ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 11, Issue, 04, pp.2839-2841, April, 2019

DOI: https://doi.org/10.24941/ijcr.34572.04.2019

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

CASE REPORT

AMELOBLASTOMA OF MAXILLA WITH CYSTIC DEGENERATION: A CASE REPORT

***Senthil Kumar, P., Selvakumar, S., Gurkirpal singh, M. and Damotharan T.**

K.A.P.V Govt Medical College Trichy, Tamil Nadu, India

ARTICLE INFO

Article History:
Received 20th January, 2019
Received in revised form
19th February, 2019
Accepted 13th March, 2019
Published online 29th April, 2019

Key Words:

Ameloblastoma, Odontogenic Tumors, Odontogenic epithelium, Ectomesenchyme.

ABSTRACT

Ameloblastoma is a benign, true neoplasm of odontogenic epithelial origin It is usually asymptomatic and manifest clinically when lesion enlarges in size. It mostly occurs in mandible, maxillary involvement is quite uncommon. We are presenting a case of Cystic Ameloblastoma in a 45 year old female patient.

***Citation*: *Senthil Kumar, P., Selvakumar, S., Gurkirpal singh, M. and Damotharan T.*2019. "**Ameloblastoma of maxilla with cystic degeneration: a case reporteport", *International Journal of Current Research*, 11, (04), 2839-2841.

INTRODUCTION

Odontogenic tumors constitute an unusually diverse group of lesions. It arises from tooth forming tissues, either from odontogenic epithelium or ectomesenchyme or both. It can also develop from pre-existing cysts. It is classified according to their tissue of origin. Ameloblastoma is the most common, benign tumor of odontogenic epithelial origin. It is mostly found in mandibular posterior region, prevalent among third to fourth decade of life, having a male predilection. Robinson *et al* described it as (UNIAC) Usually unicentric, Non functional, Intermittent in growth, Anatomically benign, Clinically persistent (Shafer, 2012).

Ameloblastoma has different clinical presentation

- Conventional ameloblastoma, solid or multicystic
- Unicysticameloblastoma
- Peripheral or Extra osseous
- Malignant

CASE REPORT

A 45 year old female patient reportedto the Department of Dental Surgery in KAPV Government Medical College and Hospital, Trichy, Tamil nadu with chief complaint of swelling in left side of the face for past six months. Swelling was initially small and had gradually increased in size.

****Corresponding author:*** **Senthil Kumar, P.,**
K.A.P.V Govt Medical College Trichy, Tamil Nadu, India.

Extraoral examination shows diffuse swelling in left maxillary region measuring about 5×5 cm, extending from inferior border of orbit till upper lip and from lateral border of nose till aline extending vertically down from the outer can thus of left eye. Obliteration of nasolabial fold was seen. Skin overlying the lesion appeared normal and non fixed. On palpation swelling was bony hard, non-tender and without fluctuation (Fig.1&2). Intraorallly swelling was seen in hard palate not crossing midline, extending from central incisor till second molar (21-27) with obliteration of maxillary buccal vestibule on left side. Occlusion was normal with displacement of anterior teeth (21&22). Mucosa was pale pink in colour with smooth surface. Swelling was bony hard in palate and buccal vestibule (Fig.3). CT scan was analysed in axial and coronal section which showed large unilocular radiolucent lesion measuring 5×4×3 cm in alveolar process of left maxilla with bicortical expansion, involving roots ofanteriors and premolars without any calcifications (Fig.4). Routine investigations were done. Upon aspiration, blood tinged fluid was obtained. Incisional biopsy was taken from buccal surface of the lesion, On HPE it showed odontogenic epithelial cells with peripheral palisading and central stellate cells suggestive of cystic ameloblastoma. Final diagnosis was made with correlation of clinical, radiological and histopathological findings.

Treatment: Under general anaesthesia intraoral vestibular incision was given, flap elevated and hemimaxillectomy was done. Temporalis muscle flap reconstruction was done to augment the defect. Specimen obtained was sent for HPE, (Fig.5).

Figure 1.

Figure 2.

Figure 3.

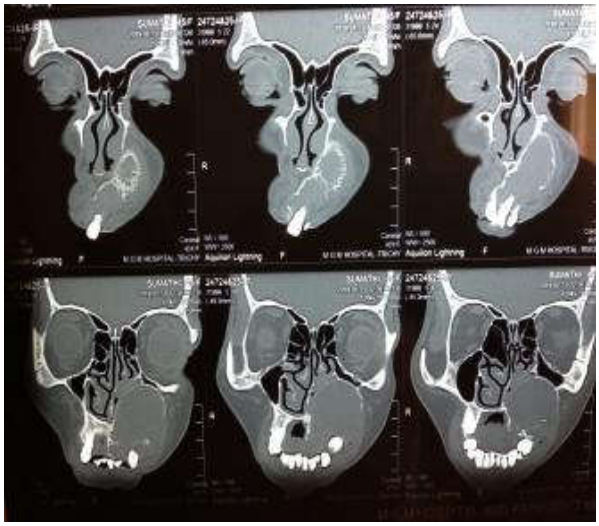

Figure 4.

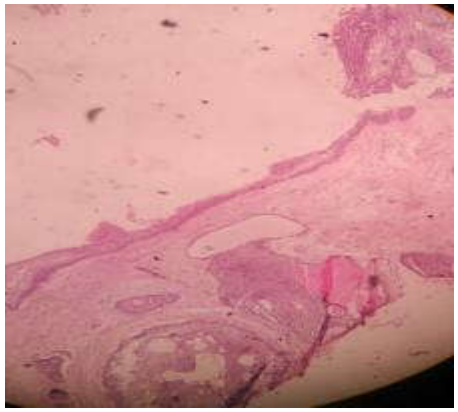

Figure 5.

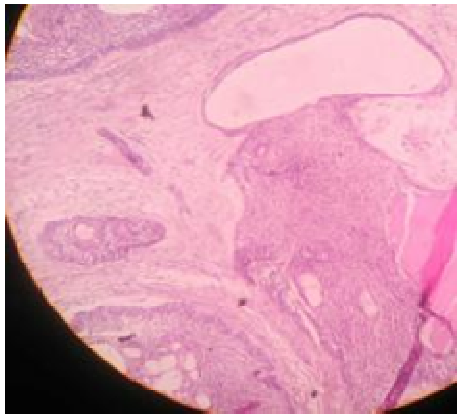

Figure 6.

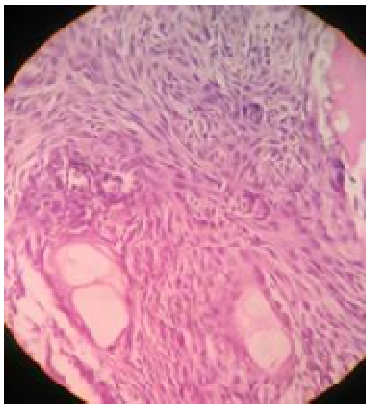

Figure 7.

which revealed islands of odontogenic epithelium with peripheral palisading and central stellate cells with focal cystic change suggestive of cystic degeneration of ameloblastoma (Fig 6, 7 & 8)

DISCUSSION

Ameloblastoma is a benign tumor of odontogenic epithelial origin, arising from cell rests of enamel organ, cell rests of Hertwig's epithelial root sheath or cell rests of Malassez. Ameloblastoma account for 1% of jaw tumors among that 80% occurs in mandible and 20% in maxilla. Ameloblastoma in maxilla is quite uncommon. Persistent growth pattern and ability to produce pronounced deformity are characteristic that contribute to identification of ameloblastoma. Typically ameloblastoma is slow asymptomatic intraosseous expansion (Neeraj Kumar, 2014). Some reports indicate ameloblastoma occurs 1% in maxilla, of them 47% in molar region, 15% in antrum and floor of the nose, 9% in premolar region,9% in canine region and 2% in palate (Dwiwedi, 2013). It is usually seen in 3rd to 4th decade of life, more significant in blacks and asians and has a tendency to recur. Radiographs are useful in diagnosis which show well demarcated unilocular or multilocular expansile lucencies with a soap bubble appearance or honeycomb appearance. CT scan is useful in assesment of extent of tumor (Adeel, 2018). Diagnosis is done with radiographs incidentally or as the patient reports with symptoms. Findings are not pathognomonic and lesion should only be confirmed with HPE (Neagu *et al*., 2019). Six histological subtypes or variants of ameloblastoma are seen viz; follicular, plexiform, acanthomatous, desmoplastic, granular and basal cell type with follicular and plexiform being most common (Cadavid, 2018). Follicular subtype is most common in undergoing cystic degeneration. Usually cyst formation in ameloblastoma is due to degeneration of cellular islands or stromal degeneration [.https://doi.org/ 10.1148/rg.305095200]. A characteristic feature of some tumors is cystic breakdown of epithelium at many places, so that cysts of varying sizes may form, alternatively cyst may arise not in epithelial masses but by stromal degeneration (https://www.bjoms.com› article › pdf). Curettage of unilocular or multilocular lesion is often followed by local recurrence. Block resection of lesion with 1cm margin of unaffected bone is treatment of choice and is rarely followed by recurrence [Burkets oral medicine 11 th edition]. It is to emphasize that maxillary lesion are more insidious than mandible owing to proximity of vital structures and maxillary sinus. Also the very thin cortical bone of maxilla forms weak barrier for spread of tumor.

Abbreviations: HPE- Histo Pathological Examination.

Financial Support and Sponsorship: Nil.

Conflicts of interest: There are no conflicts of interest.

REFERENCES

Adeel M., Rajput M., Arian A., *et al*., 2018. Ameloblastoma: Management and Outcome. Cureus10(10): e3437. doi:10.7759/cureus.3437.

Ameloblastoma - British Journal of Oral and Maxillofacial Surgery https://www.bjoms.com › article › pdf

Burkets oral medicine 11 th edition

Cadavid AMH., Teshima THN., Pinto CAL., Camillo CMC., Lourenco SY. 2018. Ameloblastoma with distinctive granular cell pattern: an 8 case study.Autops Case Rep. 2018 Oct 9;8(4):e2018052. doi: 10.4322/acr.2018.052. eCollection Oct-Dec.

Dwiwedi N., Raj V., Chandra S., Agarwal A. 2013. Maxillary ameloblastoma extending into the maxillary sinus. *Eur J Gen Dent.,* 2:182-6.

https://doi.org/10.1148/rg.305095200

Hybrid Lesion of Ameloblastoma: A Perplexing Pathological Entity RajRai[1], SP Praveen Reddy[2], Junaid Ahmed Shaik[3], Sandeep Goyal[4], SM Manjunath[4], Vivek Sunda[5], Shally Gupta[6], Rose Kanwaljeet Kaur[7]

Neagu D., Escuder-de la Torre O., Vásquez-mahía I., Carral-Roura N., Rubin-Roger G., Penedo-Vásquez Á., Luaces-Rey R., López-cedrún JL. 2019. Surgical Management of Ameloblastoma. Review of Literature.J ClinExp Dent. 2019 Jan 1;11(1):e70-e75. doi: 10.4317/jced.55452. eCollection Jan.

Neeraj Kumar, Niharika Rathore, Hemant Shakya, Anshuman Jamadade, Puneet Chitlangia. "Cystic Degeneration in Follicular Ameloblastoma: A Case Report". Journal of Evolution of Medical and Dental Sciences 2014; vol.3, Issue 18, May 05; Page: 4859-4865, DOI: 10.14260/jemds/2014/2524.

Shafer, WG, Hine, MK, Levy BM. 2012. editors. R Rajendran,BSivapathasundaram. Cysts and Tumors of Odontogenic Origin In: *Textbook of oral pathology* 7thed Philadelphia: WB Saunders. pg. 259-316.

****