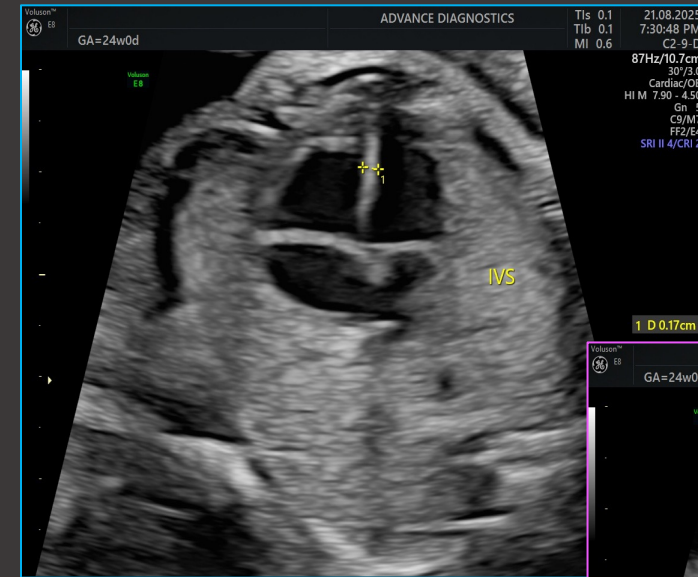


EP15.101 Echocardiographic predictors of poor perinatal outcomes in GDM pregnancies: a single centre study of India

Objectives : This prospective study aims to evaluate the predictive role of fetal Interventricular septal thickness (IVS) and Epicardial fat thickness (EFT) in identifying poor outcomes in infants of GDM mothers, defined by increased birth weight (macrosomia) and elevated amniotic fluid index (AFI, polyhydramnios).

Methods : Pregnant women diagnosed with GDM will undergo standardized ultrasonographic assessment of fetal EFT and IVS thickness during the second and third trimesters. Perinatal outcomes, including birth weight and AFI, will be documented. Associations will be analysed using multivariate regression and receiver operating characteristic (ROC) curve analysis to identify optimal predictive cut offs.

Results : Prior studies demonstrate that both EFT and IVS thickness are significantly increased in GDM pregnancies and correlate with maternal glycemic indices, fetal abdominal circumference and amniotic fluid volume (Liu et al., 2020; Sever et al., 2022; Suranyi et al., 2024). We hypothesize that combining EFT and IVS measurements will enhance predictive accuracy for macrosomia and polyhydramnios, providing superior prognostic utility compared with either marker alone.



Conclusions: Fetal EFT and IVS thickness may represent reliable echocardiographic predictors of poor perinatal outcomes in GDM pregnancies. Their integration into routine fetal surveillance could enable earlier risk stratification and targeted interventions, thereby improving neonatal outcomes.