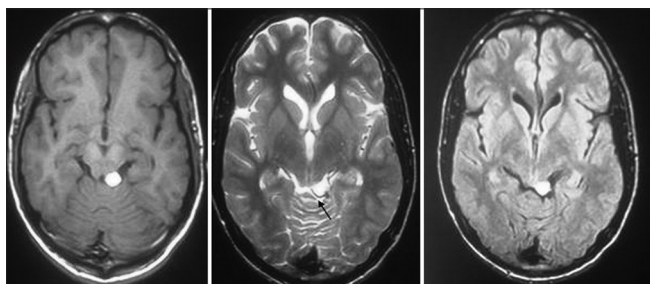


## LETTER TO EDITOR

# Tectal lipoma presenting with headache: An unusual etiology!

Sir,

We encountered a 35-year-old male patient with a tectal lipoma presenting with holocranial headache. Lipomas are rare in central nervous system. They form around 0.01% of all central nervous system tumors and arise primarily due to abnormalities in the development of meninx primitiva. Autopsies reveal an incidence around 0.08-0.46%. Most often, they are detected incidentally in the region of tectal plate/quadrigenal cistern, suprasellar region, pericallosal region, cerebello-pontine angle cistern and sylvian fissure! However, presentation with headache is almost unheard of and very rarely obstructive hydrocephalus is encountered. The clinical examination in our patient was unremarkable and fundoscopy was normal. He underwent a magnetic resonance imaging (MRI) scan revealing a lesion measuring 1 cm × 1 cm size arising from the left tectal plate, which was hyperintense on all the T1W, T2W and fluid attenuated inversion recovery (FLAIR) sequences [Figure 1]. There was no associated hydrocephalus. The literature has shown enough evidences of asymptomatic presentation of such tectal lipomas.<sup>[1,2]</sup> They can present with headaches only if they obstruct the usual cerebrospinal fluid pathways. Ono *et al.* have also described their presentation with complex partial seizures.<sup>[3]</sup> Our patient had no predisposing findings on imaging and no disturbances in the external ocular movements were noticed. However, we could find an elevated loop of P4 segment of posterior cerebral artery humped on the lipoma (arrow). Vascular stretch headaches due to such phenomenon are almost unheard for and this may be one of the reasons for such an acute presentation. Kumral *et al.* enquired about the role of vascular headaches in patients presenting with cerebro-vascular accidents. They found that headache was reported by 16% of



**Figure 1:** T1 weighted, T2 weighted and fluid attenuated inversion recovery images showing hyperintense tectal plate lipoma with humping of P4 segment of posterior cerebral artery (arrow). No hydrocephalus is visualized

patients with infarcts and 36% of patients with hemorrhage. A total of 27% of the patients presented with diffuse holocranial headaches and this was postulated to be due to mechanical stretch or distortion of blood vessels due to thrombus/hematoma stimulating the nociceptive afferents.<sup>[4]</sup> Hence, this hypothesis may be present in our case also, although, there are possibilities of it being a mere coincidence too. Usually these lipomas contain pure adipose tissue, but osteocartilaginous elements have been described also.<sup>[5]</sup> Therefore, dermoids, epidermoids (white) and teratoma constitute the chief differential diagnosis. Observation is recommended until no mass effect or hydrocephalus is seen. We intend to keep this patient under follow-up for expectant management. Surgery for such lesions is not required and also is not straight forward as they are densely adherent to surrounding neuro-vascular and neural structures. So, awareness regarding such lesions and their natural history should lead to more observatory protocols as seen in dorsal cord lipomas and thus should avoid unnecessary surgeries in future. Furthermore, possible vascular etiology of the headache in this patient would prompt a trial of anti-migraine drugs in addition to the expectant management of tectal lipoma. Similar cases in future may help in formulation of recommendations for such stretch headaches!

Ashish Kumar, Brahma Prasad

Department of Neurosurgery, Nizam's Institute of Medical Sciences, Hyderabad, Telangana, India

**Address for correspondence:**

Dr. Ashish Kumar,  
Department of Neurosurgery, Nizam's Institute of Medical Sciences, Hyderabad, Telangana, India.  
E-mail: drashishmch@hotmail.com

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