

Clinical Image

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Infant with large arachnoid cyst presented with repetitive vomiting after minor fall

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Description

A 12-month-old boy, previously healthy, presented to our Emergency Department (ED) with 7 episodes non-bilious vomiting, parents gave history of mild head injury the night before. Clinical examination was unremarkable. According to pediatric Computerized Tomography (CT) head rule (PECARN) in less than 2 years old he would be low risk for intracranial pathology and would not require CT of the brain. However, CT scan was done based on clinical gestalt given history of repetitive vomiting since the fall.

The CT scan showed a large left temporal Arachnoid Cyst (AC) with mass effect and shift of midline structures, which is an incidental finding, we wonder if the minor head injury had caused cyst rupture or intra-cyst bleed (Figure 1).

AC are clear benign cysts that arise from the arachnoid membrane within the brain and spinal cord. They contribute to about 1% of intracranial masses, with half of them forming within the

middle cranial fossa. These cysts tend to occur in children and are more common in males [1]. Majority arise due to developmental anomalies [1,2]. The clinical presentation of these cysts depends on their size and location [1]. They are usually asymptomatic and often found incidentally [1-3]. When symptomatic, they can present with a wide range of symptoms like nausea, vomiting, headaches, ataxia, paraparesis and seizures [1-3]. AC are rarely associated with chronic subdural hemorrhage following head injury and it is very rare to develop intra-cystic bleeding spontaneously [1,3]. A CT scan is diagnostic; however, Magnetic Resonance Image (MRI) is helpful for evaluation of anatomic location, size and extent of adjacent structures involved. MRI can also differentiate between AC and epidermoid cysts, which is an important differential diagnosis [1-3]. Symptomatic cysts are treated surgically with craniotomy fenestration, endoscopic cyst fenestration or shunt placement. Small, non-symptomatic cysts are managed conservatively [1-3].

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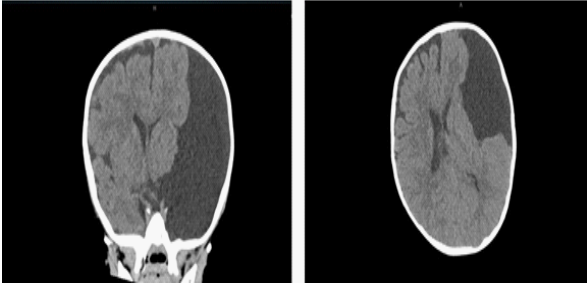


Figure 1: Large left temporal arachnoid cyst with mass effect and shift of midline structures.

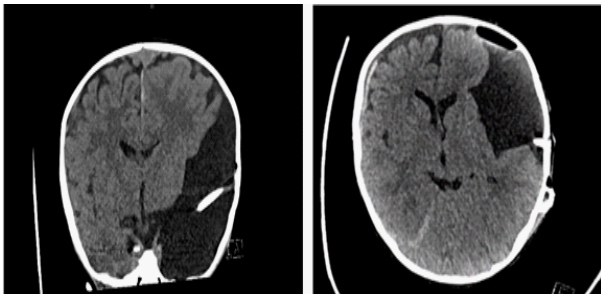


Figure 2: Post-operative CT scan.

Declarations

Competing interests: None declared.

Consent: The authors have obtained patient consent.

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