



## Two cases of twin to twin transfusion syndrome

Nalivaiko I, Krastina Z

Riga Stradins university, Riga, Latvia

### Objective

TTTS is a serious condition that can complicate 8 - 10% of twin pregnancies with monochorionic diamniotic (MCDA) placentation. The diagnosis of TTTS requires two criteria: 1) the presence of a MCDA pregnancy; 2) the presence of oligohydramnios (defined as a maximal vertical pocket of < 2 cm) in one sac, and of polyhydramnios (a maximal vertical pocket of > 8 cm) in the other sac. The Quintero staging system appears to be a useful tool for describing the severity of TTTS in a standardized fashion. Serial sonographic evaluation should be considered for all twins with MCDA placentation, usually beginning at around 16 weeks and continuing about every 2 weeks until delivery. Many patients with stage I TTTS may often be managed expectantly. The natural history of advanced (eg, stage  $\geq$  III) TTTS is bleak, with a reported perinatal loss rate of 70 - 100%, particularly when it presents < 26 weeks. Fetoscopic laser photocoagulation of placental anastomoses is considered by most experts to be the best available approach for stages II, III, and IV TTTS in continuing pregnancies at < 26 weeks. Herein we present two TTTS case reports and their management.

### Methods

This is a case report.

### Results

First case report description: 37 year - old – lady, G3P2, with two uneventful previous deliveries, presented with MCDA twin pregnancy. Several ultrasound scans were performed starting from week 17+6, all of which revealed growth discordance and gradually increasing poly - and oligohydramnios. At 24th week fetal umbilical doppler flows were severely impaired and the patient was sent for evaluation and treatment to fetal medicine department in Leuven Hospital in Belgium. Due to 54% growth discordance, selective termination of the severely affected twin was performed. The procedure was uncomplicated, the patient was closely followed - up and a planned Caesarean section was performed at 40 weeks. Second case report description: 37 year - old - lady, G2P1, presented with MCDA twin pregnancy. Multiple scans were performed, starting from week 17+6, however at 20+0s week the findings were polyhydramnios in one fetus, oligohydramnios in the other fetus and growth discordance between them (28%). Further treatment in Belgium was decided, where the patient had fetoscopic laser photocoagulation therapy, with the diagnosis of TTTS stage I (by Quintero classification). After the procedure, the patient was closely followed - up and the pregnancy resulted in twin delivery at 35th gestational week.

### Conclusion

Close monitoring in MCDA twin pregnancies is important. The right timing for intervention is crucial for a better pregnancy outcome. In addition, knowledge about the newest available procedures is needed, for offering all the treatment possibilities in patients' management.