

Case Report

# Association of Maxillary Osteoma with Choroidal Osteoma

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Osteomas of the paranasal sinuses are common slowly growing lesions and often appear as asymptomatic finding on radiological examination. They represent the most common benign neoplasm of the nose and paranasal sinuses<sup>1,2</sup>. We report a case of a young male who had a maxillary osteoma extending into the orbit and a choroidal osteoma on the same side. This association of orbital and choroidal osteoma has not been reported before in literature.

## CASE REPORT

A 16 yr old male presented in our outpatient department with slowly progressive painless proptosis of the right orbit with decreased vision for 1 ½ years. This was associated with epiphora and nasal discharge from the right side.

On examination his visual acuity was 6/9 and 6/6 in the right and left eye respectively. The right globe was proptosed 4 mm, displaced 4-5 mm superiorly

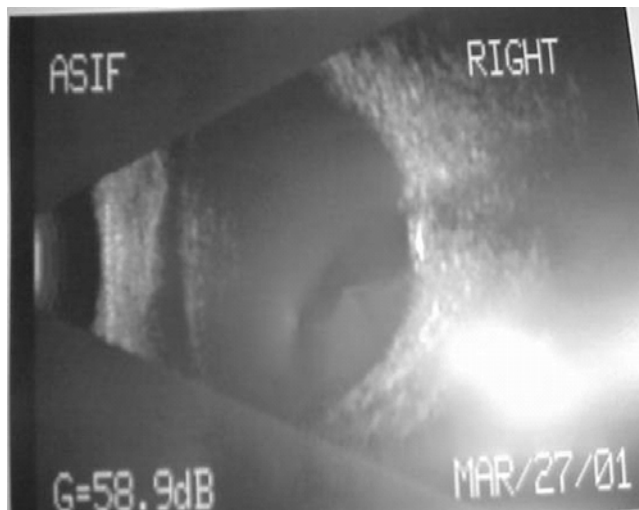
and 2-3 mm laterally. There was slight limitation of down gaze on the right side with a negative forced duction test. A hard rounded swelling was felt at the junction of the floor and the medial wall of the right orbit. The sensation in infra orbital nerve area intact. Fundus examination revealed a yellowish-orange, peripapillary placoid fundus lesion on the right side with pseudopod-like edges associated with areas of retinal pigment epithelium atrophy, indicating choroidal osteoma (Fig. 1). Anterior rhinoscopy showed hypertrophy of the inferior turbinate. B-scan echography revealed placoid lesion of the posterior ocular coats next to the optic nerve characterized by localized areas of high ultrasound reflectivity with a corresponding retrobulbar orbital shadowing (Fig. 2). Computed tomography of the orbit demonstrated plate-like thickening with calcification of the choroid that was isodense with the normal skeletal bone. Moreover there was a dense, well outlined lesion involving the anterior floor of the right orbit and the anterior wall of the right maxillary antrum (Fig. 3).

Mild compression of the right globe was seen. Systemic examination did not reveal any significant findings and serum calcium was found to be normal.

Considering the cosmetic deformity, displacement of the globe, epiphora and the potential for further growth it was decided to go ahead with right partial



**Fig. 1:** Choroidal osteoma of right eye



**Fig. 2:** B Scan shows choroidal osteoma as intense white signal below optic nerve head.

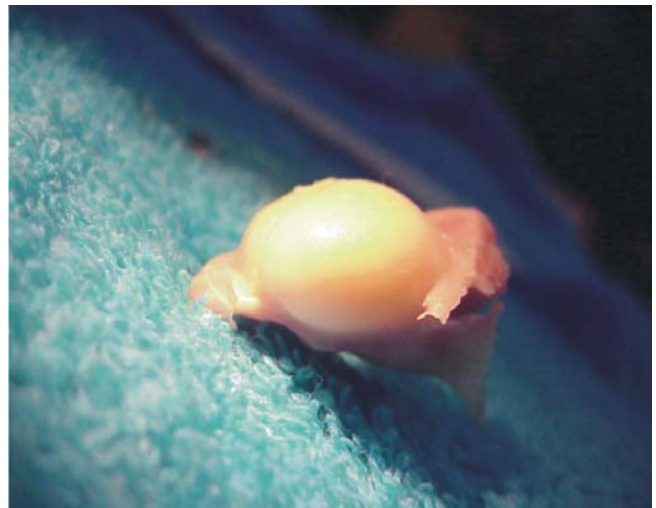
maxillectomy combined with a dacryocystorhinostomy. Osteotomies were made to remove the lesion with 2 mm margin of normal bone (Fig. 4). Post operatively there was resolution of the hyperglobus and epiphora.

## DISCUSSION

Paranasal osteomas<sup>3</sup> are benign, slow growing bony tumors that usually appear in patients between 15 and



**Fig. 3:** Maxillary osteoma of right side on CT Scan



**Fig. 4:** Gross picture of the removed osteoma

40 years of age and arise mainly from the facial and skull bones. Patients may have facial asymmetry, facial pain, headaches, chronic sinusitis, exophthalmos, nasal obstruction, or displacement of an eye. The frontal sinus is the most common site of origin of paranasal sinus osteomas, followed in frequency by the ethmoid<sup>4</sup> and maxillary sinuses. The sphenoidal sinus is the least frequently involved. These are presumed to arise from junctional points of

membranous and cartilagenous bones. The etiology of osteomas is debated but the most commonly accepted theories are embryologic, traumatic or infections. These lesions may vary in diameter from few millimetres to more than 3 cm in size. The lesion may be cancellous or compact type bone. Therapy is indicated only when the osteoma produces symptoms or if it is seen to enlarge on successive radiographs<sup>5</sup>.

Choroidal osteoma is a benign, ossifying tumour typically found in healthy young females<sup>6</sup>. Usually it is unilateral, localized in the posterior pole of the eye, near the optic disc and the macula<sup>6-8</sup>. Its aetiology is unknown: it may be caused by osseous metaplasia of the retinal pigment epithelium, or it may represent a kind of choristoma. It has not been reported to be associated with orbital osteomas.

## CONCLUSION

Association of orbital and choroidal osteoma should always be checked when either of the two lesions are seen.

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