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Incidental Finding in a Headache Patient: Intracranial Lipoma

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A 60 year old female, with a history of atrial fibrillation who was on warfarin therapy, presented to our emergency department with chief complaint of the most severe headache that she ever had. Her vital signs, systemic and neurological examinations were normal. She had emergency computed tomography (CT) of the brain with suspicion of intracranial hemorrhage that revealed a lesion in fat density in the lateral ventricle and interhemispheric fissure (Figure a). Her international normalized ratio was 3,2. She underwent cranial magnetic resonance imaging (MRI) that revealed a hyperintense lesion in T1 and T2 sequences in the lateral ventricles, pericallosal area and interhemispheric fissure that did not show contrast enhancement (Figure b and c). After the symptomatic relief by analgesics she was discharged from the emergency department for out-patient follow-up.

Intracranial lipomas are rare and benign congenital malformations accounting for 0,1% to 0,46% of all intracranial tumors.¹ Since half of all cases are asymptomatic, they are usually

an incidental finding during neuroimaging studies. Headache is the most common symptom in adults if it becomes symptomatic.²

The deep interhemispheric fissure, especially the corpus callosum, is the most common localization of intracranial lipomas.¹ Intracranial lipomas are often associated with other malformations of the central nervous system, such as callosal agenesis or hypogenesis, spina bifida or a cranium bifidum.^{1,3}

Noncontrast cranial CT and brain MRI allow definitive diagnosis. The appearance of the corpus callosum lipoma on the cranial CT scan is quite typical, with the low attenuation seen only in adipose tissue, which ranges from -40 to -100 Hounsfield units.^{4,5} In the brain MRI the lesion presents characteristics of fatty tissue, with a hyperintense signal in both T1 and T2-weighted studies.⁶

Most lipomas are treated conservatively and rarely requires neurosurgical treatment because of their benign nature.¹ Our patient did not have any accompanying lesion and was discharged to follow-up as an out-patient.

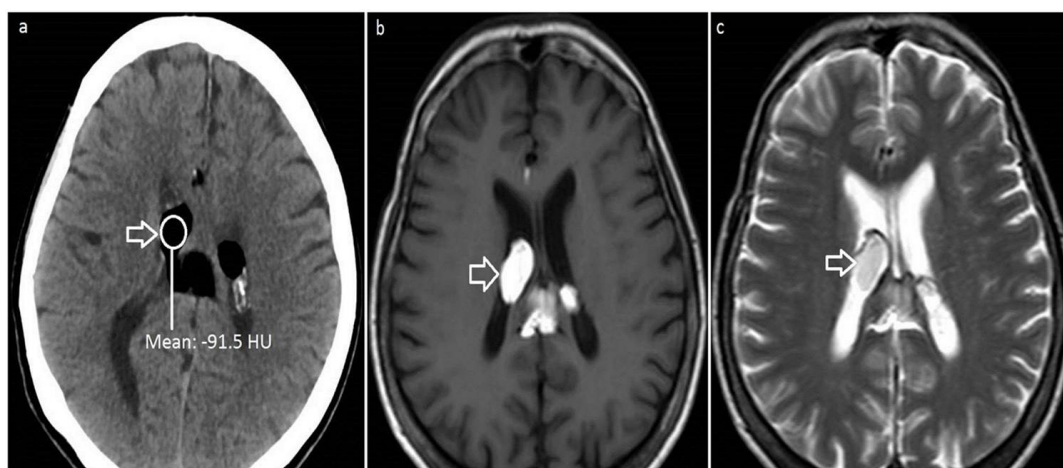


Figure. Image (a) shows cranial computed tomography. There is a homogenously hypodense lesion measuring 33 mm x 30 mm in the lateral and third ventricles with about -101 to -110 Hounsfield unit. Image (b) and (c) show magnetic resonance imaging with hyperintense mass lesion in lateral ventricle (T1-weighted and T2-weighted images, respectively).

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