



## Frontoethmoidal Encephalocoele Case Report

(Two Cases in Last Five Years)

Authors

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### ABSTRACT

*Anterior encephalocoele are very rare congenital malformation of CNS. The preoperative diagnosis requires clinical examination and imaging modalities like CT scan and MRI brain with face.*

*The principle of surgical management is dissection of sac and adequate closure of the defect at neck. We have operated two cases of Anterior Encephalocoele in last five years.*

**Keywords:** Congenital Anomaly, Fronto ethmoidal, Encephalocoele.

### INTRODUCTION

Congenital malformation of the central nervous system constitutes more than half of all congenital anomalies with an incidence of one to two per thousand. This is in spite of the fact that at least 50 percent of the defective embryos having malformation of CNS undergo spontaneous absorption or resorption.<sup>(1,2)</sup> In our centre incidence of encephalocoele is 1 % and anterior encephalocoeles are very rare.

### CASE REPORT

2 cases of Frontoethmoidal presented to the Neuro surgery Deptt of SPMC and P.B.M. Hospital, Bikaner. First case was Yogita 10 month female child operated on 4.08.2010. Second case baby of Sonu 3 ½ year old was operated on 01.11.2014. This child presented with swelling on right side of face below the medial canthus and above infraorbital margin with broadening of root of nose. The swelling was irregular in shape, non

reducible with no impulse on coughing and pushing the eye laterally and upward, and hypertelerism. CT Scan head (plain & contrast) showing hypodense lesion with minimal enhancement protruding through ethmoid and orbit into face beneath the skin: The medial wall of orbit was eroded. The child was taken for surgery. Bicoronal hair line skin incision and Bifrontal craniotomy by intra-dural and extra dural approach.<sup>(3,4)</sup> Herniation of brain was identified. Herniated brain through the dural defect was coagulated, and that of the orbit was sucked out along with CSF. Dural defect was repaired, bony defect was repaired by bone cement. Patient had good recovery. .



## DISCUSSION

Spring 1854 first described the cranial encephalocele. Matson<sup>(5)</sup> reported that Occipital encephalocele is the most common site. Anterior encephalocele may be frontal, frontonasal, frontoethmoidal or naso-orbital in location.

The cranial defects have been classified by Suwanwela<sup>(6)</sup> in to

A. Cranial vault B. Sincipital C. Basal

While planning management of encephalocele one needs to take in to consideration the site, size and contents of the lesion, the state of CSF pathways, the neurological status of the patient, the general condition of the child and the presence and absence of associated anomalies elsewhere in the body.

The principles of surgical management are:-

1. Dissection of the sac
2. Isolation of the neck.
3. Inspection of the contents
4. Adequate closure of the defect at neck
5. Herniated part of the brain can be excised.

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