Fetal growth in ART-pregnancies and the effect of culture media

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Introduction
Children born after artificial reproductive techniques (ART) are at high risk for (very) low birth weight compared to children born after natural conception (NC). The aim of this study is to investigate if fetal growth is deflecting at 20 weeks of gestation and the influence of culture media (VG5 and CSCM).

Materials and methods
A cross-sectional study was conducted between October 2017 and March 2018. In 13 NC and 20 ART fetal biometry was measured at 20 weeks of gestation.

Results
The ART group showed an increased fetal growth compared to the NC-group, without differences in gestational age. No significant differences were seen between VG5 and CSCM.

Conclusion
ART-pregnancies showed an unexpected increased BPD and AC at 20 weeks of gestation, within this group, no significant differences were observed between VG5 and CSCM culture medium.

Figure 1. Fetal biometry at 20 weeks of gestation. BPD= biparietal diameter(*1), HC= head circumference(*1), AC= abdominal circumference(*3), FL= femur length(*2) and P>0.05.

Figure 2. Fetal biometry at 20 weeks of gestation in different culture media in the ART-group. VG5= Vitrolife, CSCM = Continuous Single Culture product medium.

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