

P 13.17. Ultrasound parameters predicting mortality in monochorionic twins pregnancies with selective intrauterine growth restriction (sFGR)

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Objetive: To evaluate ultrasound parameters predictive of perinatal mortality in monochorionic twin fetuses affected by selective intrauterine growth restriction (sFGR) managed expectantly. The focus was on perinatal mortality, including both intrauterine death (IUD) and neonatal death (NND).

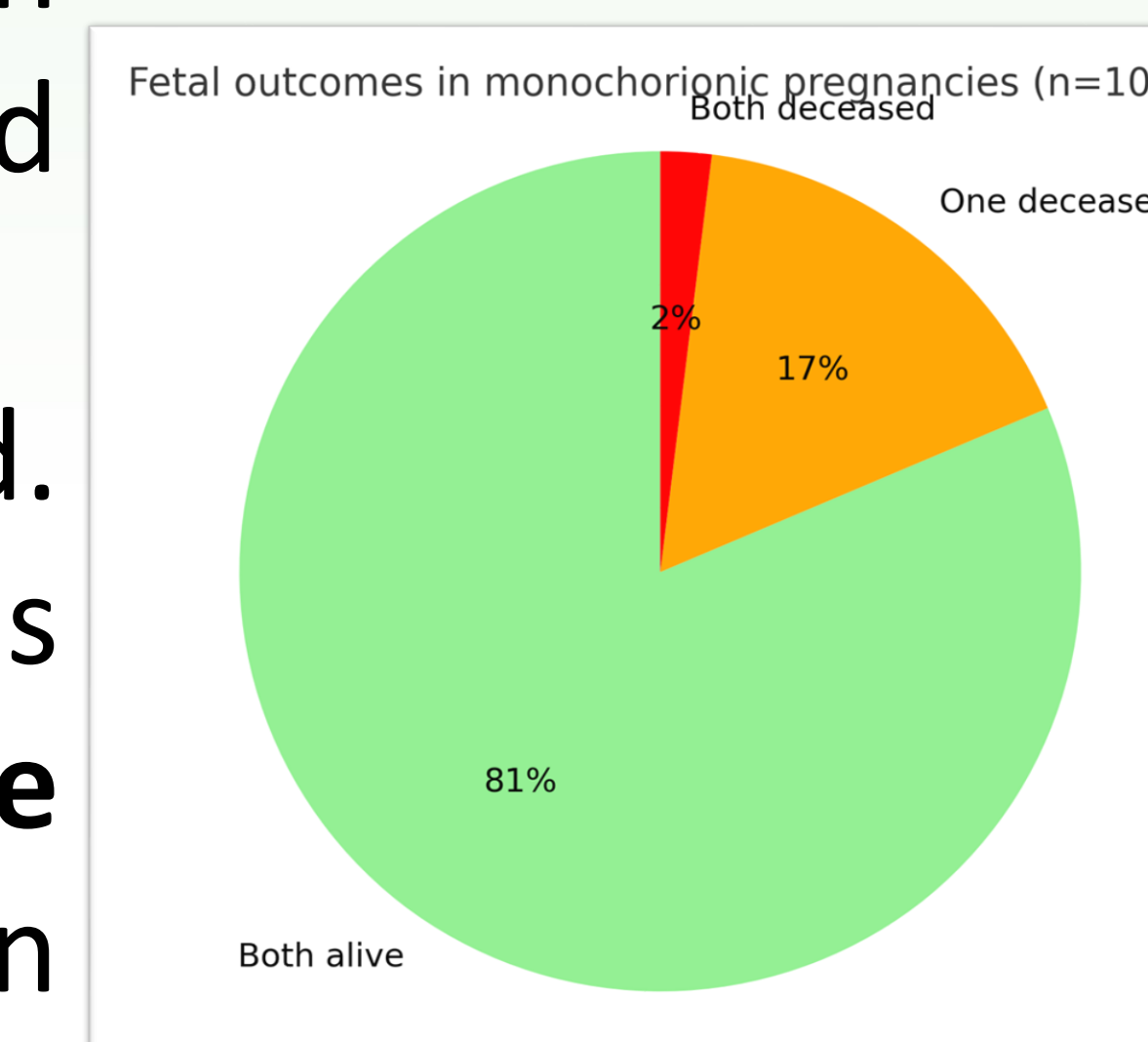
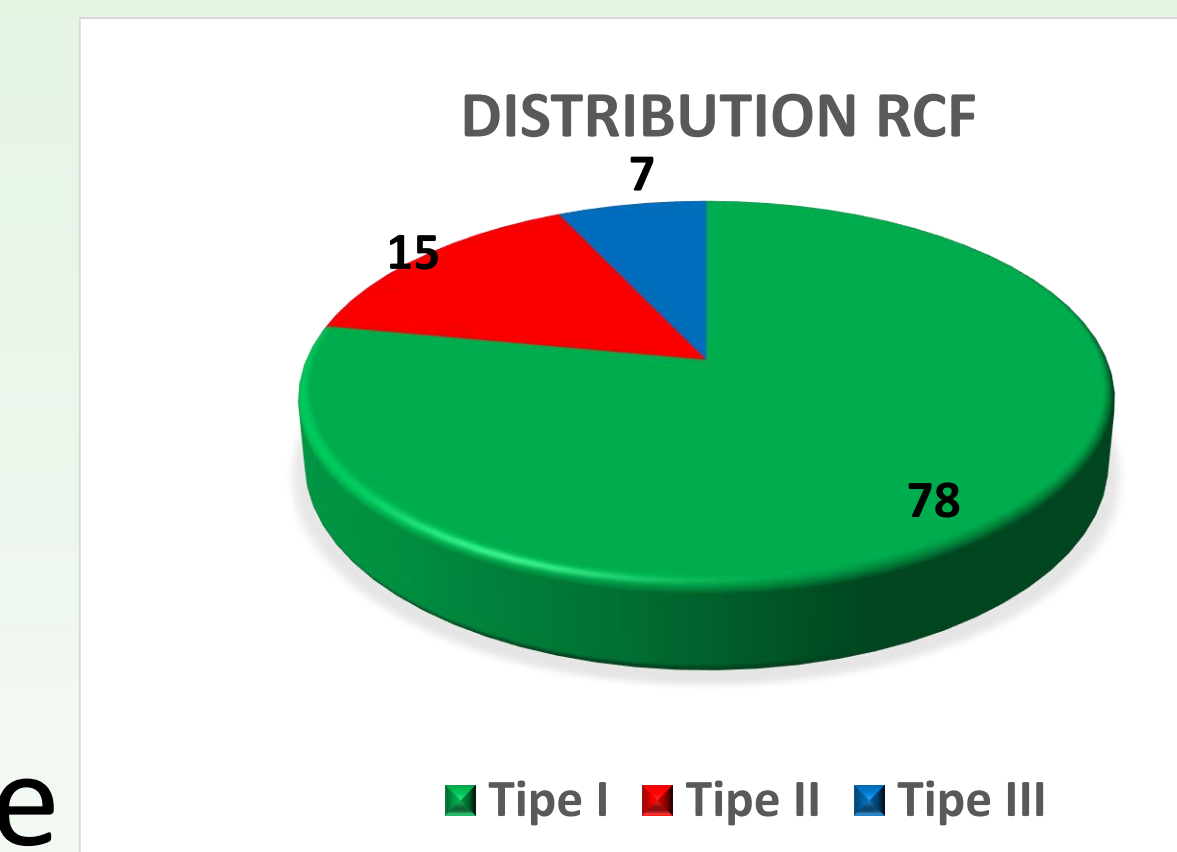
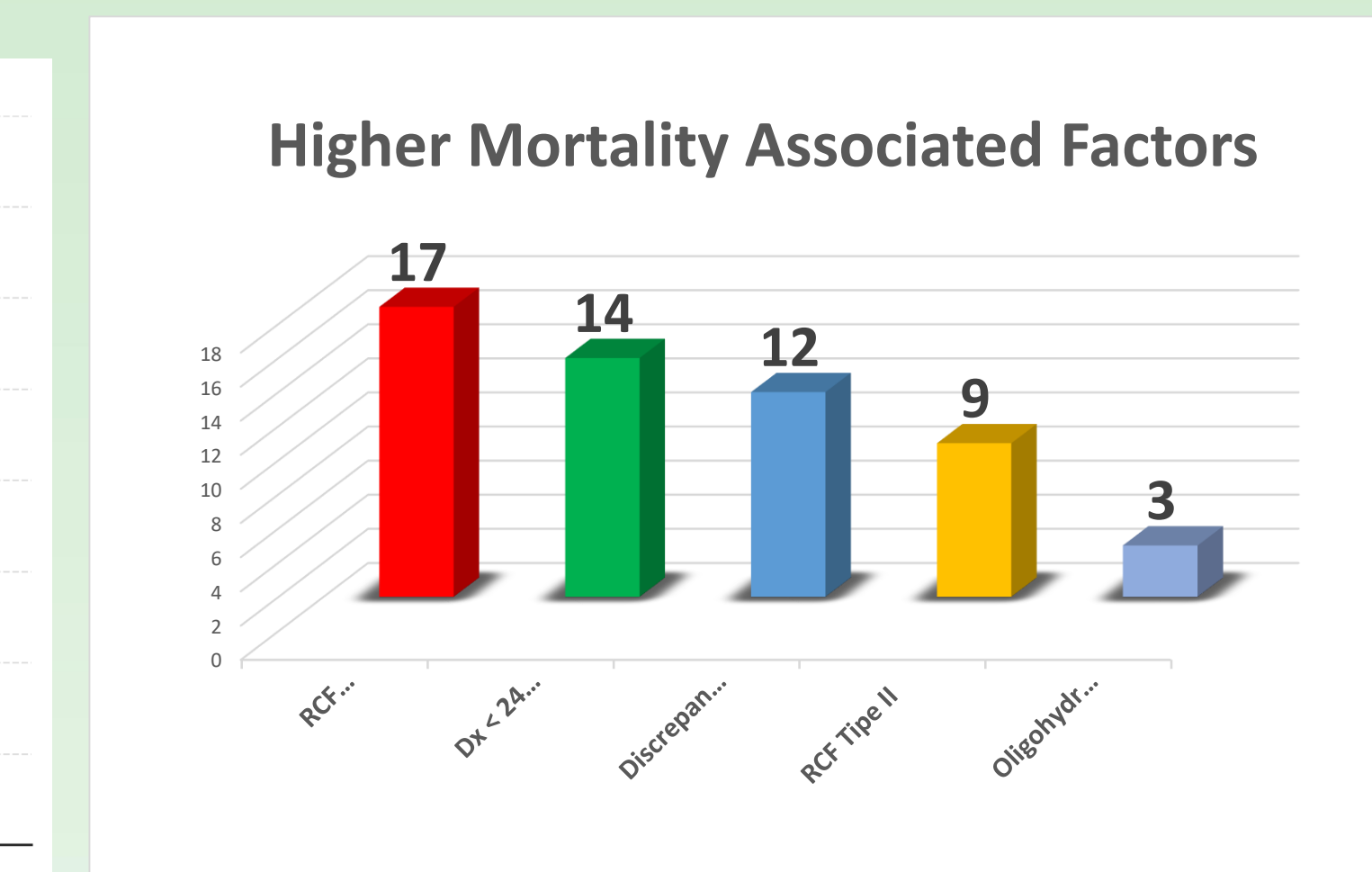
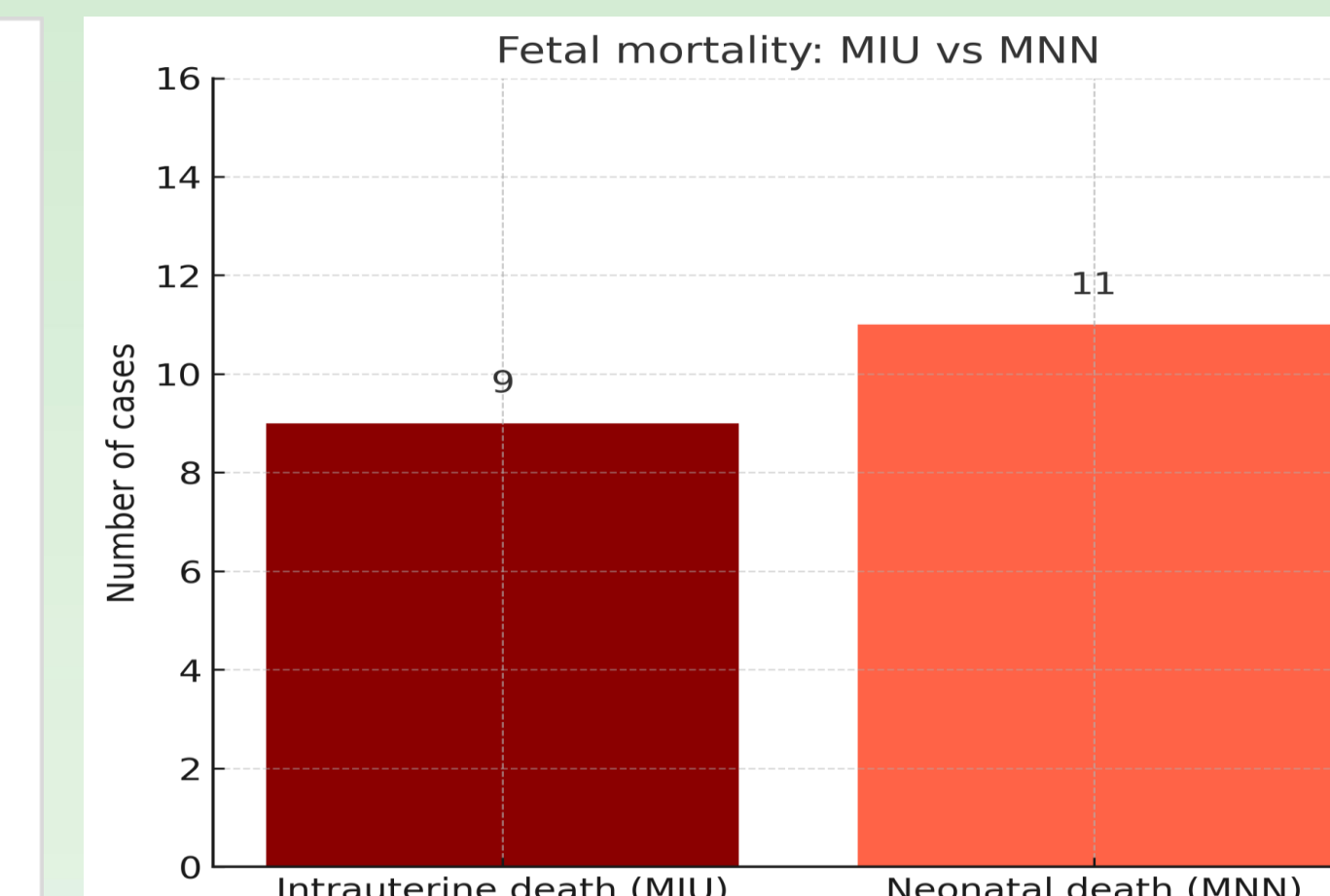
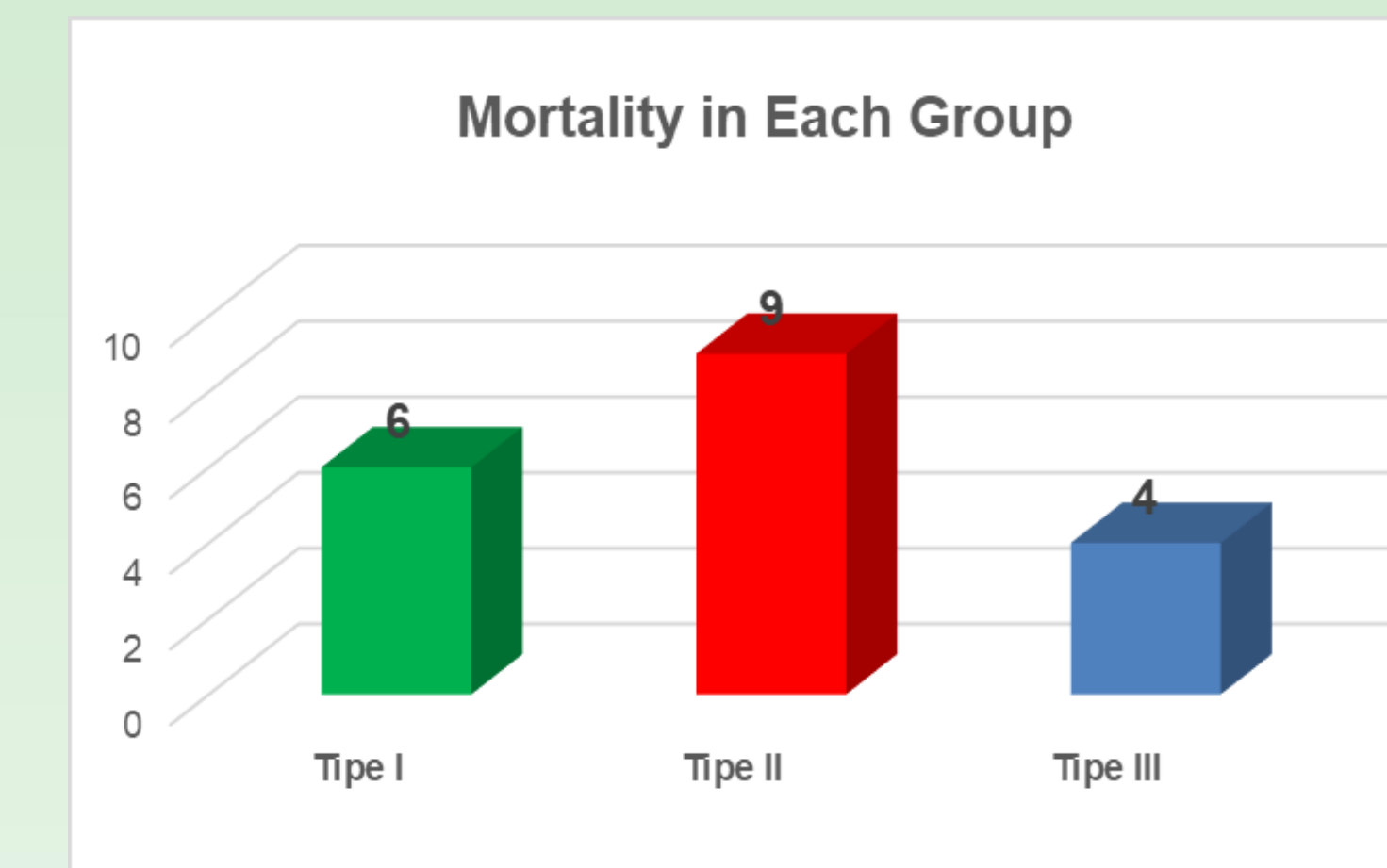
Methods:

Retrospective, descriptive study of a series of **monochorionic twin pregnancies diagnosed with sFGR** who underwent follow-up care at our center from 2009 to 2024. Variables analyzed included abnormal umbilical artery Doppler, oligohydramnios, polyhydramnios, stuck twin phenomenon, severe FGR, weight discordance and gestational age at diagnosis. Data were extracted from our institutional database. Cases with twin-to-twin transfusion syndrome (TTTS) or fetal malformations were excluded. Fetal growth was assessed using Intergrowth-21st charts. The decision for pregnancy termination was made by the attending physicians

Results:

Out of a total of **692** monochorionic biamniotic (MCBA) pregnancies during the study period, 102 (15%) were diagnosed with selective fetal growth restriction (sFGR). Among these, 11 fetuses (11%) experienced intrauterine death (IUD) and 9 (9%) experienced neonatal death.

Both twins died in 16% of cases, while in 84% of cases, only one twin died. Gestational age at diagnosis was under 24 weeks in all cases. **Severe IUGR** was present in 84% of patients with at least one fetal death. **Weight discordance greater than 35%** was observed in 63% of cases. Oligohydramnios was found in 15%. According to umbilical artery (UA) Doppler classification, 31.5% were Type I, 21% Type III, and 47% Type II.



Conclusions: Our findings suggest that, in addition to abnormal umbilical artery Doppler findings, **severe fetal growth restriction (FGR) and early gestational age at diagnosis are key predictors of mortality in monochorionic twins with sFGR.** Findings such as oligohydramnios and the stuck twin phenomenon were not significantly associated with mortality. Type III sFGR was linked to lower survival rates compared to Types I and II. One of the main challenges in managing MCBA twins with FGR remains the absence of specific prognostic markers. Our findings may contribute to improving prenatal counseling and follow-up protocols.

