LIPOMA OF CORPUS CALLOSUM DIAGNOSED BY CT SCANNING - A CASE REPORT

Pages with reference to book, From 149 To 151

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Abstract

Lipoma of corpus callosum is a rare intracranial tumour or malformation. The appearances of this tumour in computerised tomography (CT) brain scans are fairly specific. A case report is presented with a short discussion of reported cases and review of literature and CT features of the tumour (JPMA 36: 149, 1988).

CASE REPORT

A 25 years old male was admitted under the care of psychiatrist in a private hospital in Karachi with complaints of headache off and on for 10 years; sleep disturbances and night terrors, abnormal body posture and social phobias for the last 1½ years. Past history was non-contributory. He was an occasional smoker and had studied uptill Intermediate College level. General and system examination was unremarkable. Laboratory investigations showed Haemoglobin 11.8 Gms, ESR 23mm, normal leucocyte count and negative urine examination. Skull X-Rays did not show pathological calcification or any other abnormality.

CT FINDINGS

CT scanning of the brain done four days after admission at the same Hospital on a Head and Body scanner showed a large area of decreased attenuation situated in the midline in the region of the corpus callosum. The lateral ventricles were parallel in position and were not dilated as shown in the figure.

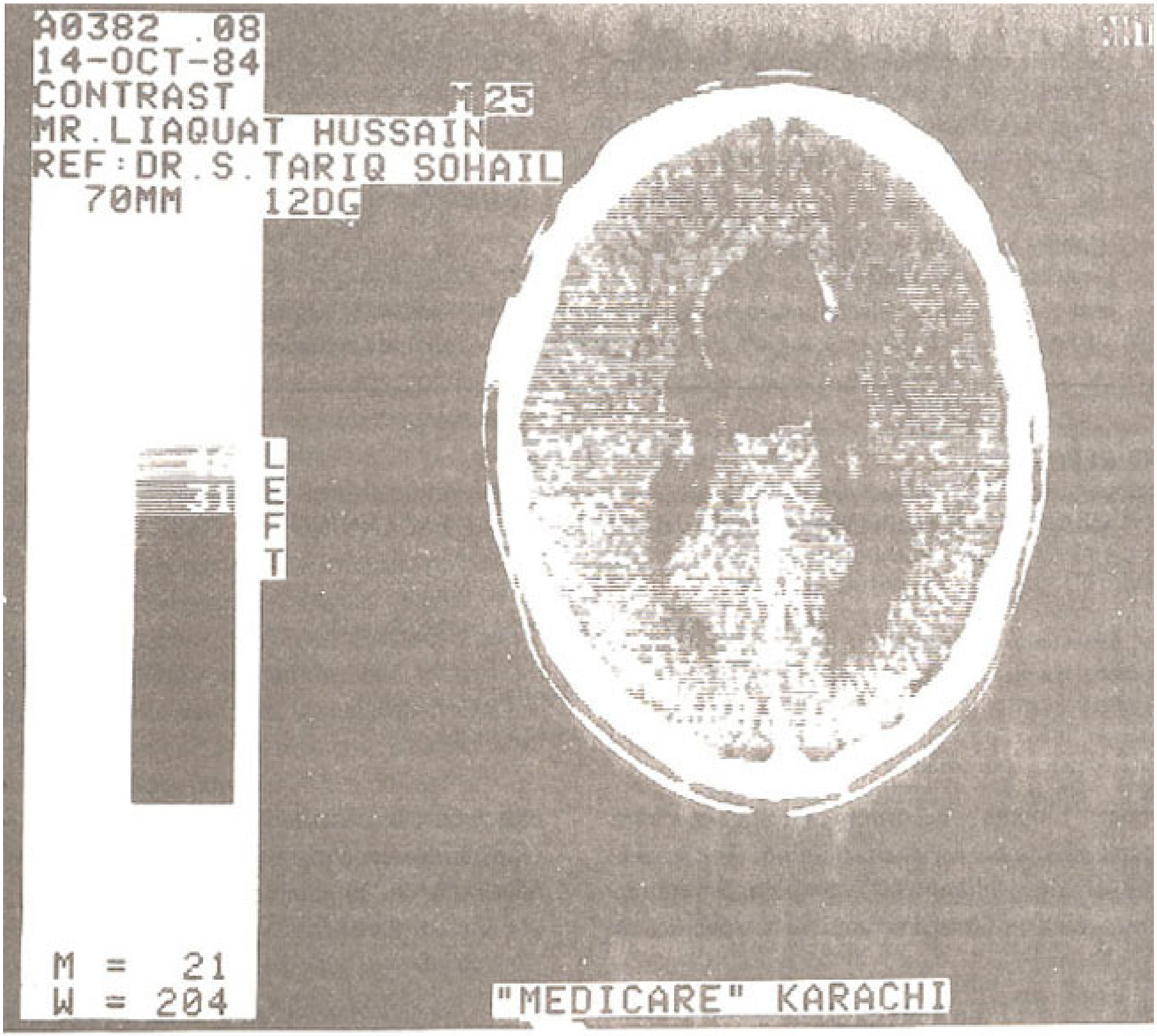

Figure.1 CT Scan showing Lipoma of Corpus Callosum.

The low density area showed fatty density with small flecks of calcification at the periphery of the lesion.

Diagnosis of lipoma of corpus callosum was made and the patient was referred to the Neurosurgeon who thought it inadvisable to remove the whole tumour. Biopsy was taken and histopathological findings confirmed the lesion as lipoma of corpus callosum.

DISCUSSION

Intracranial lipomas are rare tumours. The most frequent site is corpus callosum, but they also occur in the cerebellopontine angle and quadrigeminal plate cisterns[1]. They are frequently associated with absence of septum pellucidum and corpus callosum, cervical spine anomalies, myelomeningocoele, spina bifida and agenesis of cerebellar vermis.

According to Gastaut, Regis et a1[2] only 100 cases have been published since the original observation

of Rokitansky in. 1856. These authors have reported four cases of Lipoma of corpus callosum with epilepsy detected by CT from amongst 13,000 patients (0.03%).
Kazner and Stochdorph'1 have reported 11 cases found within four years among 17,500 patients who were studied by CT scanning. Iñtracranial lipomas can produce symptoms. In the series published by Kazner and Stockdorph[3] eight of 11 patients, presented with symptoms that may be directly or indirectly related to intracranial lipoma. They can produce hydrocephalus with signs of raised intracranial pressure. Gastaut[2] reported cases associated with epilepsy. Our case also showed some non specific symptoms mainly behavioural anomaly.
CT findings[4] are an area of low attenuation situated in the midline with irregular margins and with tharp demarcation. The density of these lesions is between -50 to 150 Hounsfield units. Linear calcification are frequently identified at the margins of these tumours. Contrast enhancement occurs only within the dilated and tortuous anterior cerebral artery which penetrates these corpus callosal tumours but does not extend within substance of the tumour. Over haif of these tumours are associated with partial or complete agenesis of corpus callosum 4. Differential diagnosis is mainly with dermoid tumours but these are cystic lesion in the midline and in a particular situation. The cysts are thick walled with calcification and teeth or dense calcification inside the cyst. CT demonstrates the cyst wall as isodense with adjacent brain except where it is calcified. If these rupture, fat fluid levels may occur and CT features of dermoid cysts are also fairly specific.
The case presented illustrates the fairly specific features of lipoma of corpus callosum and almost definitive diagnosis can be made on CT scanning. With increasing use of CT scanners, it is hoped that more cases of this rare condition will be reported.

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