

Antenatal Management of Dural Sinus Malformation: A Case Report

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BACKGROUND

Dural sinus malformation (DSM) is a rare intracranial vascular anomaly with a broad range of clinical presentations and neurodevelopmental outcomes. Emerging literature reports increasingly favourable prognoses, largely due to the ability to monitor and observe spontaneous involution of the DSM. Despite this, conclusive data regarding reliable prognostic indicators remains limited, which has important implications for antenatal counselling and management.

CASE

We present a healthy 32 year old nulliparous female in her first pregnancy referred to our Maternal Fetal Medicine (MFM) department at 19 weeks gestation with a suspected arachnoid cyst on routine morphology scan. MFM assessment using amniocentesis, ultrasound and fetal MRI defined a normal microarray male fetus with a DSM involving the torcula and extending into the right transverse sinus, with associated thrombus.

AIMS

The aims of this study are to describe a rare case of antenatally diagnosed DSM and provide management recommendations based on experience gained from the case.

RESULTS

The space occupying lesion caused mass effect to the occipital lobes, cerebellum, and brain stem. The pregnancy progressed to an elective termination at 23 weeks gestation resulting in neonatal death, with autopsy confirming the diagnosis of DSM with thrombus.

DISCUSSION

This case highlights the importance of multi modal imaging of suspected DSM in a regional setting, where definitive predictors of outcome are currently scarce. Management recommendations include detailed counselling, close multi modal fetal monitoring, early consultation with multi disciplinary neonatal teams, and careful neurodevelopmental follow up with a paediatrician.

FIGURE 1 | MFM Ultrasound Key Images

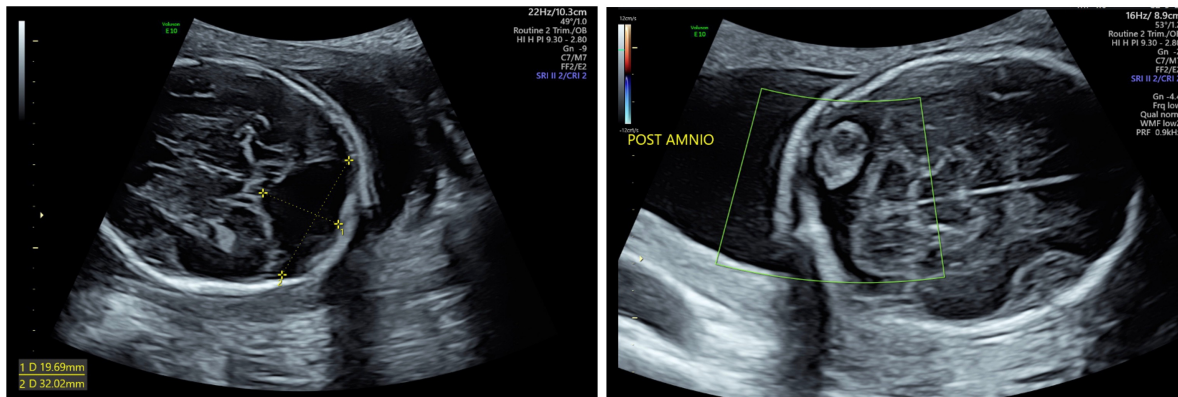
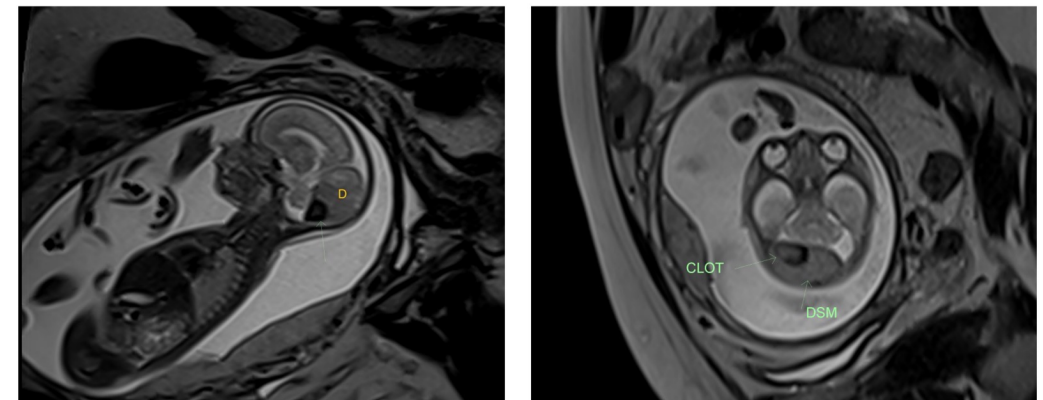


FIGURE 2 | Fetal MRI Key Images



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