A case of DC with intracranial extension in a 9-year-old boy who presented with headache and a fluctuant scalp swelling. Magnetic resonance imaging revealed a midline scalp mass with intracranial extension. The lesion was excised with superior sagittal sinus preservation; and confirmed as DC by histopathological examination. The boy made a good recovery [1].

Borni et al. from the Department of Neurosurgery - UHC Habib Bourguiba -Sfax (Tunisia), presented a rare case of a spontaneously ruptured intracranial dermoid cyst in a 32-year-old man presenting as new onset epileptic seizures due to chemical meningitis caused by dissemination of fat or lipid droplets [2].

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A patient complaining of vertigo caused by spontaneous rupture of dermoid cyst, preoperatively diagnosed by CT and MRI. Cranial CT revealed a dense fatty lesion adjacent to the posterolateral parasellar region on the left with multiple small, dense fat droplets scattered in the subarachnoid space corresponding to a dermoid cyst rupture. Cranial MRI sections revealed a lesion with mixed-signal-intensity and multiple hyperintense droplets scattered through the cerebellar surface on the left. No enhancement was found on axial T1-weighted MRI after intravenous Gadolinium administration. Diffusion weighted image (DWI) and apparent diffusion coefficient map studies exhibited explicit restricted diffusion.

Many studies and literature case reports concerning the rupture of dermoid cyst have been reported. However, multimodal imaging of this rare pathology in the same patient is uncommon. Although dermoid cysts are pathognomonic in appearance on a CT examination, the MRI is also of value in helping to understand the effect of extension and pressure of the mass. DWI is also important for support of the diagnosis and patient follow-up [3].

A 47-year-old female presented to the hospital with a ruptured intracranial dermoid cyst following a mild head injury. The ruptured cyst contents were disseminated into the subarachnoid and intraventricular compartments, resulting in an obstructive hydrocephalus. After medical stabilization, she underwent gross total resection of the cyst using combined transsylvian, transcortical-transventricular, and sub-frontal approaches. A ventriculo-peritoneal shunt was eventually also needed.

Traumatic rupture of an intracranial dermoid cyst is an extremely rare event and this is only the fourth such case reported in the literature. The authors presume that this rupture occurs due to sudden shifts in the cyst sac, which is adherent to some partially mobile intracranial contents. Although computed tomography (CT) is often adequate in making a diagnosis of this entity, magnetic resonance imaging (MRI) provides complete characterization of the extent of lipid dissemination, and is essential for operative planning. Intravenous steroids at presentation are helpful in managing the aseptic meningitis associated with rupture. Complete surgical resection is the goal, but must be weighed against the risk for injury to nearby vital structures. Hydrocephalus should be managed promptly, and patients should be monitored for it closely in the perioperative period. Even though the recurrence rate with subtotal resection is extremely rare, follow up should be done routinely [4].

1)

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Headache. Mymensingh Med J. 2021 Jul;30(3):860-862. PMID: 34226481.

2)

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3)

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4)

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