

Neuroimage: Giant Intracranial Lipoma with Extracranial Extension

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Dear Sir,

Intracranial lipomas are rare tumors and account for less than 0.1% of the diagnosed brain tumors. Common sites of occurrence in the brain include the vicinity of the corpus callosum, though they have been reported in the interpeduncular, ambient as well as cerebellopontine cisterns [1]. A 36-year-old woman presented to the neurology outpatient department seeking evaluation for a lump on her forehead (fig. 1). Though the lump had been present since birth, it had never bothered her and she had never consulted a physician. Cosmetic concerns due to her upcoming marriage had now prompted her to seek evalu-

ation of the forehead lump. A large lobulated fat intensity nonenhancing mass was seen in the midline frontal region on T₁- and T₂-weighted images (fig. 2, 3). The mass was hypointense on fat suppression T₂ and was seen intracranially in a dilated third and lateral ventricle, extending through the cribriform plate to become continuous with the subcutaneous fat through a large frontal bone defect (fig. 4). Corpus callosum agenesis was seen. Lipomas are thought to occur from maldifferentiation of the meninx primitiva, a mesenchyme derivative of the neural crest with both ectodermal and mesodermal

tissue. They need to be differentiated from frontal encephaloceles, which arise due to a mesodermal defect and are associated with midline craniofacial dysraphism [2]. Computed tomography and magnetic resonance imaging with fat suppression sequences can help clarify the diagnosis. An incidentally detected lipoma can be safely observed, while in the presence of progressive symptoms surgical decompression remains the best option. Our patient sought consultation for cosmetic reasons; taking the extent of the lipoma into consideration, we decided to withhold any active neurosurgical intervention.



Fig. 1. Patient with forehead lump.

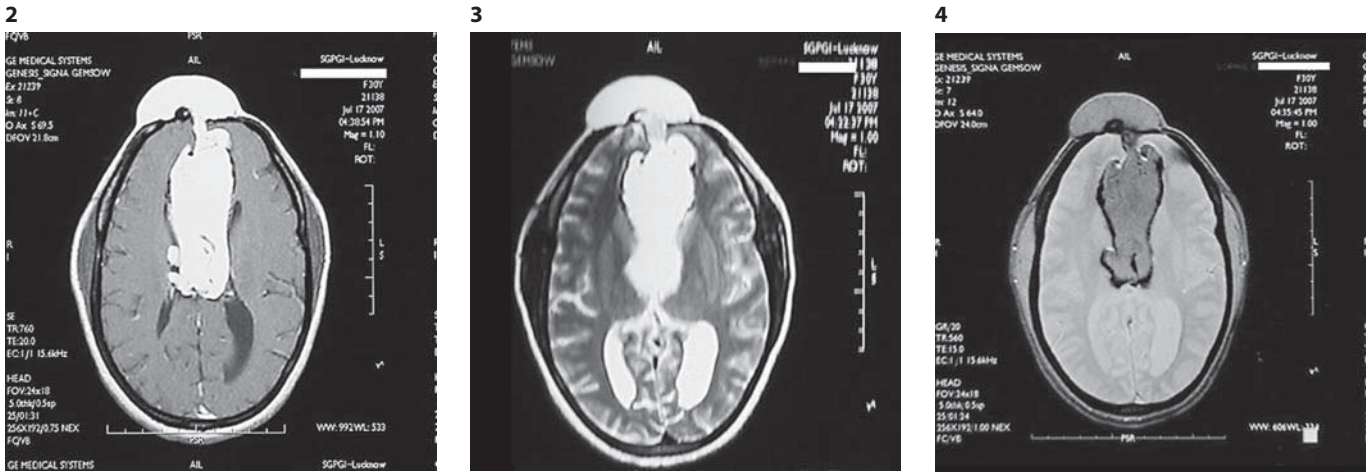


Fig. 2–4. Magnetic resonance, T₁, T₂ and fat suppression images showing a large lobulated fat intensity non-enhancing mass in the middle frontal region.

References

- 1 Ichikawa T, Kumazaki T, Mizumura S, Kijima T, Motohashi S, Gocho G: Intracranial lipomas. *J Nippon Med Sch* 2000;67:388–391.
- 2 Rowland CA, Correa A, Cragan JD, Alverson CJ: Are encephaloceles neural tube defects? *Pediatrics* 2006;118:916–923.