Pediatric Neurology 98 (2019) 89–90

Contents lists available at ScienceDirect

Pediatric Neurology

journal homepage: www.elsevier.com/locate/pnu

Visual Diagnosis

Pituitary Lesion in a Neonate

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ARTICLE INFO

Article history:
Received 20 May 2019
Accepted 30 May 2019
Available online 5 June 2019

Summary

The patient is a term girl who presented at age two weeks with a large segmental facial hemangioma without PHACE syndrome (posterior fossa anomalies, hemangioma, arterial anomalies, cardiac anomalies, and eye anomalies). Magnetic resonance imaging at age three months (Fig 1) showed a pituitary hemangioma characterized by an enhancing, T1-isointense, T2-hyperintense sellar and suprasellar mass without susceptibility or diffusion restriction. The patient underwent a course of treatment with oral propranolol, which has previously been shown to be an effective treatment for intracranial hemangiomas.[1] Repeat imaging (Fig 2) after nine months of treatment showed decreased size of the sellar and suprasellar mass with persistent enhancement.

FIGURE 1. Magnetic resonance imaging at age three months. T1 noncontrast (A) and T1 postcontrast (B) with arrows showing an enhancing, T1-isointense, sellar and suprasellar mass.

Conflicts of interest: There are no conflicts of interest to disclose.

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https://doi.org/10.1016/j.pediatrneurol.2019.05.012
0887-8994/

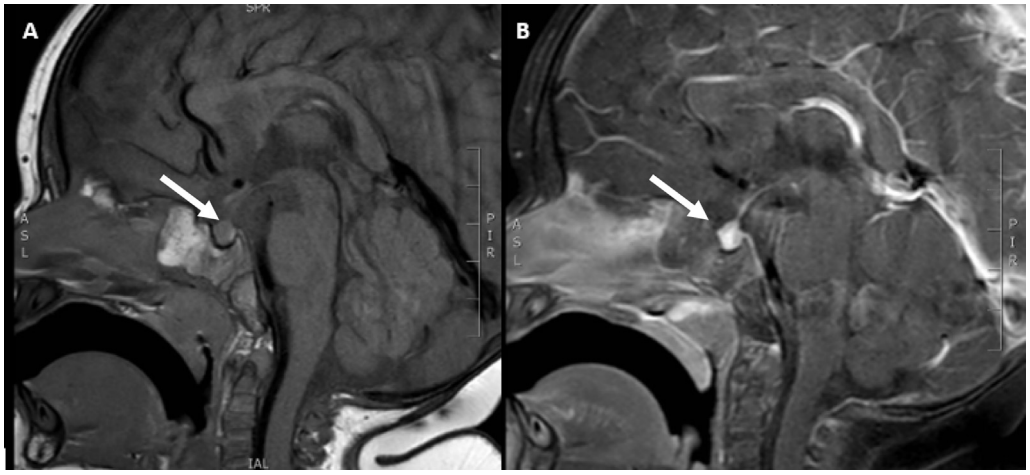

FIGURE 2. Magnetic resonance imaging at age 12 months. T1 noncontrast (A) and T1 postcontrast (B) with arrows showing decreased size of the sellar and suprasellar mass with persistent enhancement.

Discussion

This child exhibited characteristic imaging findings of an infundibular pituitary hemangioma associated with a cutaneous infantile hemangioma. Sellar hemangiomas have been reported without associated cutaneous infantile hemangiomas,[2] and other pituitary abnormalities have been reported with cutaneous and intracranial infantile hemangiomas[3,4] that may be sequela of an unidentified involuted pituitary hemangioma; this is the first reported case of an identified pituitary hemangioma in a patient with a cutaneous infantile hemangioma. This is a crucial association to be aware of because infantile hemangiomas tend to have a more benign course than other intracranial vascular lesions and correct identification could prevent unnecessary invasive interventions.[5] We suspect that the reduction in mass size was due to treatment with propranolol, as the natural course of infantile hemangiomas is to involute slowly over years[5] rather than months as seen in our patient.

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