

Figure 1: Axial CT image shows islands of fat and calcification

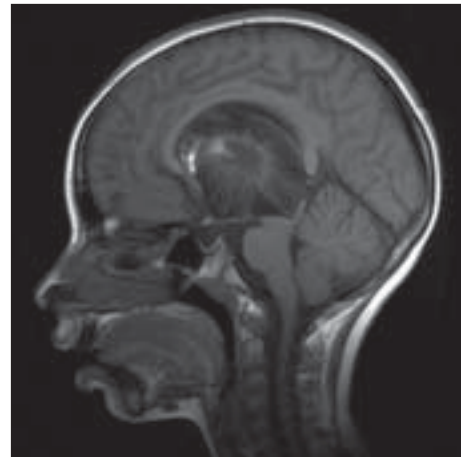


Figure 2: T1w sagittal image shows fat and an abundance of hair

Third ventricular dermoid: An unusual tumor at an unusual site

A dermoid is an inclusion cyst having ectodermal elements. Dermoids have an outer connective tissue capsule and are lined with stratified squamous epithelium. The cyst contents include hair follicles, sebaceous glands and sweat glands. Desquamated epithelium and some lipid material are found in the center. Intracranial dermoids account for about 0.04 to 0.6% of all intracranial neoplasms.^[1] They commonly occur in the cranial midline, in the posterior fossa, the suprasellar cisterns and the sub-frontal areas. Intraventricular dermoids are rare and occur most frequently in the fourth ventricle. The occurrence of a dermoid in the third ventricle is extremely rare.^[2,3]

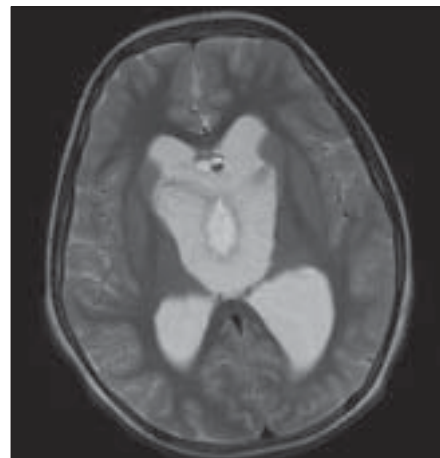


Figure 3: T2w axial image shows a dermoid in the third ventricle. The hair radiating from the center gives it a "sun and rays" appearance

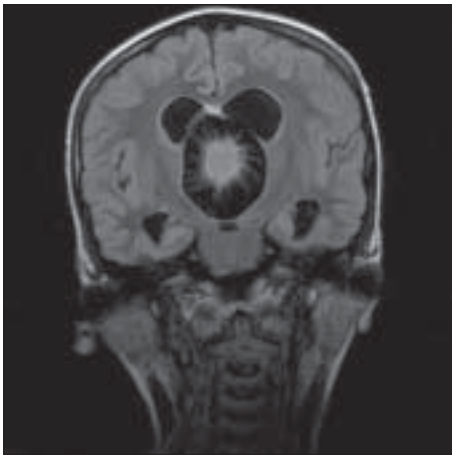


Figure 4: Coronal FLAIR image shows a dermoid in the third ventricle. The hair radiating from the center gives it a “sun and rays” appearance

We present the case of a nine-year-old female with a dermoid in the third ventricle.

The patient presented with complaints of severe headache and fever for a year. The symptoms worsened over a period of two months when the patient developed an ataxic gait, decreased hearing in the left ear and blurred vision. There was no history of loss of consciousness, convulsions, diplopia or facial asymmetry. A computed tomography (CT) scan and magnetic resonance imaging (MRI) of the brain was performed, which showed an unusually striking image of a dermoid in the third ventricle with islands of fat, calcification and an abundance of hair [Figures 1, 2].

Islands of fat were seen within the lesion, showing negative Hounsfield Units on CT images [Figure 1] and appearing hyperintense on T1-weighted images [Figure 2]. Focal calcifications were observed in the lesion as hyperdense foci on CT and areas of susceptibility on gradient MRI. Thin linear structures radiated dramatically from the center of the lesion which represented hair giving the lesion a ‘sun and rays’ pattern [Figures 2-4].

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