Case Report

LARGE AND EXPANDING ODONTOGENIC MYXOMA OF MANDIBLE: A RARE ENTITY

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ABSTRACT

Odontogenic myxoma (OM) is a benign tumor of jaw, accounts 3-6% of all odontogenic tumors. OM frequently occurs in second and third decade of life and females are more affected than males. It is a slow growing, painless and expansile tumor. We report a case of Odontogenic myxoma which is a rare entity, in a 30-year-old female presented with expansile lytic lesion in mandible.

Keywords: Benign, Myxoma, Odontogenic, Aggressive, Mandible

INTRODUCTION

Intraosseous myxomas are rare and are almost exclusively confined to jaw and they are odontogenic in origin (Suchitra *et al.*, 2013). Few intraosseous myxomas have been found in clavicle (Zimmerman and and Dahlin, 1958) ribs (Pansecchi, 1967) and femur (Pansecchi, 1972).

In 1947, Odontogenic myxoma (OM) was first described by Thoma and Goldman (1947). It is a benign and accounts 3-6% of all odontogenic tumors (Varun *et al.*, 2016). OM frequently occurs in second and third decade of life and females are more affected than males. It is a slow growing, painless and expansile tumor may leads to tooth mobility, root resorption, bone expansion, cortical destruction and facial distortion (Suchitra *et al.*, 2013).

We report a case of Odontogenic myxoma which is a rare entity, in a 30-year-old female presented with expansile lytic lesion in mandible.

CASE

A 30-year-old female patient presented to Dental OPD with Painless swelling on left side of mandible for 6 months. Swelling was gradually increasing in size.

Radiologically, there was a unilocular osteolytic lesion measuring 7x5x3cm, leading to expansion of bone.

Incisional biopsy was sent to the department of pathology was a provisional diagnosis of Ameloblatoma. Grossly, multiple grey white soft tissue pieces measuring 1x0.5x0.3 cm were received in 10% formalin. Sections were stained with H&E stain. Microscopic examination shows predominantly myxomatous stroma focally lined by flattened lining epithelium along with sparse spindled or bland stellate cells embedded in it. Occasional bony trabeculae also noted. Hence a diagnosis of Odontogenic myxoma was made.

DISCUSSION

Odontogenic myxoma is a benign tumor derived from embryonic mesenchymal elements of a developing tooth including dental papilla, dental follicle and periodontal ligament (Thabusum *et al.*, 2017). It is an infiltrative tumor which leads to massive cortical bone expansion and destruction of bone (Guzman *et al.*, 2016).

Incidence of OM in Asia, Europe and America has been found to be 0.5% to 17.7% (Khan and Agrawal, 2015). It is common in second and third decade of life. Rare in children and adults more than 50 years of age. Mandible is affected more than maxilla (Varun *et al.*, 2016). Patients age in our case is 30 years and gender are female with site affected is mandible which is in concordance to the literature.

Indian Journal of Medical Case Reports ISSN: 2319–3832(Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jcr.htm 2019 Vol.8 (4) October-December, pp. 8-9/Ekta et al.

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Radiologically OM appears to be unilocular to multilocular lesion and have well- defined to diffuse margin (Varun *et al.*, 2016). Our case was having unilocular lytic lesion involving the mandible and causing bone expansion.

Differential diagnosis must be considered are simple cysts, ameloblastoma, Odontogenic keratocysts, intraosseous hemangioma and giant cell granuloma.

Histopathologically -OM show abundant myxoid stroma with spindle to stellate shaped cells. Microscopic features were also concordance with the literature in our case.

Treatment options are: enucleation, excision, radical surgery with curettage of adjoining hard tissues. OM has high recurrence rate 10-33% (Buch *et al.*, 2017).

CONCLUSION

As this benign tumor has an aggressive nature, it is of utmost importance to look into each and every report on odontogenic myxoma. Radiographic patterns show wide variations which compel the radiologist to suggest differential diagnosis. Therefore, a correlation of clinical, radiological and histopathological examination is necessary for diagnosis.

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