

Fetal Biometry and Dopplers in the Prediction of Complications in Pregnancy after Assisted Reproductive Technology

Long Nguyen-Hoang, Piya Chaemsaitong, Patricia N. Ip, Jun Guo, Xueqin Wang, Marc K. C. Chong, Jacqueline P. Chung, Liona C. Poon

Objectives

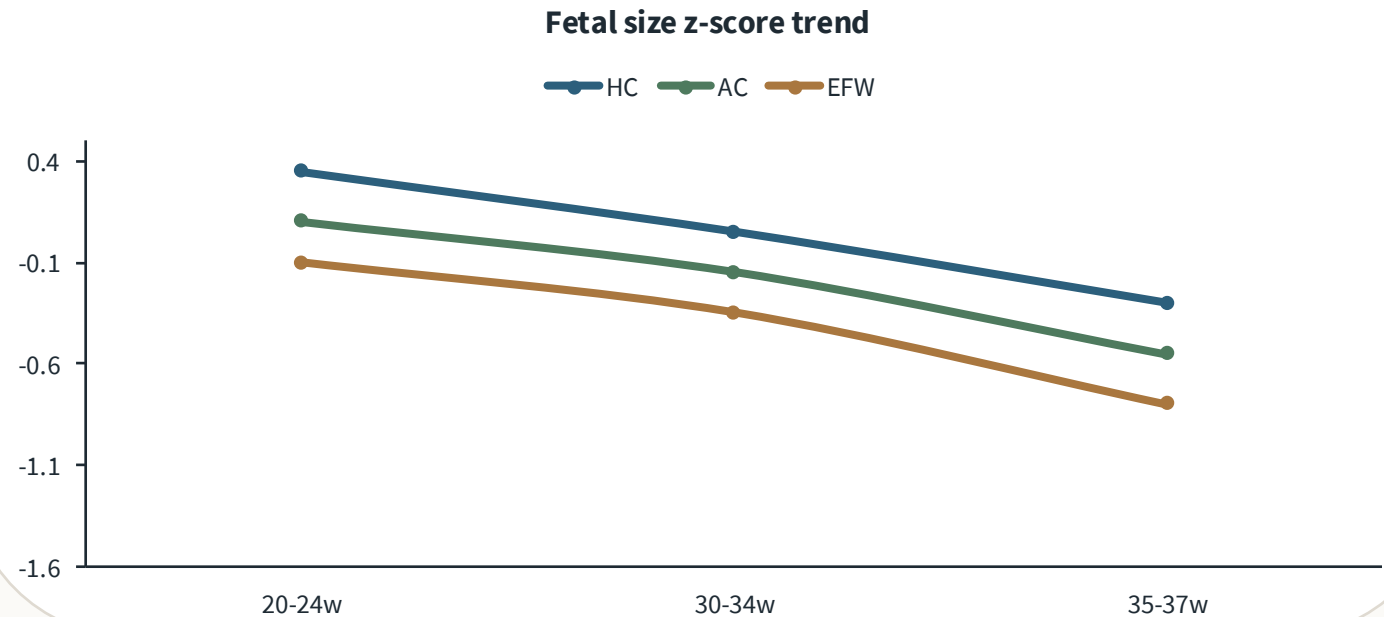
- Compare temporal changes in fetal biometry, amniotic fluid volume and Doppler parameters across gestation
- ART pregnancies complicated by great obstetrical syndromes (GOS) or gestational diabetes (GDM) vs unaffected ART pregnancies

Methods

- Prospective longitudinal study, 141 singleton ART pregnancies
- Assessments at 20–24, 30–34 and 35–37 weeks' gestation
- Biometry and Doppler converted to gestational-age-adjusted z-scores

Results

- GDM in 44 (31.2%); GOS in 33 (22.4%)
- HC, AC, EFW z-scores declined across gestation ($p < 0.05$); no significant GOS effect after adjustment



Conclusions Fetal size z-scores (HC, AC, EFW) declined across gestation in ART pregnancies. GOS and GDM did not substantially alter the longitudinal trends in fetal biometry, AFI or Doppler parameters after adjustment for clinical ART characteristics.