

Natural history of fetal isolated ventriculomegaly: Comparison between pre- and post-natal imaging

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Objective

The aim of our study was to assess the agreement between pre- and post-natal measurements in prenatal isolated ventriculomegaly.

Methods

Ninety-two women were referred for lateral ventricular abnormality and followed prospectively. Cases with at least one dilated lateral ventricle ≥ 10 mm and a normal work up (serological tests, detailed anatomical scan, fetal brain MR imaging, genetic counseling, and amniocentesis) were considered idiopathic ventriculomegaly and comprised the study group for post-natal follow up. Prenatal measurements were performed by ultrasound and MR imaging. Post-natal measurements were performed by cranial sonography at age of 1-3 months. Measurements were performed in the customary plane for each modality. Paired Student's t test was used to assess the mean difference between pre- and postnatal measurements.

Results

Forty three cases comprised the study group for post-natal measurements. A statistically significant decrease in ventricular width ($p < .001$) was observed between pre- and post-natal measurements. On clinical follow up for 24 months, all cases were normal except three who demonstrated very mild neurological deficits.

Conclusion

Our study indicates statistically significant regression of prenatal isolated ventriculomegaly in the post-natal period.