

Mode of conception and perinatal outcomes in infertile patients

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Objective

To examine perinatal outcomes in fertile women with spontaneous pregnancies, infertile women who achieved pregnancy without treatment, pregnancies achieved by ovulation induction (OI) and in vitro fertilization or intra-cytoplasmic sperm injection (IVF/ICSI).

Methods

Retrospective single-center cohort study including 200 fertile and 748 infertile women stratified according to infertility treatment. The outcome measurements were preterm delivery (PTD), small-for-gestational-age (SGA), gestational diabetes, placenta previa or preeclampsia.

Results

The overall rate of pregnancy complications was significantly increased in all infertility groups regardless of the infertility treatment (adjusted odds ratio: infertile without treatment 2.3 vs. OI 2.2 vs. IVF/ICSI 3.4). PTD was mainly associated to IVF/ICSI (adjusted odds ratio: infertile without treatment 1.3 vs. OI 1.6 vs. IVF/ICSI 3.3), while SGA was significantly associated to both OI and IVF/ICSI (adjusted odds ratio: infertile without treatment 1.9 vs. OI 2.7 vs. IVF/ICSI 2.6).

Conclusion

This study confirms the higher prevalence of pregnancy complications in infertile women and further describes a preferential association of prematurity with IVF/ICSI, and SGA with treated infertility (OI and IVF/ICSI).

