P04.01 – Aetiology and perinatal outcome in periviable fetal growth restriction associated with structural or genetic anomalies.

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Objectives
To investigate the aetiology and the perinatal outcome of fetuses diagnosed with periviable fetal growth restriction (FGR) associated with structural defects or genetic anomalies.

Methods
Retrospective study conducted at a referral Fetal Medicine unit. Singleton pregnancies in which FGR, defined by fetal abdominal circumference ≤3rd percentile for the gestational age, was diagnosed between 22-25 weeks of gestation were enrolled. The study group included periviable FGR associated with genetic or structural anomalies (“anomalous FGR”) while the control group consisted in structurally and genetically normal FGR (“non-anomalous FGR”). The results of the genetic tests, of the TORCH screening and of the post-mortem examination as well as the perinatal outcomes were investigated.

Results
Of 255 cases, 188 fetuses were eligible, of whom 52 were anomalous FGR and 136 non-anomalous FGR. Confirmed genetic abnormalities accounted for 17/52 cases of anomalous FGR, with trisomy 18 constituting over 50% (9/17). The most common structural defects associated with FGR were CNS abnormalities (13/35). Overall, 12 cases survived the neonatal period. No differences were found in terms of perinatal survival between anomalous and non-anomalous FGR.

Conclusions
Of anomalous FGR, most are associated with structural defects. The association of structural abnormality with a genetic defect and FGR at periviable gestation was invariably lethal, while the combination of periviable FGR and structural defect in the absence of a confirmed genetic abnormality was associated with a one in three chance of perinatal survival.