Letters to Editor

Extradural thoracic spinal meningioma

Sir,

A 42-year-old male patient was admitted for the investigation of an insidious onset Grade 4 paraparesis progressing over a period of one month. Magnetic resonance imaging (MRI) revealed a posterior and left lateral epidural mass at D2-D3, with foraminal extension and bone remodeling of the left posterior segment of the D3 vertebral body. The lesion was isointense to the spinal cord both on T1 and T2 sequences and with an intense and homogeneous gadolinium uptake [Figure 1a-c]. A D2-D3 laminectomy was performed and a totally extradural tumor mass, very adherent to the dura was removed. Neuropathology reported a typical psammomatous meningioma, the most common histological subtype of spinal meningiomas.

Meningiomas account for 25% of all intraspinal neoplasms and are the second most common primary intraspinal tumor. Exclusively epidural meningiomas are very rare, accounting for 2.7-3.5% of spinal meningiomas, but in some large series they were not reported. [1,2] Their origin is probably in the ectopic extradural arachnoid cells. These tumors can be intracanalar with dural sac compression simulating a metastasis or hematological malignancy, or they can have a foraminal location or extension, making them difficult to distinguish from a schwannoma.

The iso or hypointensity of this type of lesion on T2 MRI sequences contrasts with the T2 hyperintensity of most epidural tumors, except for lymphomas that can be hypointense in over 50% of cases. Spinal neurinomas can be exclusively extradural in 15% of cases, with a post-ganglionic origin and foraminal extension to the

Figure 1: Sagittal T2 (a), axial T2 (b) and sagittal T1 with gadolinium (c) MRI showing a posterior and left lateral epidural mass at D2-D3, with foraminal extension, bone remodeling and homogeneous contrast enhancement

Ruptured intracranial dermoid cyst

Sir

Intra-axial dermoid cysts are rare intracranial lesions, more so in the pediatric age group. Dermoid cysts account for about 0.2 to 1.8% of all intracranial tumors and are commonly located in the cisternal spaces, mainly in the cerebellopontine angle and parasellar
cisterns. Intracranial dermoid cysts are pathologically characterized by a thick, stratified squamous epithelium cyst wall containing dermal elements. Rupture of dermoid cyst can cause granulomatous chemical meningitis that can result in recurrent symptoms, most commonly headache. Headache is often the presenting feature of ruptured intracranial dermoid. Rupture of dermoid cyst is unusual to present in older people. Rupture of an intracranial dermoid produces a dramatic MR and CT appearance. Computerized tomography (CT) scan typically shows a well-defined round hypodense mass lesion with attenuation consistent with fat and peripheral calcification [Figure 1]. In case of ruptured dermoid cyst, CT scan shows low-density fatty droplets scattered throughout the ventricles and subarachnoid space [Figure 2]. A fat-cerebrospinal fluid (CSF) level may also be seen. Dermoid cysts do not enhance on contrast administration. The presence of disseminated fat droplets in the subarachnoid space or ventricles on neuroimaging is diagnostic for a ruptured dermoid cyst. A definitive diagnosis can be made by the characteristic features on CT scan. Magnetic resonance imaging typically demonstrates high signal intensities on T1 and variable signal intensities on T2. This is consistent with the lipid and cholesterol which typically collects within the dermoid cyst. When the cyst ruptures, high-signal droplets on T1 images may be seen scattered throughout the CSF. Sometimes a fat-CSF fluid level may also be seen.

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References