A Case Report of Clivus Chordoma

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Abstract- In the present study 50 skulls (dry specimens) of known sex were studied in detail. In one of the male specimen a very well defined tubercle measuring 3 mm by 5mm was observed on the clivus at the junction of upper 1/3 and lower 2/3.

Clivusmeningiomas and clivuschordomas are the common conditions in this region. Lateral and frontal tomography help in diagnosis.[1]The symptoms produced are because of the compression on the brain stem or arteries and nerves related.

Index Terms- clivus, chordoma, brainstem meningiomas, blood vessels, nerves

I. Introduction

Clivusis formed by the union of basiocciput and basisphenoid. Basiocciput develops from fusion of four occipital sclerotomes. Incidentally this junction also marks the cephalic limit of notochord. Cellular remnants of notochord are seen in the cephalic and caudal regions of the notochord and formation of chordomas is also seen in these two regions.[2] Chordomas are considered locally invasive, accounts for 1% of intracranial tumors .they may occur at any age but usually seen in adults. [3] Incidence of sacro coccygeal chordoma is more compared to clivuschordoma. The symptom of clivuschordoma is because of the compression effects on the pons, related cranial nerves, basilar artery and its branches. Condition can be diagnosed by lateral and frontal tomography.

II. Materials and Method

In the present study 50 skulls (dry specimens) of known sex were studied in detail (male 27 female 23), in one of the male specimen a well defined tubercle measuring 3mmx5mm was observed with sharp tubercular apex .It was situated at the region of the junction between basiocciput and basisphenoid and this region is intimately related to covering meninges and pons, related blood vessels, nerves. The tubercle was central in position.

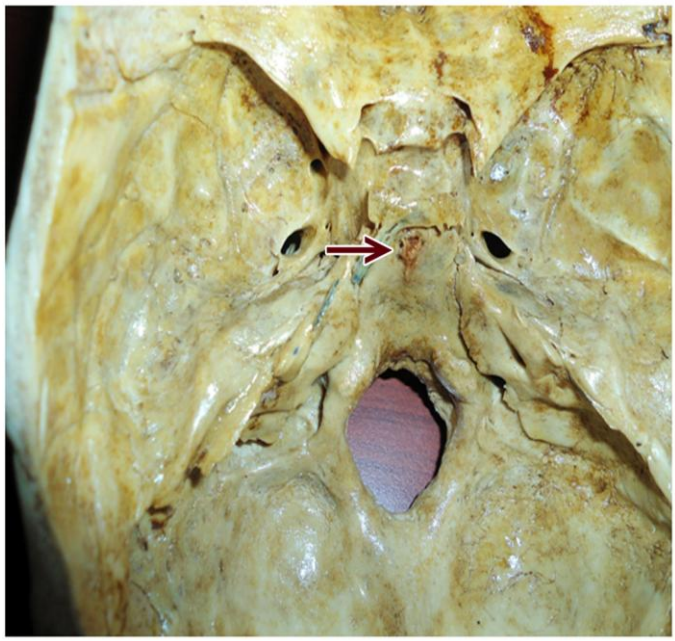

Fig: Arrow showing tubercle at the clivus

III. Discussion

Chordomas are rare, slow growing tumors arising from the remnant of notochord.the incidence is more in sacrococcygeal region, next comes the clivus, they being caudal and cephalic limit of the notochord. The cellular remnants of the notochord left behind results in slow growing neoplasm, sacrococcygeal or clivuschordomas. Pressure symptoms in clivuschordoma include headache, diplopia, dysphagia, dysarthria and sensory changes in the face.[4]The pressure symptoms could be because of the compression on basilar artery and its branches or nerves.

MRI and CT scanning help to diagnose the condition. Families with multiple affected members have been reported but still not considered as hereditary. The treatment of choice for chordomas of skull base would be surgical. Some groups advocate universal administration of radiaotherapy for clivuschordoma. [5]

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