



## Outcome of MCDA twins with selective FGR according to the umbilical artery Doppler pattern

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### Objective

To assess the outcome of monochorionic (MC) twin pregnancies with selective fetal growth restriction (sFGR) according to the umbilical artery Doppler pattern in the smaller twin.

### Methods

85 cases of MC twin pregnancies with sFGR were studied. sFGR was defined as the presence of one twin with estimated fetal weight less than 10th percentile and weight difference between fetuses was more than 25%. sFGR was classified according to the umbilical artery Doppler flow pattern of the smaller twin. A prospective study, which included three groups: Group I, sFGR with normal (constantly positive diastolic flow) umbilical artery Doppler (n = 52); group II, sFGR with abnormal (permanently absent/reversed diastolic flow) umbilical artery Doppler (n = 20); and group III, sFGR with abnormal (intermittently absent/reversed diastolic flow) umbilical artery Doppler (n = 9). The gestational age was set by either a first trimester ultrasound for pregnancy dating or an accurate last menstrual period.

### Results

The degree of weight discordance between the twins was significantly higher in the group II (51,6%) compared to group I (35,6%) and group III sFGR (30,9%). MC twin pregnancies of group I were delivered later for gestational age (33,6 weeks) compared to group II (30,2 weeks) and group III (31,4 weeks). Perinatal mortality was higher in twins of group III (22,2%) than in groups II (10%) and I (3,8%) respectively. All cases of double fetal loss were in group III.

### Conclusion

Our study showed the worst outcome in group III with intermittent diastolic flow in the umbilical artery and it did not correlate with higher rate of weight difference between the twins. Groups I and II had better outcome. The mean weight difference was higher in group II.