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INTRACRANIAL DERMOID CYST:A RARE CASE REPORT

General Surgery

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ABSTRACT

Intracranial dermoid cyst are congenital,usually nonmalignant lesions with an incidence of 0.5% of all intracranial tumors.they tend to occur in the midline sellar,parasellar or frontonasal regions.although there nature is benign,dermoid cyst have a high morbidity and mortality risk,especially when rupture occurs.

KEYWORDS

Dermod cyst, subarchanoid space, meningitis, coma.

INTRODUCTION:-

Intracranial dermoid cyst are rare,congenital, usually benign lesions. they are usually detected accidentally but often become symptomatic after rupture.the presence of fat droplets in the subarchnoid space and ventricular system is the typical finding in the comuputed tomography(CT) and magnetic resonance imaging (MRI). rupture lead to aseptic chemical meningitis, vasospasm, cerebral ischemia and coma. Chemical meningitis may lead to transient cerebral ischemia secondary to vasospasm with complicating infraction and the death of the patient.

In this report we present a case of intracranial dermoid cyst.with atypical presentation.

CASE REPORT:-

A 60yr old male patient present in surgery opd with the complaint of swelling in left occipito-temoral region.

The swelling present since birth.which was gradually increasing in size since 4-5 yrs. And attained size of 6x8cm.in last 1 moth patient experience pain over left parieto-temporal region extend to occipital region.not associated with any deformity in vision or hearing,on left side.and had headache.

On examination there was painless globular shaped mass over left occipital region, firm to hard in consistency. not associated with any pulsation, not compressible, fixed from base, with well defined margins, smooth surface.

Radiological examination was done-

X-ray skull show-rounded osteolytic lesion in left occipital region.
Plain CT head also done showing-Focal lytic defect 2.7cm,in the left side parieto-occipital region.with linear hyper density is seen in the subcutaneous soft tissue.

Then plan for surgery, routine investigation was done, and posted for excion.
On excision there was absent bone plate under the mass, and there was thin layer which separate brain matter from mass. then mass en block removed gently.and send for histopathology examination.

Post operative period was uneventful.

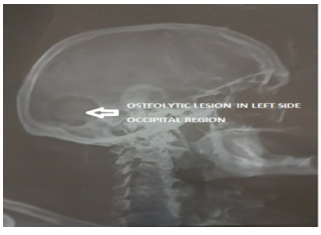

Fig.1 X-ray showing osteolytic lesion in left occipital region.

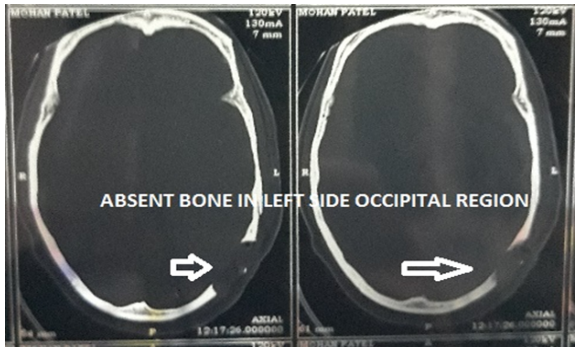

Fig 2.plain CT head showing focal lytic defect(absent bone) in left side occipital region

DISCUSSION:-

Intracranial dermoid cyst are congenital ectodermal inclusion cysts. they are usually nonmalignant lesions with an incidence of 0.5% of all intracranial tumors.they tend to occur in the sellar,parasellar and frontonasal regions.They emerge from the inclusion of the ectodermal primitive pleuripotent cells due to defects in neural tube closer.the capsule of dermoid cyst consists of simple epithelium supported by collagen. it contain a dense liquid composed of cholesterol, keratin, lipid metabolites, calcifications, hair and teeth. they are detected accidentally, but also may give symptom of seizures and headache and rarely olfactory delusions. Although their nature is benign and development is slow, dermoid cyst have high morbidity and mortality risk, especially when rupture occurs. They can rupture and release lipid droplets in the subarachnoid and ventricular system. Rupture is usually spontaneous, even though in some cases is due to surgery and head injury. The rupture of dermoid cyst and the presence of lipid in the subarachnoid and ventricular system may cause chemical meningitis, hydrocephalus, vasospasm and cerebral ischemia. Clinical symptom of acute rupture are headache, nausea, vomiting, vertigo, vision problems, aseptic chemical meningitis, hemiplegia, mental changes and coma.

Prognosis of patients with ruptured intracranial dermoids depends on the spread of the contents and the time period after rupture.

CONCLUSION:-

Intra cranial dermoid cysts are rare and may present since birth, asymptomatic.patient commonly present with the symptoms of headache, when the cyst get rupture intracranial, and fat droplet involved in subarachnoid and ventricular system. when it mixed in subarachnoid and ventricular system, it may lead to risk of morbidity and mortality. gross total removal is recommended when possible and recurrence is rare.

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