Outcomes and Follow-up of Posterior Fossa Cyst Cases: Dandy-Walker Variant (DWV) and Vermian Hypoplasia

L Anwari¹, K Lestak¹

1: Department of Obstetrics and Gynaecology, Darent Valley Hospital, Dartford and Gravesham NHS Trust, UK

Introduction
- Counselling parents antenatally regarding congenital anomalies remains a challenge for obstetricians and fetal medicine specialists.
- Clinicians are often faced with questions regarding prognosis, which will impact decision making for expectant families.
- Dandy-Walker Variant (DWV) and vermian hypoplasia remain rare diagnoses with uncertain neurodevelopmental outcomes for infants affected¹,²,³

Methods
- We describe two cases of DWV and Vermian Hypoplasia diagnosed antenatally and then followed-up until 2 years old
- We discuss the difficulties of counselling in these cases and potential future considerations

Case A
- 38 year old PO IVF pregnancy
- Initial posterior fossa cyst at 13 weeks.
- Confirmed DWV 16 and 20 week ultrasound (US). Parents refused further invasive diagnostics. Serial scans started.
- 28 week MRI: Confirmed DWV, suspected vermian hypoplasia.

Case B
- 30 year old G2 P1. Previous normal pregnancy,
- Vermian hypoplasia and suspected Blake’s pouch cyst at 20 week US.
- Declined further invasive testing.
- Serial US and foetal medicine review at 26 and 28 weeks.
- 30+2 week MRI: Inferior vermian hypoplasia confirmed, cyst excluded.

Follow-Up
- Both patients have normal developmental markers at 2 years.
- No hydrocephalus or need for neurosurgical intervention.

Key Points
- DWV and Vermian Hypoplasia hold an uncertain prognosis, with some studies reporting normal outcomes¹,²,³
- Our cases support evidence of a good prognosis.
- Care must be taken to advise parents of this variance and the potential for good outcomes; thus avoiding invasive testing

Conclusions
Given evidence of good outcomes, isolated posterior fossa anomalies could be managed conservatively without need for invasive testing. However, more research is needed to confirm this.

References