

Neurodevelopmental outcome following prenatal diagnosis of a short corpus callosum

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Objective

Data regarding the neurodevelopmental outcome of fetal short corpus callosum (CC) diagnosed according to standard reference charts is scarce. The purpose of this study was to assess whether the finding is related to neurodevelopmental delay, and to examine reclassification of normal fetal CC length using CC length/estimated fetal weight (EFW) ratio.

Methods

Historical prospective cohort study including pregnant women referred for fetal neurosonogram due to abnormal CC. Short CC was defined as below the 5th percentile according to reference charts. Twenty cases were included in the study group and compared with a control group of 59 cases. The patients in the study group were divided into two groups according to CC length/EFW ratio. Children's neurodevelopment was assessed using the Vineland Adaptive Behavior Scale (VABS).

Results

VABS scores were within normal range in 90% of the cases. There was no significant statistical difference between the study group and the control group. In addition, there was no statistically significant difference between fetuses reclassified as normal callosal length according to CC length/EFW ratio in comparison to the control group.

Conclusion

The neurodevelopmental outcome of fetuses with short CC did not differ from the neurodevelopment of normal fetuses in the control group.