

Effects of fetal reduction in multi-fetal pregnancy on perinatal outcomes

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Objective

There is currently insufficient evidence regarding the prognosis of multi-fetal pregnancies reduced to twins or singletons. We compared the perinatal outcomes of deliveries following fetal reduction with the perinatal outcomes of deliveries without fetal reduction.

Methods

We carried out a retrospective cohort study of all births in British Columbia between 2009 and 2013, using information from a population-based database. Comparisons were made between all women who had a fetal reduction to a twin or a singleton pregnancy with those who did not undergo a fetal reduction procedure. The outcomes of interest were preterm delivery and composite severe neonatal morbidity or perinatal mortality. Generalized estimating equations adjusting for maternal age, parity, pre-pregnancy weight, use of in vitro fertilization and baby's sex were used to estimate odds ratios (OR) and 95% confidence intervals (CI).

Results

Among 207,273 deliveries, 139 (0.07%) had a fetal reduction. Of these, 89 women delivered twins and 50 delivered singletons. Women who had a fetal reduction were more likely to have conceived with in vitro fertilization (77.6%) compared with those who did not (3.31%). Twins delivered after fetal reduction had lower rates of neonatal morbidity/mortality (OR 0.19, 95% CI 0.08-0.42) compared with unreduced triplets but rates similar to those of twins without a reduction procedure (OR 1.44, 95% CI 0.81-2.58). Singletons delivered after fetal reduction had non-significantly lower rates of neonatal morbidity/mortality than unreduced twins (OR 0.75, 95% CI 0.36-1.57) but significantly higher rates of neonatal morbidity/mortality (OR 3.98, 95% CI

1.91-8.30), preterm delivery and being small for gestational age than singleton pregnancies without a reduction procedure.

Conclusion

Perinatal outcomes of twins delivered after fetal reduction are better than those of unreduced triplets and similar to those of unreduced twins.

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