

Outcome of monochorionic diamniotic pregnancies followed at a single Twin Clinic

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Objective: To evaluate the outcome of a large cohort of twin monochorionic diamniotic pregnancies followed at a single Twin Clinic.

Method: The electronic database of patients followed at our Twin Clinic (University of Brescia, Italy) was reviewed to identify monochorionic pregnancies delivered between May 2001-December 2008. A total of 292 monochorionic diamniotic (MCDA) and 7 monoamniotic (MCMA) twin pregnancies were identified. Patients with incomplete data (19), MCMA (7) and with a diagnosis of TRAP sequence (4) were excluded from the study. MCDA were followed from the first trimester and fortnightly after 16 weeks of gestation or referred to our centre later in pregnancy for monochorionicity or a suspicion of complications.

Results: A total of 269 MCDA pregnancies were included in the study. Twin-twin transfusion syndrome was diagnosed with ultrasound examination in 48 cases, IUGR and/or intertwin weight discordancy $\geq 20\%$ was present in 55 pregnancies.

Termination of pregnancy was requested in 12 cases and selective fetocide was performed in one case for severe selective IUGR. After excluding those cases, miscarriage < 20 weeks of gestation occurred in 4/256 cases, single intrauterine death (IUD) in 19/256 cases and double IUD in 5/256 cases respectively. Intrauterine death of one or both twins ≥ 32 weeks occurred in 0.8% (2/256). Overall fetal and neonatal mortality was 9% (46/512), median gestational age at delivery was 35.5 (range 23.3-40.3) weeks of gestation and mean birthweight $2130 \pm 495,77$.

Conclusion: Monochorionic diamniotic twin pregnancies followed at our twin Clinic, nevertheless specific prenatal fetal monitoring, have still to be considered at high risk.