Neurodevelopmental Outcome of Fetuses with Isolated Ventricular Asymmetry Without Dilation

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Introduction
Fetal lateral ventricular asymmetry is a common finding in prenatal examinations. Ventricular asymmetry is defined as a difference in width of ≥2 mm between the two lateral ventricles in ultrasound and MRI based studies. Data regarding the clinical outcome in cases of isolated ventricular asymmetry (IVA) without ventriculomegaly is limited.

Objectives
The aim of the study was to assess the outcome of cases with IVA without ventriculomegaly, in a MRI based study.

Methods
A historical cohort study. Study group: Cases referred to fetal brain MRI as part of the investigation of IVA without ventriculomegaly (≤10 mm), identified during routine US examinations.

Control group: normal cases without IVA. Children were assessed at ages 13 to 74 months using the Vineland Adaptive Behavior Scales, 2nd edition (VABS-II).

Result
VABS-II scores were within normal range. There was no significant difference in composite VABS-II score between the study and control groups. VABS-II scores did not differ between the groups when matched for gender and age at VABS-II interview.

Conclusion
In cases of isolated ventricular asymmetry without ventriculomegaly on MRI, neurodevelopmental test scores were normal and did not differ from cases without IVA.