Outcome of DCDA twins complicated by early second trimester rupture of membranes in one sac

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Objective
To investigate the outcome of dichorionic twin pregnancies complicated by early second trimester rupture of membranes in one sac.

Methods
Data regarding all cases of ruptured membranes (with severe oligohydramnios and continuous leakage) at 14–20 weeks in dichorionic twin pregnancies, were collected retrospectively from 3 fetal medicine units. Patients who had chosen to terminate the pregnancy were excluded from the study.

Results
Between 2003 and 2016, 21 patients (42 fetuses) were recruited according to the inclusion criteria. Of them, 7 patients decided on expected management and 14 patients decided on selective termination. In the expectant management group the take home baby rate was 79% (11 of 14 fetuses), delivered at 27–34 weeks of gestation. There was one case of intrauterine fetal death and two cases of neonatal death due to hypoplastic lungs (one case) and sepsis (one case). Three survivors of ruptured membranes had limb contractures. In the selective termination group, non-reduced fetuses were born at 31–40 weeks of gestation, and 10 of 14 were born at term. The outcome was excellent in all. Clinical signs of amnionitis were observed in three women in the expected management group, who were treated by immediate cesarean section and antibiotics.

Conclusion
Our data suggest that rupture of membranes in one sac of dichorionic twins at 14–20 weeks has favourable prognosis whether an intervention is preformed or not. Nonetheless, selective termination may have an advantage over expectant management, since gestational age at delivery was higher when selective termination was performed.