Volume-9 / Issue-I/June 2021/ISSN No.-2321-3450
DOI: httpp://doi.org/10.36611/upjohns/volume9/Issue1/9
Date received: 10.04.2021 / Date published: 15.06.2021

CASE REPORT

"CENTRAL GIANT CELL GRANULOMA OF MAXILLA - A CASE REPORT"

Authors: Dhiraj Kr. Talukdar
Authors Affiliations: Former Principal Govt. Dental College, Dibrugarh, Prof. and Head Dentistry, Jorhat Medical College, Jorhat

ABSTRACT:-
Central giant Cell granuloma (CGCG) formerly called giant cell reparative granuloma is a benign bony lesion and etiology is unclear. It occurs most commonly in mandible and also occur in maxilla. 1%-7% of all benign lesions of jaws are central giant cell granuloma. It affects children and adults. It is usually a slow growing lesion, fast growing lesions also reported. The fast growing CGCG has an aggressive behaviour mimicking a malignant lesion through it has the innocent histological appearance. CGCG sometimes resemble a wide variety of conditions that led to a misdiagnosis both on clinical and radiographic examination. Histological examination confirms as CGCG. The case described here involved maxilla which was treated with surgical curettage. The patient has been followed up for $1^1/_2$ years with no post operative complications and no recurrence.

Keywords: Central giant cell granuloma, maxilla, benign, jaw

INTRODUCTION:

Central giant cell granuloma (CGCG) is uncommon benign intraosseous lesion [1]. Jaffe first described it in 1953. CGCG is an idiopathic non-neoplastic proliferative lesion. CGCG was at one time widely term as reparative giant cell granuloma and was considered primarily to be a local reparative reaction of bone. Since the lesion represents essentially a destructive process the use of the term reparative has subsequently been discontinued [2]. WHO says it is an intraosseous lesion consisting of cellular fibrous tissue that contains multiple foci of hemorrhage, aggregations of multinucleated giant cells and occasional trabeculae of woven bone[3] CGCG occurs predominantly in females in 2nd and 3rd decade of life [4]. These lesions cause facial swelling, asymmetry and expansion of cortical plates clinically. Radio graphically shows resorption of roots of teeth with cortical perforation [3]. A diagnosis of CGCG is made based on histopathology [2]. Though majority of these lesions occur in young patients there certainly is a percentage that occur in older patients.

CASE REPORT

A female patient aged 53 years complained of a mass on the left maxillary region starting few months after extraction of a tooth. There was no pain. The physical examination of the lesion showed it as painless mass firm in consistency fixed to deeper layers measuring about 2x1cm in diameter.

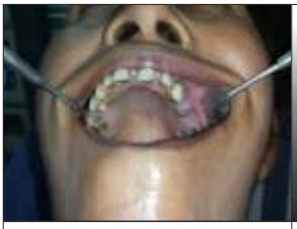

Figure 1
Intraoral view showing swelling in relation of 24 and 25 missing teeth region

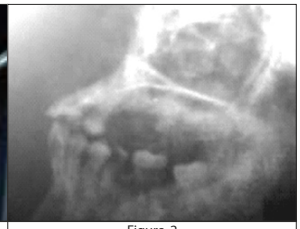

Figure-2
Pre operative maxillary radiograph shows destruction of thealveolar process of the maxilla on left side with thin out cortex..

The patient underwent surgical curettage, pathology diagnosed the lesion as central giant cell granuloma.

Figure-3
Intra oral view after $1^1/_2$ years of surgery showing post operative follow up.

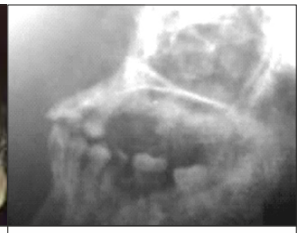

Figure-4
Post operative maxillary radiograph after $1^1/_2$ years of surgery shows no erosion or bone destruction noted in maxilla.

The patient is being monitored and no recurrence has arisen in the one and half year follow up

DISCUSSION

Central giant cell granuloma (CGCG) is a nonneoplastic proliferation of unknown etiology. It is uncommon lesion. It occurs most commonly on the mandible than maxilla. Less than 7% of all benign lesions of mandible and maxilla is central giant cell granuloma. It occurs 2-3 times more frequently in mandible than in maxilla and more commonly on right side than on left side [1] CGCG occurs generally in patient in 2nd and 3rd decades of life [1]. Central giant

cell granuloma also occurs in other facial skeleton and cranial vault and rarely in short tubular bones of hand and feet [2]. In jaw bones central giant cell granuloma may be peripheral or central. Peripheral lesions present as pedunculated or sessile lesion on gingiva while central lesions are endosteal [5]. Usually it can present as painless swelling, rapid growth also seen in some cases, lesion can erode the bone particularly of the alveolar ridge to produce a soft tissue swelling [6] . It is twice as frequent in female [6]. Variable radiological appearance is seen in CGCG. Usually the lesion appears as a unilocular or multilocular radiolucency[5,7]. It may be well defined or ill defined and shows variable expansion and destruction of cortical plate. The radiological appearance of CGCG may be confused with that of many other lesions of jaws. The final diagnosis of CGCG is done by histopathology because the clinical and radiological features are not specific [7]. Histologically, CGCG contain focal arrangement of giant cells within a vascular stroma with thin walled capillaries adjacent to the giant cells. There is a spindle cell stroma, which may well be the cell of origin [8] . Surgery is the most accepted and traditional form of treatment. However tissue removal range from simple curettage to block resection [6,7]. Usually surgical curettage used for smaller lesion and for aggressive lesion en block resection is used [6].

CONCLUSION

CGCG is an uncommon benign bony lesion affecting jaws and etiology of the lesion is unknown but is assumed to occur bytrauma and inflammation.Diagnosis is based on histopathology. Surgical treatment is the common and widely accepted form of treatment.

REFERENCES:

1. C.Padmavathi Devi, T.Swarookanth, G. Sudhakar, D. Kiranmi, R. Sasank and D. SridharreddyCentral Giant Cell granuloma of Maxilla A case report Indian J otolaryngal Head Neck Surg: 2013 Jul65 (suppl. 1);192-194
2. Amar A Sholapurkar, Keerthilatha M Pai, AuswafAshan Central giant cell granuloma of the anterior maxilla. Indian Journal of Dental Research year; 2008/volume19/issue;1/page;78-82
3. Deepanshu Gulati, Vishal bansal, Prajesh Dubey, Sanjay Pandey and Abhinav Agarawal Central Giant Cell Granuloma of posterior Maxilla; First Expression of PrimaryHyperthyroidism. CaseReport in Endocrinology/2015/Article Volume 2015/Article IDI70412/7pages/ https://doi-org/10. 1155/2015/170412
4. E De Corso, M Polit, Mr. Marchese, T Pirranti, R Recci and G Paludetti Advanced giant cell reparative granuloma of mandible: radiological features and surgical treatment Acta Otorhinolaryngol 1 tal. 2006 Jun;26(3) 168-172.
5. Hooman Ebrahimi, Javed Yazdani and MosoumehMehdipour Central Giant Cell Granuloma of the Posterior Maxilla; A case Report, Journal of Dental Research, Dental Clinics, Dental Prospects 2008 spring, 2(2) 71-75
6. P Garg A Central giant cell granuloma in Posterior part of maxilla – A case Report International Journal of surgery case reports volume 30, 2017, page 222-225
7. K A Kamble, Sanketh S. Guddad, Sujith S. Guddad,
A. Lingappa Central giant cell granuloma: a case report with review of literature. Journal of Indian Academy of oral Medicine & Radiology 28(I), 98, 2016
8. Rani Prakash, Sasankoti Mohan, Sankap Verma, Neha Agarwal [] and Udita Singh central giant cell granuloma: a case Report BMJ case Report 2013; 2013:bcr 201300993 2013 Jul 20.

***Corresponding Address:**

Dr. Dhiraj Kr. Talukdar
Pubsarania Road, H. No. 86
Guwahati-781003
E mail- t.dk191@hotmail.com
M – 9435032191

How to cite the article

Talukdar DK - "Central Giant Cell Granuloma of Maxilla - A Case Report"- UPJOHNS- Vol.-9, Issue-I, June 2021

DOI: httpp://doi.org/10.36611/upjohns/volume9/Issue1/9