Lipoma of the corpus callosum

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DESCRIPTION

A 38-year-old male driver was involved in a road traffic accident. He was brought to the emergency department after a high-speed frontal impact against a concrete wall. He could not remember what had led to the accident. He was treated according to the Acute Trauma Life Support (ATLS) guidelines. He was fully conscious, alert and orientated with a Glasgow Coma Scale score of 15/15 with equal and reactive pupils. His blood sugar was normal. He was found to have minor orthopaedic injuries in the distal limbs.

Owing to the fact that the patient had transient amnesia that could not be explained, a brain CT was ordered, which showed an extensive lipoma of the corpus callosum (figures 1–4). This was interpreted as the cause of a possible epileptic fit that resulted in a transient loss of consciousness, which subsequently led to his accident. The patient was discharged home on anti-epileptics without surgery.

Figure 2 Brain CT—horizontal plane, white arrow shows a large, well-defined low-density lesion involving the genu and body of the corpus callosum.

Figure 1 Brain CT—sagittal plane, white arrow shows a large, well-defined low-density lesion involving the genu and body of the corpus callosum.

Figure 3 Brain CT—coronal plane, white arrow shows a large, well-defined low-density lesion involving the genu and body of the corpus callosum.

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Figure 4 Series of CT brain slices—
incidental finding representing a
lipoma of the corpus callosum.

Learning points

- ▶ Intracranial lipomas represent rare congenital malformations, accounting for less than 1% of intracranial tumours. They are thought to originate from abnormal differentiation of the meninx primitive, a mesenchymal derivative of the neural crest.¹
- ▶ More than one half of intracranial lipomas are associated with varying degrees of brain malformations. Associated anomalies include agenesis of surrounding tissues, frontal bone defects or facial dysplasia and cerebral vascular defects.¹
- ▶ Intracranial lipomas may present with symptoms such as headache, seizures, local mass effect or may be diagnosed incidentally during evaluation following trauma.²
- ▶ CT imaging of lipomas shows the hypo attenuation characteristic of fat. MRI reveals a homogeneous T1 hyperintensity and T2 hypointensity/isointensity.²
- ▶ The prognosis of intracranial lipomas is generally good, especially for pure corpus callosum lesions. Surgical intervention is limited depending on the patient's symptoms, surgical feasibility and associated malformation.²

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Contributors SJ and TA diagnosed and managed the patient mentioned in the case. MA and SJ wrote the case manuscript and learning points, and performed the literature review. TA was the attending consultant when the patient presented to the emergency department. He reviewed the manuscript, made the necessary corrections to language and offered his suggestions.

Competing interests None.

Patient consent Obtained.

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