



Case Report

Extensive Ameloblastoma of the Mandible

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Abstract

The ameloblastoma is the most common and aggressive odontogenic tumour of the jaws. But only rarely the anterior portions of the jaws are involved. Since extensive ameloblastoma of the mandible crossing the symphysis upto the canine region of the opposite site is a rare occurrence, so we are encouraged to present this case for academic interest.

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Introduction

The ameloblastoma is the most common and aggressive odontogenic tumour of the jaws^{1, 2, 3}. It is a true neoplasm, generally considered to be a benign but persistent lesion. However, some authors consider this tumour to be a locally malignant lesion on the basis of persistent local growth^{4, 5}. The suggested aetiology of ameloblastoma is that it either arises from the dental lamina or more probably, it arises from basal cells of the oral epithelium or from cells that have undergone differentiation to mimic the ameloblast⁶. The ameloblastoma usually occurs in persons between the age of 20 and 50 years with the average age being 39 years. About 80% occur in the mandible and the remainder in the maxilla. In both the mandible and the maxilla, the majority (80%) is located in the molar area and a few (10% to 20%) in the premolar area. Only rarely the anterior portions of the jaws are involved⁷. Since extensive ameloblastoma of the mandible crossing the symphysis upto the canine region of the opposite site is a rare occurrence, so we are encouraged to present this case for academic interest.

Case Report

A 22 year old married female, hailing from Baghmara, Rajshahi was admitted in to the surgery unit - II of Rajshahi Medical College Hospital on 27-06-2002 with complaints of asymmetry of the face due to massive swelling in the lower right jaw. The patient stated that she had noticed this gradually growing tumour mass during the past 5 years causing a noticeable facial deformity. The patient was transferred to ENT ward, RMCH for radical oral surgery. Extraorally on examination, a firm, non-tender, diffuse swelling involving the entire right mandible (Fig. 1 and Fig 1.a) measured approximately 10 x 8 cm was detected. Intraorally, an oval mass of tissue measuring 6x6 cm. was seen from the right ascending ramus upto midline of the mandible with loosening and displacement of teeth. The colour of the mucosa was normal but showed cuspal indentation from the upper teeth.

Panoramic view (Orthopantomogram) of the mandible revealed large multilocular areas of radiolucency involving whole of the right

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Fig. 1. Clinical Photograph Showing a Large ameloblastoma.



Fig. 2. Panoramic View (Orthopantomogram) of the Mandible showing multicystic areas of radiolucency with expansion and thinning of the cortical bones.



Fig. 1.a



Fig. 3. P.A. View of the mandible after operation with metallic plate and screws.

mandible extending upto lower left canine area (Fig.2). The labial cortical plate was expanded and thinned. There were small cystic areas in or around the larger cystlike areas. This lesion simulates the radiographic appearance of an ameloblastoma. Hemimandibulectomy under general anaesthesia was performed and reconstruction was done with metallic plate and screws (Fig. 3). The patient was given nasogastric feedings for 5 days with usual post-operative antibiotics and analgesics. Later on, diagnosis of ameloblastoma was confirmed by histopathology.

Discussion

Extensive ameloblastoma of the mandible causing severe facial deformity is really disfiguring condition with unbearable social problem. This poor woman stated that her husband started living separately and got married to another one because of her ugly looking facial deformity. The socio-cultural fact that was revealed out of this condition is really unfortunate. Had it been diagnosed earlier, there would have been much better scopes for post-operative functional and cosmetic results.

The treatment of the ameloblastoma ranges from conservative curettage to radical resection of the tumour. In most instances, the early literature advocated conservative treatment consisting of simple enucleation from an intraoral approach. Because of the high recurrence rate in conservative method of treatment, the pendulum at this time appears to have swung toward a more radical surgical approach. Successful treatment is a difficult term to define because the recurrence of the tumour does not always necessarily indicate that the treatment was unsuccessful. Sometimes, radical resection may be difficult to justify when a less extensive procedure will maintain functional and cosmetic results for more than 20 years.⁸ Again it is also equally difficult to justify in an elderly patient who has impaired general health because the radical treatment might cause situation

worsen than the disease itself. On the other hand, conservative treatment cannot be justified if recurrence is likely within a short time.

Conclusion

Since the ameloblastoma is locally invasive, destructive and clinically malignant tumour, the only rational treatment is complete surgical removal. And if the lesion is very extensive, radical resection of the involved bone with or without immediate reconstruction is the treatment of choice. As far as possible, immediate reconstruction must be planned to restore the function and aesthetics.

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