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Teaching Neuro*Images*: Giant fetal arachnoid cyst with favorable neurologic outcome

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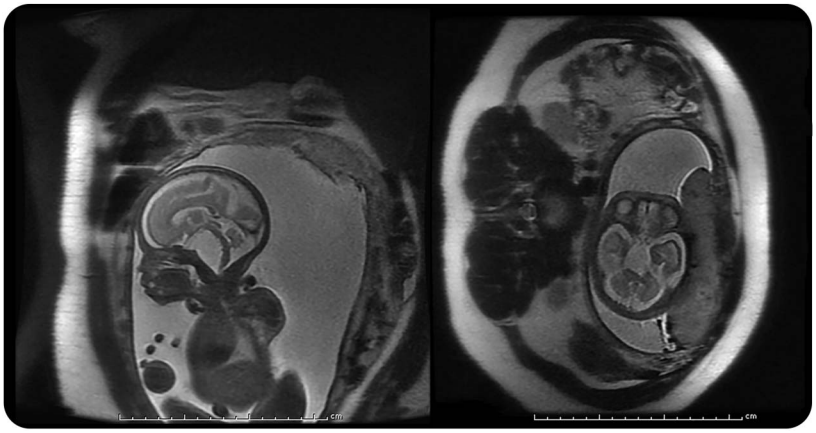
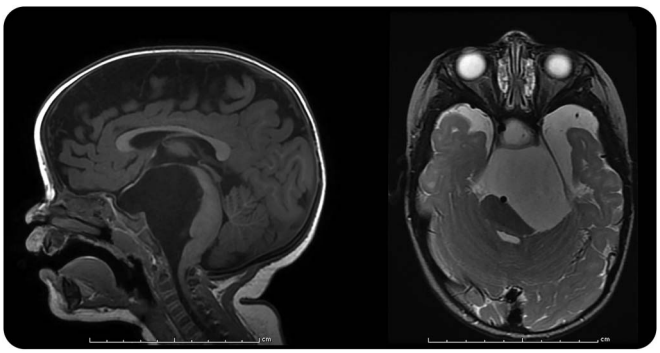
Figure 1 Fetal MRI at 29 weeks' gestation



Sagittal midline single slice fast spin-echo T2 (Left) and axial single slice fast spin-echo T2 (Right) sequences show a large suprasellar-prepontine arachnoid cyst displacing the brainstem with asymmetric mass effect on the left side.

Figure 2 Postnatal brain MRI at age 11 months



Sagittal midline T1 (Left) and axial fast spin-echo T2 (Right) sequences through the upper pons show a similar configuration of the cyst with interval enlargement.

A 29-year-old woman was referred after an ultrasound at 24 weeks' gestation demonstrated a 1.8-cm intracranial cyst. Fetal MRI[1] at 29 weeks (figure 1) showed a large cyst anterior to the brainstem measuring 3.4 × 1.7 cm with associated mass effect. Postnatal MRI at age 11 months (figure 2) confirmed the large suprasellar-prepontine arachnoid cyst (SPAC) with mass effect on the brainstem. Neurologic examination at age 17 months revealed no gross neurodevelopmental deficits and no intervention was required. SPACs comprise 5%–12% of arachnoid cysts and are often symptomatic, with signs of hydrocephalus or mass effect, and may require surgery.[2]

AUTHOR CONTRIBUTIONS

Dr. Sanapo designed and drafted the article. Dr. Bartolini contributed to the design and drafting of the article. Dr. Chang contributed to the design of the article and reviewed the manuscript. Dr. Vezina contributed to the design of the article, reviewed the manuscript, and interpreted the fetal and postnatal MRI.

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