

Fetal neurological defects detected by fetal neurosonography in a Chilean perinatal center

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Objectives & Methods

To describe a cohort of patients evaluated in a Chilean perinatal referral center for fetal neurosonography (NSG). A retrospective cross-sectional descriptive study was conducted.

Results: Epidemiology

A total of 172 pregnant women referred for fetal NSG due to suspected CNS anomalies were recorded.
Mean maternal age of 31.4 years (range: 15–45). Most patients (74%) had no significant medical history. Common comorbidities included hypothyroidism (7%), Type 2 DM (5.8%), and gestational hypertension (5.2%).

Perinatal outcomes included preterm newborns (23,6%), admission to neonatal intensive care units (58%), fetal demise (17%) and stillbirth (18%), while 21% of pregnancies underwent elective termination.

Results: Findings

Isolated neurological defects were identified in 52% of cases (Figure 1). Ventral induction defects were the most prevalent, followed by posterior fossa malformations. Concurrent neurological anomalies occurred in 17% of fetuses.
Fetal MRI, performed in 31% of cases, confirmed NSG findings in 83%, provided additional data in 14.8%, and yielded discordant results in 2%.
Postnatal neurological evaluation (81.6% of live births) confirmed prenatal diagnoses in 80.7% of cases, with discrepancies primarily involving mild cisterna magna enlargement (70%) and choroid plexus cysts (30%).

Conclusion

It highlights the importance of early detection for clinical management and provides updated insights into the demographic , diagnostic profile and perinatal outcomes in these high-risk pregnancies.

Figure 1. Type of Defect

