

Case Blog

Title: Maxillary Osteosarcoma with Fibrous Dysplasia of Frontal Bone – A Rare Case Blog

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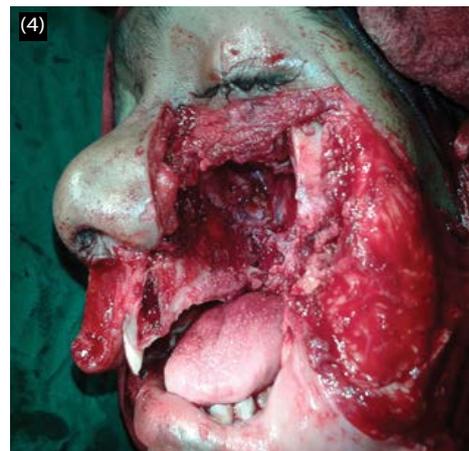


Figure 1: CT scan showing osteosarcoma Lt maxilla.

Figure 2: 'Sun burst' appearance.

Figure 3: Total maxillectomy done showing the tumour.

Figure 4: Intra op pic after total maxillectomy.

Introduction

Osteosarcoma is the primary malignancy of bone which accounts for 15-20% of all the primary bone tumours. Osteosarcomas of Head and neck is a relatively rare tumour and accounts for 10% of all osteosarcomas [1]. The mean age of occurrence of this tumour is fourth decade. Diagnosis is mainly based on the CT scan, which also clearly describes the extent of the disease. Osteosarcomas of jaw differ from osteosarcomas of other long bones in its biological behaviour. Early diagnosis and adequate surgical resection are keys for high survival rate. This paper documents a rare presentation in which there is osteosarcoma of the maxilla with fibrous dysplasia of frontal bone, dual presentation in the same patient.

Case Blog

A twenty two years male patient came to the Department of ENT and Head Neck surgery with complaints of left sided cheek swelling, left sided nasal obstruction, watering of let side eye for the past four months. There was also occasional history

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of nasal bleeding from left side for the same period and loosening of left upper jaw teeth. On clinical examination there was hard swelling (7cm × 5 cm), fixed to skin and deeper tissues. Another hard swelling (3 cm × 2 cm) was present over the right side eye brow, not fixed to the overlying skin. No paraesthesia or loss of sensation was present over left side cheek or over the right side forehead region. Proptosis of left side was present. There was no fluctuation, visible pulsation or hyperpigmentation seen. It was not compressible or reducible. There were no signs of ulceration or sinus formation.

CT scan of Para nasal sinuses findings was left maxillary antrum showing “sun burst” opacification (Figures 1 and 2). Left nasal cavity was occluded and left orbit was encroached upon by mass. Those findings were suggestive of osteosarcoma. Frontal bone was having the classical “ground glass appearance” suggestive of fibrous dysplasia of the bone. As maxillary region swelling was more suggestive of sarcoma, it was taken as prime importance and treatment was planned accordingly. Endoscopy assisted biopsy of the mass was planned first. Biopsy from the left nasal cavity showed spindle shaped and polygonal cells with large hyper chromatic nuclei. Tumour cells showed marked nuclear pleomorphism and osteoid production, multi nucleated cells with bizarre hyper chromatic nuclei and mitotic figures were found. Histopathological findings were suggestive of osteosarcoma.

Left sided total maxillectomy was done preserving left eye (Figures 3 and 4) .Specimen was sent for histopathological examination and histopathological report confirmed it to be osteosarcoma. The patient was sent to oncology department for further management and was followed up regularly. Right side frontal bossing was looking more a kind of fibrous dysplasia with the classical ground glass appearance in CT scan; hence observation and conservative management was planned. The patient went for chemotherapy and regular follow-up was done every 3months.

Discussion

Osteosarcomas being the rare primary bone tumour of the Head and Neck easily can be left undiagnosed or underdiagnosed. The most common presentation of osteosarcomas is painless hard swelling, associated with epistaxis, nasal obstruction, loosening teeth, eye problems [2]. In our case also patient had all these problems. As it was a painless swelling patient was not so much worried, and this lead to delay in diagnosis. The differential diagnoses that we should keep in our mind when we are diagnosing osteosarcoma are chondrosarcoma, Ewing’s sarcoma, metastasis, fibrous dysplasia, rhabdomyosarcoma [2].

The diagnosis was done in this patient, because of the classical sunburst appearance in the CT scan [3]. This bony swelling started as a painless progressive swelling and the duration was only 4 months. Because of its rapid progression, this was thought to be more a kind of malignant tumour, rather than inflammatory swelling. Also, radiology and histology studies were more in favour of osteosarcoma.

After histopathological confirmation, Patient was started on chemotherapy. Patient was regularly followed up in our department in 3rd month and 6th month. There was no recurrence of tumour noted.

Conclusion

Osteosarcomas of head and neck are very rare. When one physician is encountering a bony hard painless swelling rapidly progressing in nature, with complaints of eyes, loosening of teeth, one should always keep in mind the chances of primary bone tumour of the Jaw. Though incidence of these tumours is found to be rare, there are possibilities of these sarcomas, and if early diagnosis is not done in these patients, prognosis is found to be very bad.

References

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