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Outcome of 167 fetuses diagnosed *in utero* as having apparently isolated ventriculomegaly

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Clinical background

Ventriculomegaly is an abnormal enlargement of the cerebral ventricles and one of the most frequently diagnosed fetal abnormalities [1]. The condition is classified as isolated when it is seen in the absence of other fetal abnormalities. It is essential that any fetal abnormality is described to parents together with as accurate a prognosis as possible. This allows parents to reach an informed decision as to whether or not they are prepared to continue with a pregnancy. This series aims to clarify the prognosis that should be considered when apparently isolated ventriculomegaly is present on the initial anomaly antenatal ultrasound scan.

Materials and Methods

A retrospective cohort review of the clinical case notes of 167 fetuses recorded entered on the database of the Fetal Management Unit at St Mary's Hospital as having ventriculomegaly on the first anomaly ultrasound scan was performed. Findings from ultrasound reports and paediatric case notes were recorded and analysed.

Results

47/167 (28%) cases of apparently isolated ventriculomegaly were later found to have complicating abnormalities. In this series 60 known deaths occurred (including terminations). Of the remaining 107 cases, there were 65 (61%) known live children whose development had been clinically noted. When ventriculomegaly was truly isolated (46 cases), this series showed that approximately 80% of cases had a normal developmental outcome. When apparently isolated ventriculomegaly was reclassified as complicated (19 cases) 42% of cases were judged to have normal development ($P = 0.002$). 13% of cases in this series were found to have an abnormal karyotype. Male fetuses were registered as having isolated ventriculomegaly significantly more often than females ($P = 0.040$).

Conclusion

When apparently isolated ventriculomegaly is identified on the initial anomaly antenatal ultrasound scanning, parents should be counselled that the majority of fetuses will progress to a normal developmental outcome. Isolated ventriculomegaly should continue to be classified as resolving, stable or progressive and as mild, moderate or severe but the prognosis assigned to each category is only applicable in the absence of further defects. If isolated ventriculomegaly is found to have complicating abnormalities as in approximately one quarter of this series, a significantly worse outcome is indicated. Male fetuses may have a greater mean atrial width than female fetuses as suggested by previous studies [2,3].

References

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