**Objectives**
To evaluate the association between early amniocentesis (EA) and CVS between 10 to 14 weeks gestation and complications between sampling and delivery.

**Methods**
This study comprises data from 398 (48.8%) women allocated to early transabdominal CVS (TA-CVS) and 413 (51.2%) women allocated to early amniocentesis (EA) between 12 to 15 weeks gestation in 10th year period (2009-2018).

For early amniocentesis we obtained amniotic fluid (3-5ml) by amniocentesis method, using 21-22 G needle, and for TA-CVS using 20 G needle, both with continuous ultrasound guidance.

**Results**
PCR genomic DNA analysis after 24 hours and cell culture for seven days were successful in 406 of 413 (98.3%) cases of early amniocentesis. Over night method for three days and culture method for seven days were successful in 390 of 398 (97.9%) cases of CVS.

Spontaneous abortion after early TA-CVS occurred in one case (0.25%) and in two cases (0.4%) after EA. 20 (5.0%) cases after CVT showed chromosomal aberrations. Spontaneous abortion after EA occurred. In 17 (4.1%) we found chromosomal aberration.

Mosaicism was detected in two cases of TA-CVS (0.5%) but none of the EA. The incidence of talipes in EA group were in two cases (0.5%), none in TA-CVS group. There was no difference in the incidence of rupture of membranes, preterm delivery, neonatal respiratory distress and anomalies in the newborn infants between two groups.

There were no significant differences in mean pulsatility indices in uteroplacental and fetal vessels before and after TA-CVS and EA procedures. Data for 8 trisomic foetuses (5 trisomy 21, 2 trisomy 18, 1 trisomy 13) indicate an abnormally increased umbilical and ductus venosus PI and abnormally decreased middle cerebral artery PI.

**Conclusions**

TA-CVS and EA are a safe method of prenatal diagnosis for high-risk couples and does not significantly affect the pregnancy. EA obtained by amnio-vacucentesis method between 10 to 14 weeks not associated with a greater risk of spontaneous miscarriage, neonatal talipes and foetal anomalies compared to TA-CVS.