

# Prenatal diagnosis of fetal dural sinus thrombosis with postnatal resolution; a case report.

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## Background:

Prenatal diagnosis of dural venous sinus thrombosis is extremely rare, with less than 50 cases reported in the literature. There are few reported cases of fetal dural sinus thrombosis with associated ventriculomegaly, and such cases have had variable associations with an increased risk of neurodevelopmental delay. We report the case of a significant dural sinus thrombosis diagnosed in the third trimester, which had all but resolved following delivery.

## Case:

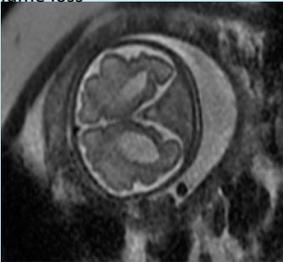
A 33 year old, G2P1 at 30 weeks, was referred following a diagnosis of fetal dural sinus thrombosis with bilateral ventriculomegaly, detected on growth scan. Fetal MRI showed a large volume dural venous sinus ectasia with thrombosis centred at the torcular, and bilateral occipital lobe volume loss, thought secondary to compression.

Given the paucity of literature regarding prognosis, a second opinion was sought. Again ultrasound and MRI demonstrated a dural sinus malformation with torcular ectasia. The surrounding brain parenchyma was felt to be normal, and the prognosis reasonable, despite the associated ventriculomegaly. The couple elected to continue the pregnancy and serial ultrasounds were arranged.

Spontaneous labour occurred at 39 weeks. An emergency caesarean section was performed for a non-reassuring CTG. A live female infant was delivered with Apgars of 6, and 7. A cranial ultrasound on Day 1 of life did not demonstrate the thrombosis. An MRI on Day 4 of life demonstrated near complete resolution of the torcular thrombosis with evidence of mild medial occipital lobe volume loss. Paediatric neurodevelopmental follow-up has been unremarkable thus far.



**Figure 1 & 2:** Fetal MRI at 30+4 shows large volume dural venous sinus, with bilateral occipital lobe volume loss



**Figure 3:** Large dural venous thrombosis at 30+3 on Ultrasound



**Figure 4:** Ultrasound evidence of ventriculomegaly at 30+3

**Figure 4:** Neonatal MRI day 4 of life shows near complete resolution of the torcular thrombus with evidence of mild medial occipital lobe volume loss. Otherwise a normal study.

