Objective
To investigate the parental attitude and the pregnancy outcome in twin pregnancies with one fetus affected by a major structural malformation.

Methods
We performed a 4-year retrospective study (2011-2014) in a tertiary center. 26 twin pregnancies were assessed. The inclusion criteria was one fetus with a major structural anomaly and registration in the Prenatal Diagnosis Unit before 12 weeks of gestation. We had 16 dichorionic, 8 monochorionic diamniotic and 2 monochorionic monoamniotic pregnancies. The variables assessed were maternal age, parity, gestational age at diagnosis, chorionicity, amnionicity, fetal gender, type of fetal abnormalities, the fetal/neonatal outcome.

Results
Fetal abnormalities were diagnosed at a mean gestation of 16.5±3.7 weeks: cardiac abnormalities were present in 38.46% of abnormal fetuses, abdominal wall defects in 23%, central nervous system 26.92%, spine 11.53%, urinary system 7.69%, limbs and facial defects 3.84%. Most parents elected to continue with the pregnancy. Fetal death occurred in 7 (26.92%) abnormal fetuses and was significantly correlated with the monochorionic placenta (p=0.11, OR=2.8, 95% CI=0.78-9.8). Normal co-twin fetal death occurred in one case of monochorionic pregnancy. Extremely preterm delivery (before 28 weeks) was present in 2 cases, and preterm delivery (before 34 weeks) in 11 cases. Early neonatal death of abnormal co-win occurred in almost half cases (11 cases – 42.3%).

Conclusion
Most couples opted for the expectant management in twin pregnancies that are discordant for major anomaly. The pregnancy outcome in twin pregnancies with one fetus affected by a major structural malformation and the outcome of the healthy co-twin is not related to the type and severity of the twin anomaly.