31st ANNUAL CONFERENCE OF ANDHRA PRADESH NEURO SCIENTISTS ASSOCIATION

A RARE CASE OF MATURE TERATOMA IN CEREBELLUM

[Dr. G Sai Teja Neurosurgery Resident, Guntur Medical College]
Dr. Ch Praveen MS., MCh, Dr G Rama Krishna MS., MCh, Dr KVVSN Murthy MS., MCh

INTRODUCTION

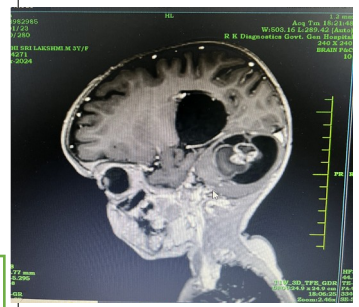
Germ cell tumors are very rare group of CNS neoplasms, comprises 0.3-0.6% of all primary intracranial neoplasms.
They further divided into germinomas and nongerminomatous germcell tumours and mixed germ cell tumors.
Teratomas are a subgroup of nongerminomatous tumors constitutes 0.1-1.5% of all intracranial neoplasms.
Teratomas are considered to derive from misplaced embryonal cells and thus develop during prenatal life.

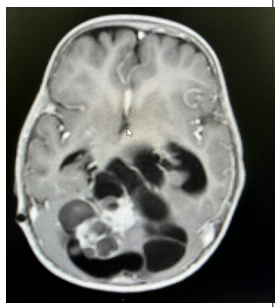
CASE REPORT

A 4 year old female patient born out of nonconsanguineous marriage with uneventful pregnancy presented with complaint of head ache since 10 days localized to occipital region associated with decreased appetite. Not associated with vomiting.
Past history: Baby underwent VP shunt at the age of 1 year for obstructive hydrocephalus.
Delayed mile stones noted.

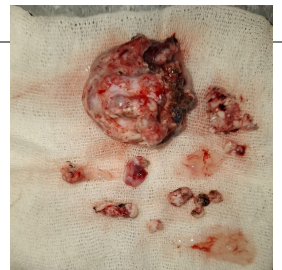
INVESTIAGTIONS

CEMRI: ill defined large lobulated solid cystic lesion of size 10.7 x 7cms in the posterior fossa midline. 3rd and left lateral ventricles are dilated. Vermis is not seen separately from the lesion. Solid part has heterogenous enhancement on contrast.
Reported as **pilocytic astrocytoma**





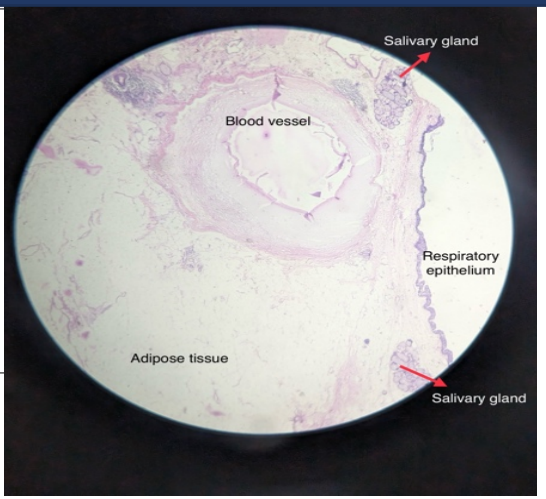
Approach: MLSOC with C1 laminectomy and telovelar approach.
Intra OP findings:
thick mucus, encapsulated tumor, hair follicles, keratin, cartilaginous substance.



BIOPSY

HPE: sections from multiloculated cyst studies show cyst lined by cuboidal cells with melanin pigmen and adjacent glial tissue and following structures are identified : Respiratory epithelium, adipose tissue, smooth muscle bundles, mucinous glands, cartilage, blood vessels, choroid retinal epithelium, psammoma bodies.

Imp: f/s/o mature teratoma.



DISCUSSION

Teratomas are congenital tumors that contain tissues derived from all the three germ layers. Histologically, CNS teratomas are described as mature or immature based on microscopic findings Mature teratomas look almost like normal cells and are made of different kinds of tissue, such as hair, muscle, and bone. Immature teratomas are made of cells that look like fetal cells. Intracranial teratomas usually are located in the supratentorial midline and the pineal region. Definitive diagnosis is achieved by means of histological study, when tissues are derived from the three germ layers are identified. On reviewing the literature, Noudel *et al*. reported case series of intracranial paediatric teratomas in which 5 of 14 patients found to have mature teratomas. However, all of them were located in pineal or sellar region but none of them in posterior fossa.[5] Kong *et al*. reported 6 cases of teratomas from case series of 36 patients. Out of six cases only one was located in posterior fossa.