

Spontaneous Remission of a Pineal Region Cyst

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1. Abstract

Cysts of the pineal region are benign, incidental and commonly present on Magnetic Resonance Imaging (MRI) performed for unrelated pathology. When reimaged they are usually stable in size and imaging characteristics. The case report demonstrates spontaneous remission of a pineal cyst in a patient undergoing MR evaluation for cerebral infarction.

2. Key Message: Pineal cysts are a common imaging finding. They are benign, incidental and usually stable in appearance. Rarely, they spontaneously decrease in size. This is a report of a novel finding of spontaneous resolution of a pineal cyst.

3. Report

This is a report of an 81 female with a clinical history of cerebral infarction. The patient subsequently underwent an MRI for further evaluation and an incidental 1.9 cm non hemorrhagic pineal cyst was noted (Figure 1). Follow up imaging four years later, again performed for evaluating for cerebral infarction, revealed that the pineal cyst had resolved (Figure 2).

As a result, this is a novel report of spontaneous resolution of a non-hemorrhagic pineal region cyst.

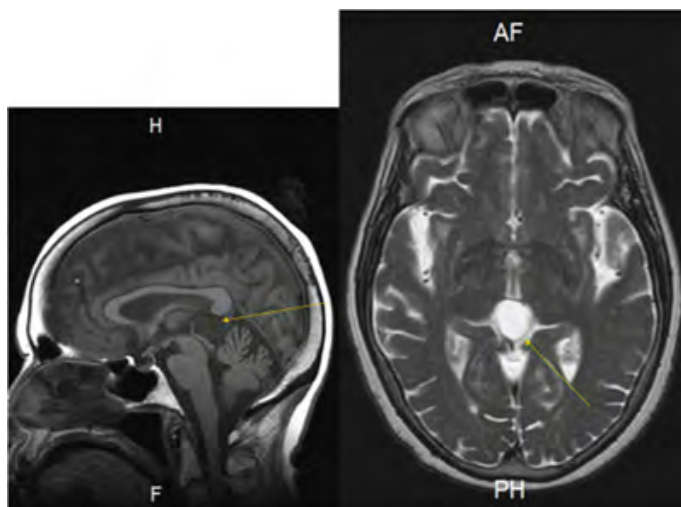


Figure 1: sagittal T1 weighted and axial T2 weighted images of the brain demonstrate a 1.9 centimeter pineal region cyst. There is mass effect on the superior colliculus on the sagittal T1 weighted image.

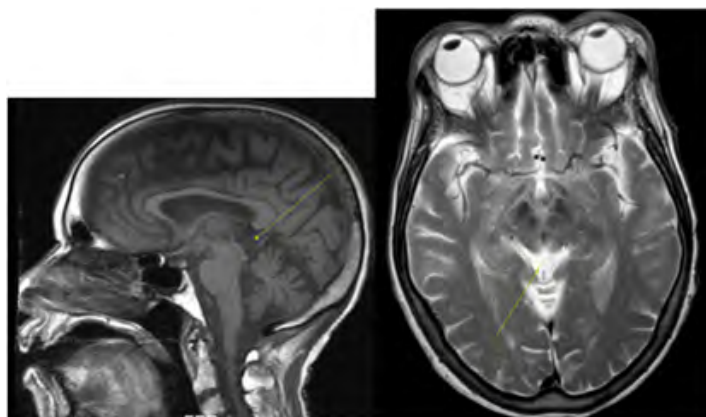


Figure 2: Follow-up MRI performed four years later demonstrates interval resolution of the previously noted pineal cyst.

4. Discussion

Pineal cysts are commonly noted on MR evaluation [1]. In fact, a retrospective review at the patient's treating institution revealed 917 incidentally noted pineal cysts on MRI evaluations over a fifteen-year period. Furthermore, a review of 151 pineal region cysts revealed 23 spontaneously decreased in size [1]. None were noted to spontaneously resolve.

There is a case report in the literature of a pineal lesions which had decreased in size following third ventriculostomy [2]. Similarly, there is a report of a solid lesion of the pineal region spontaneously regressing [3]. There are two case reports which present regression of a hemorrhagic pineal cyst in children [4,5].

5. Conclusion

Pineal cysts are a common imaging finding. When noted, the neuroradiologist will invariably suggest that no follow up is needed, as they are benign and incidental. As a result, they are not followed and if a patient does happen to undergo follow up imaging it is for unrelated intracranial pathology. When so, the cyst is usually stable on subsequent evaluation [1].

Rarely, they spontaneously decrease in size. However, this is a first report of spontaneous resolution of a pineal cyst and therefore of importance to neurologic and imaging specialties.

References

1. Al-Holou WN, Terman SW, Kilburg C, Garton H, Muraszko KM, Chankdler WF, et al. Prevalence and natural history of pineal cysts in adults. *Journal of Neurosurgery*. 2011; 115: 1106-14.
2. Di Chirico A, Di Rocco F, Velardi F. Spontaneous regression of a symptomatic pineal cyst after endoscopic third-ventriculostomy. *Child's Nerv Syst*. 2001; 17: 42-6.
3. Mattogno P, Frassanito P, Massimi L, Tamburrini G. Spontaneous regression of pineal lesions: ghost tumor or pineal apoplexy? *World Neurosurgery*. 2016; 88: 64-9.
4. Millichap JG. Spontaneous Involution of Pineal Cyst in an Infant. *Pediatric Neurology Briefs*. 2006; 20: 56.
5. Nimmagadda A, Sandberg DI and Ragheb J. Spontaneous involution of a large pineal region hemorrhagic cyst in an infant. Case report. *J Neurosurg*. 2006; 104: 275-8.