

## Fetal brain MRI in polyhydramnios: Is it justified?

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### Objective

Despite meticulous investigation of polyhydramnios cases, in many of these cases, congenital anomalies are detected only after birth. The aim of our study was to explore the contribution of fetal brain MRI to the detection of CNS anomalies in cases of polyhydramnios.

### Methods

This was retrospective cohort study on fetuses referred for the investigation of polyhydramnios at a single tertiary center. All fetuses underwent a detailed sonographic anatomical scan and a fetal brain MRI. Isolated and non-isolated polyhydramnios were differentiated according to associated anomalies. MRI findings were compared between the groups.

### Results

A total of 46 fetuses were included in the study. Brain anomalies were detected in ultrasound in 12 (26%) cases while MRI detected brain anomalies in 23 (50%) cases. MRI detected more anomalies in fetuses with non-isolated compared to isolated polyhydramnios (62.9% and 31.6% respectively,  $p=0.019$ ).

### Conclusion

Fetal brain MRI may contribute to the evaluation of fetuses with polyhydramnios. The clinical value and cost-effectiveness of MRI use in the routine work-up of polyhydramnios should be assessed in future studies.