sample size.

CONCLUSION: Policy efforts were successful as we found a reduction in elective deliveries prior to 39 weeks in our large cohort. There was also a trend toward later delivery for indications not considered purely elective. Further study is needed to characterize the degree of increased risk incurred by prolonging high risk pregnancies to 39 weeks.

Trends in the Percent of Term Deliveries < 39 Weeks by Indication



28 Risk of stillbirth after 37 weeks in pregnancies complicated by small for gestational age fetuses

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OBJECTIVE: The evidence for delivering small for gestational age (SGA) fetuses at 37 weeks remains conflicting. Our objective is to estimate the risk of stillbirth per additional week of gestation beyond 37 weeks for pregnancies complicated by SGA.

STUDY DESIGN: We performed a retrospective cohort study of singleton pregnancies undergoing routine second trimester anatomy ultrasound from 1990-2009. Pregnancies complicated by fetal anomalies, aneuploidy and incomplete birthweight information were excluded. SGA was defined as birthweight < 10th percentile by the Alexander growth standard. The incidence of stillbirth at each gestational age strata was calculated as the number of stillbirths during that week per 10,000 ongoing pregnancies. For pregnancies ≥37 weeks, the risk of stillbirth with 95% CI and the OR with 95% CI for the association of SGA and stillbirth were calculated. The risk of stillbirth with 95% CI was calculated for each week of gestation ≥37 weeks.

RESULTS: Among 57,195 pregnancies meeting inclusion criteria the background risk of stillbirth was 56/10,000 (95% CI 42.3-72.7). The risk of stillbirth beyond 37 weeks in pregnancies complicated by SGA was greater compared to pregnancies without SGA (60/10,000 vs. 12/10,000 OR 7.1 95% CI [3.9-12.4]). A significant risk of stillbirth was found for each week of pregnancy beyond 37 weeks. The risk of stillbirth in the first week, 37-37 6/7 weeks, was 21/10,000 (95% CI [13.0-32.1]). At ≥40 weeks gestation the risk of stillbirth rose to 60/10,000 (95% CI [45.8-77.2]).

CONCLUSION: Pregnancies complicated by SGA have a five-fold increase risk for stillbirth beyond 37 weeks compared to pregnancies that are not complicated by SGA. There is a significant risk of stillbirth for each week of gestation beyond 37 weeks. Given these findings, a policy of delivery of SGA fetuses at 37 weeks is advocated.

GA (weeks)	Ongoing SGA Pregnancies	SGA Stillbirths (N=20)	Stillbirth risk/10,000 ongoing SGA pregnancies
37-37 6/7	3,333	7	21 (13.0-32.1)
38-38 6/7	2,776	3	11 (5.5-19.7)
39-39 6/7	1,953	5	26 (17.0-38.1)
≥40	832	5	60 (45.8-77.2)

29 The Mothers, Omega-3 & Mental Health Study: a double-blind, randomized controlled trial

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OBJECTIVE: Maternal deficiency of the omega-3 fatty acid, docosahexaenoic acid (DHA) has been associated with perinatal depression.