

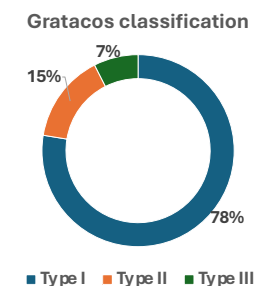
The performance of the Gratacos classification in the severity assessment of monochorionic pregnancies complicated by selective fetal growth restriction

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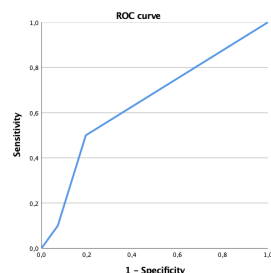
OBJECTIVE: To evaluate the performance of the Gratacos classification of severity in predicting adverse outcomes among monochorionic pregnancies with selective fetal growth restriction (sFGR).

METHODS: This is a retrospective cohort study including all cases of selective fetal growth restriction followed-up in a large tertiary referral center in the UK, from 1997 to 2024. All twins were assessed with twin growth charts by Stork et al. and were diagnosed with sFGR using Delphi criteria.

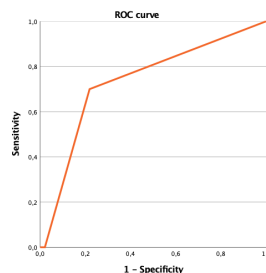
RESULTS: 107 cases were included. Intact survival of both twins was significantly higher in the Type I group (45/83, 54.2%) compared to the Type II and III (3/16, 18.8% and 2/8, 25%, respectively) (p 0.015). The ROC analysis showed low accuracy of the Gratacos classification at diagnosis, in predicting demise of the smaller twin (AUC 0.606, 95% CI 0.462-0.751, p 0.140) or double demise (AUC 0.644, 95% CI 0.453-0.834, p 0.135). Slightly higher accuracy was reached when classification at the end of pregnancy was considered, for both demise of the smaller twin (AUC 0.764, 95% CI 0.638-0.890, p <0.001) or double demise (AUC 0.733 (0.563-0.903, p 0.015).



Double demise

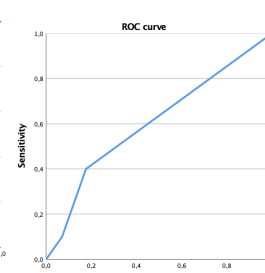


At diagnosis

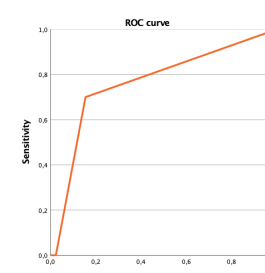


At the end of pregnancy

Demise of the smaller



At diagnosis



At the end of pregnancy

CONCLUSIONS:
Gratacos classification showed only moderate accuracy in identifying cases of sFGR at risk of adverse outcomes.