

MCDA twins with umbilical artery flow discrepancy without growth restriction – expectant management.

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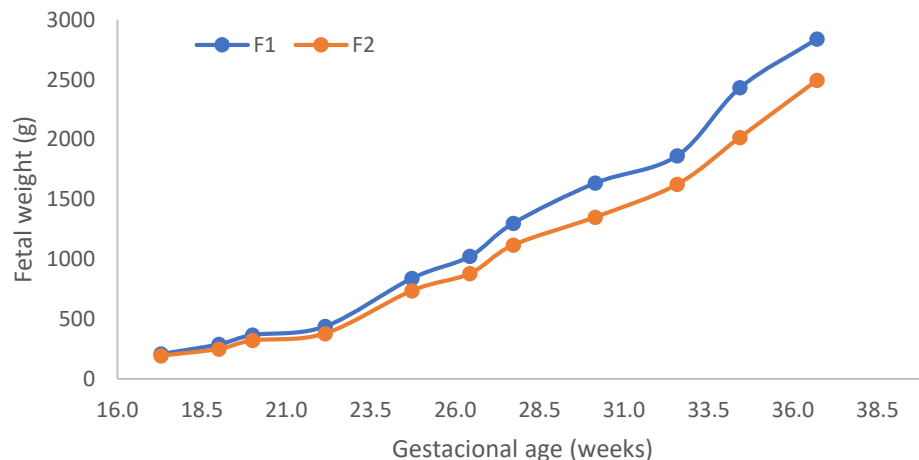
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OBJECTIVE

Report a conservative management of an early umbilical artery flow impairment in one fetus from a monochorionic diamniotic twin pregnancy.

METHOD

SMHS, 31 years old, G2P1, spontaneous monochorionic twin pregnancy was referred to our fetal medicine center due to a discrepancy in size and NT (F1: CRL 84mm NT: 1,5mm and F2: CRL 94mm NT: 3,5mm), both with normal DV. At 17 week pregnancy, it was observed discrepancy of 14% between fetuses with fetus 2 showing umbilical artery impairment flow (absent end diastolic and increased pulsatility flow). No structural or amniotic fluid abnormalities were observed. Patient was counselled to perform fetoscopic laser ablation of the placental anastomoses, but due to insufficient data according to laser in such cases and religious beliefs she preferred not to perform.



RESULTS

Patient had 7-12 days interval appointment, mainly for intrauterine transfusion rescue therapy if necessary. Up to 25 weeks of pregnancy both fetuses had normal development, with visible bladder and normal amniotic fluid. Discrepancy in size was less than 18%. However, fetus 2 maintained a pattern of abnormal umbilical artery flow, without reversed end diastolic flow. At 27th week of pregnancy there was normalization of the umbilical artery flow and this improvement was maintained until delivery. Growth evaluation remained discordant, but around 18% among fetuses. Other parameters such as amniotic fluid, visible bladder and MCA Doppler measurement remained within normal ranges for both fetuses. At 36 weeks and 6 days two boys born by elective caesarean section, weight 2840 g and 2494g without any complication.

Pathologic examination of the placenta did not show abnormalities in umbilical cord insertion or necrosis. At 12 months of age, neurological development was adequate for both neonates.

CONCLUSION

Monochorionic diamniotic pregnancies are associated with high morbimortality rates due to twin oligo-polyhydramnios sequence, selective intrauterine growth Restriction, growth discrepancy and others. In most severe cases, laser ablation of placental anastomosis can be performed to separate AV anastomosis.

In this case, in the absence of IUGR or significant growth discrepancy between fetuses, was decided to manage conservatively.

We could observe that despite umbilical artery flow impairment in one fetus, underlying large AA anastomosis could maintain oxygen and nutrients that allowed the fetus born without neurological or motor impairment.