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Recurrent C. P. angle epidermoid with abscess- A Case Report.

Medical Science

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ABSTRACT

Thirty four year old lady with three months pregnancy presented with left cerebellar signs and raised intracranial pressure (ICP). She had a left cerebellopontine epidermoid which was grossly removed. After full term normal delivery she had early recurrence of cerebellar symptoms and raised ICP. She was re-operated following MRI. Abscess containing thin plus and a few flakes of tumor and the capsule was excised.

Introduction

Intracranial epidermoids are usually congenital benign lesions and are approximately 0.1% of all intracranial tumors (1). Intracranial epidermoid treatment is troublesome because growth in states into different spaces and cisterns. Engulfment of cranial nerves and vessels make it difficult for radical excision. Near total or partial removal of tumor leads to recurrence which occurs after a prolonged period as a result of slow growth rate of tumor (2,3). Infection within tumor leading to abscess formation as in the present case is reported only in a single case earlier (4).

Case History

A 24yr old woman initially presented with headache, vomiting, disturbed balance while walking for more than 6months. She was admitted in January 2015. (Pt IP no- 160919162)

Examinations revealed left cerebellar signs including ataxia, dysdiadokokinesia, left lower motor facial palsy. Her vitals and routine blood investigations were normal. Patient was 3 months pregnant MRI scan demonstrated an extremely large extra axial mass on left side CP angle. The signal characteristic was consistent with an epidermoid tumor (fig1).

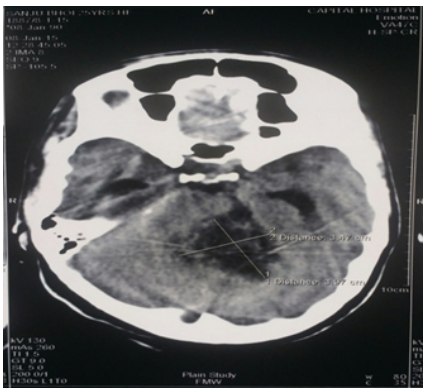

Figure 1. Non contrast CT brain showing characteristic feature of epidermoid tumor at left CP angle

Patient was operated in January 2015 by left posterior fossa craniectomy and near total resection achieved (fig 2). Postoperative period was uneventful and the patient was discharged. She delivered a male child in august 2015 by caesarian section. Her cerebellar sign had much improved.

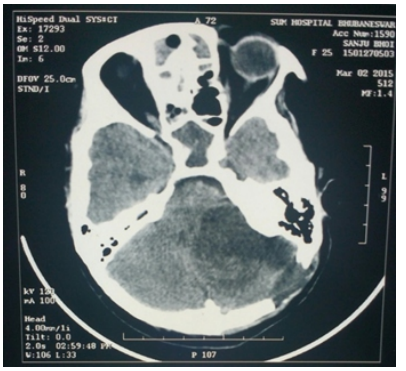

Figure 2. Non contrast CT showing post operated image

Then she came to the hospital in September 2016 with complaint of headache, vomiting, left limb ataxia. MRI was done (fig 3).

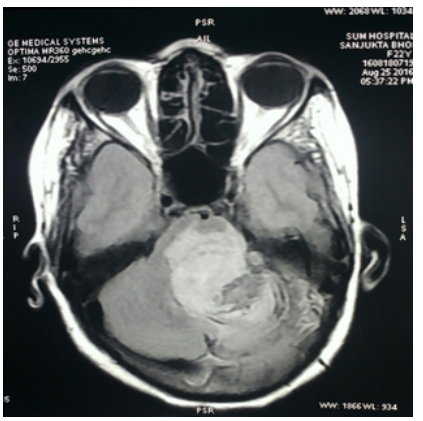

Figure 3.T2 weighted MRI show left large epidermoid with low signal area within the tumor.

It showed Left CP angle extra axial lesion with T1W hypo-intense, T2W hyper intense signal and evidence of diffusion restriction. Peripheral white matter edema was seen. T1W shows mild peripheral rim enhancement with low attenuation central core. Mass effect with compression on pons, middle cerebellar peduncle and effacement of 4th ventricle with early obstructive hydrocephalus. Suggestive of large epidermoid of the left CP angle with mass effect. Epidermoid with secondary infection. Patient was again operated,

on opening the dura, the pearly tumor was exposed about 10 cc of thick yellow pus came out which was sent for culture and sensitivity test. The tumor was resected out completely. Wall of the cavity and flakes of the tumor sent for biopsy.

The pus was sent for culture and sensitivity, pus cells ware 6-8Hpf. AFB was –VE and no organism were grown. Micro section shows cerebellar tissue along with a cyst lined by keratinized stratified squamous epithelium with granular layer showing keratohyaline granules. Lumen is filled with halos of lamellar keratin. Wall of the cyst was fibrous collagen tissue infiltrated by mixed inflammatory cells, conglomeration of F.B. giant cells and cholesterol crystals.

Discussion

Epidermoids are slow growing benign tumors, occur in patients between 20-40 yrs of age. They arise from dorsal midline ectodermal cells between the 3rd and 5th week of embryonic life. Cerebello pontine angle epidermoid is the result of proliferation and lateral displacement of ectodermal cells by the developing otic vesicles. Epidermoids have tendency to spread along cisternal crevices (5). So there is no initial mass effect and the tumor remains asymptomatic for many years. Epidermoid cyst produces gradual mass effect including headache, vomiting, cranial nerve deficit, cerebellar symptoms, raised ICP because of slow growth (6). The recurrence of CP angle epidermoid cyst occurs many years or decades after original surgery (7,8). Initial surgery is definitely an important determinant how soon the recurrence will occur, but with subtotal excision as done in the present case, a mean interval of 8 yrs has been reported between initial and subsequent surgery9. In our case the tumor recurred after 1 yr 9months of surgery with an abscess within the lesion. During surgery pus came out which was negative on culture. But we found pus cells on microscopic examination. Biopsy revealed inflammatory cells and giant cells which is confirmatory of infection. So we are in opinion that rapidly recurring epidermoid should be assumed that there is a low grade infective cause even if sometimes there is lack of confirmatory evidence of presence of organisms. Rapid worsening of patient's clinical status could be due to early recurrence of tumor and an abscess within the lesion (4).

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