

EP05.12 Detection of fetal structural anomalies in the third trimester

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Objectives

- To determine the diagnostic performance of third-trimester growth ultrasound for congenital anomalies in cases with a previously normal second-trimester structural ultrasound at the Maternal-Fetal Medicine Department of the Instituto Nacional de Perinatologia

Methods

- A retrospective, observational, descriptive, and cross-sectional study was conducted at the National Institute of Perinatology from March 2018 to December 2024
- During this period, 15,084 medical records of patients with singleton pregnancies were reviewed. Of these, only 5,432 had a second-trimester structural ultrasound without abnormalities and subsequently underwent a growth ultrasound, as well as delivery at this institution

Results

- A total of 5,432 cases meeting the inclusion criteria were analyzed.
- Among these, 32 cases presented a congenital defect detected during the third-trimester growth ultrasound; of these, 24 cases were confirmed at birth, while 8 were ruled out (Table)
- Among the remaining 5,361 records in which no anomalies were detected in either ultrasound, 47 newborns were diagnosed with a congenital defect postnatally

Table. Diagnostic performance of the third-trimester ultrasound

Parameter	Value (%)	95% CI
Sensitivity	33	0.227 – 0.448
Specificity	99	0.996 – 0.999
PPV	75	0.599 – 0.900
NPV	99	0.988 – 0.993



Conclusions

- No significant differences were found between our results and those reported in the international literature regarding the late detection capability of structural defects
- These findings highlight not only the limitations in detection during the structural stage but also the dynamic process of the natural history of congenital anomalies