

The enigma of the multiple pregnancy

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Objective

The rate of multiple pregnancies decreased in the past decade due to reduction of embryo transfer of three or more embryos. Multiple pregnancies remain at risk for unique and severe complications. This is a case report of a dichorionic triamniotic triplet pregnancy complicated by twin to twin transfusion syndrome (TTTS), selective FGR and twin anemia polycythemia sequence (TAPS).

Methods

case report.

Results

A 35 years old primigravida with dichorionic triamniotic pregnancy after ICSI conception was referred to the Riga Maternity Hospital with suspected diagnosis of TTTS in the monochorionic pair at 17 weeks of gestation. At admission the singleton fetus (F1) was appropriate for gestational age with EFW 193g with normal Doppler pattern and amniotic fluid (AF) index. In the monochorionic pair fetus 2 (F2) presented with EFW 210g, increased amniotic fluid with deepest pool of 8.4 cm and normal fetal Dopplers and fetus 3 (F3) with EFW 156g, deepest pool of the amniotic fluid 2.4 cm and absent enddiastolic flow in the umbilical artery, with otherwise normal Dopplers. There was 25% discordance in the fetal weights and the bladders of both twins were visible and appeared normal. Due to the mild nature of TTTS an intervention was not offered to the parents. However, selective embryoreduction of the donor was considered but since the situation was not deteriorating, the parents opted against. The situation remained stable until 22 weeks as the Dopplers of F3 deteriorated. There was constantly reverse flow in the UA with MCA (middle cerebral artery) PSV over 1, 5 MOM, that could not exclude TAPS. The optimal management of TAPS is controversial and includes expectant management, delivery, intrauterine blood transfusion, selective feticide or fetoscopic surgery. The patient was managed expectantly. At 25 weeks there was significant improvement in the fetal Dopplers and amniotic fluid of F3. This situation remained stable until 30 weeks of gestation as the Dopplers in F3 demonstrated again negative EDF in UA with redistribution (low PI MCA), decrease in the fetal growth and reduced amniotic fluid. The parameters of the other two babies were completely normal. A caesarean section was performed at 32 weeks. The birth weights and APGAR scores of the triplets were as followed: F1: 1944g, APGAR 8/8; F2-1812g, APGAR 8/8; F3-1248g, APGAR 6/7/8. The singleton and the ex recipient were on nasal CPAP (Continuous positive airway pressure) regime 1day after birth. Fetus 3 (ex donor) was on nasal CPAP 2 days and received surfactant. All three girls were transferred to the Children University Hospital on day 6 after birth for further observation.

Conclusion

The case demonstrates that the multiple pregnancies still remain an enigma and more studies are necessary to improve our knowledge on the short- and long-term outcome and determine the optimal management in the complicated cases.

