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INTRODUCTION

Belonging to the group of Giant and Cystic Cell Lesions of the 4th Edition of the Head and Neck Tumours Classification by WHO, the Central Giant Cell Granuloma is an intraosseous osteolytic lesion, with an unknown etiology, characterized by a benign proliferation of fibroblasts and osteoclast-like giant cells, within a well vascularized stroma. Most of these lesions happen in the anterior sector of the maxillary bones, in women under 30 years of age, being typically asymptomatic and non aggressive. The conventional therapy for the Central Giant Cell Granuloma is the surgical complete enucleation.

CLINICAL CASE

DESCRIPTION OF THE PATIENT: Female caucasian patient, 21 years old, sent by her medical assistant for evaluation of a radiolucent lesion in the posterior mandible, between teeth 47 and 48

DESCRIPTION OF THE LESION Well defined radiolucent lesion, with radiopaque borders, between teeth 47 and 48, with the approximate dimension of 10 mm, and without associated symptoms

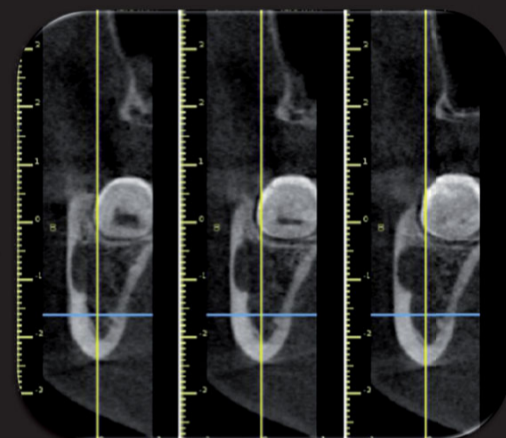
DIAGNOSTIC HYPOTHESIS: Lateral Periodontal Cyst, Simple Bone Cyst, Aneurysmal Bone Cyst, Cemento-osseous Fibroma, Odontogenic Keratocyst and Unicystic Ameloblastoma

COMPLEMENTARY EXAMS: Orthopantomography, *Cone Beam Computerized Tomography* (CBCT), Periapical Radiograph, Blood Tests

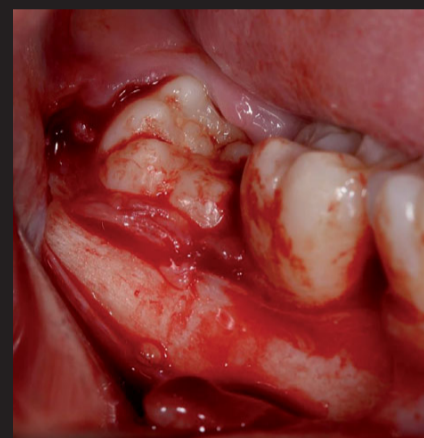
Clinical Procedure



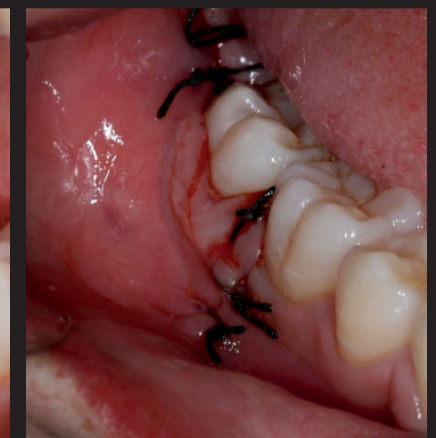
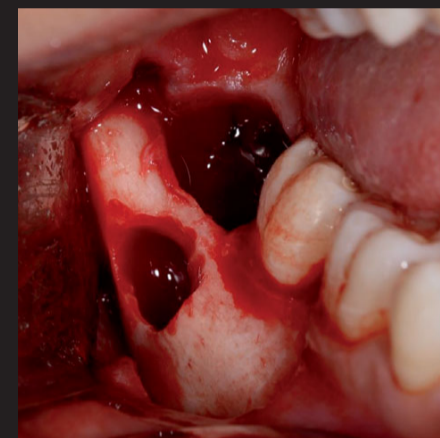
[Picture 1] Portion of orthopantomography where the radiolucent well defined lesion between teeth 47 and 48 can be seen



[Picture 2] CBCT in which the lesion is seen, as well as its proximity to the Inferior Alveolar Canal and level of associated destruction (with maintenance of the buccal cortical)



[Pictures 3-5] Images related to the clinical procedure, in which it is possible to see the tooth 48 during its extraction, after a mucoperiosteal flap extended to the mesial aspect of the tooth 47, the post-extractional alveolae as well as the buccal access to the intraosseous lesion and the surgical wound already closed with five simple stitches using silk 3/0, respectively.



1º Extration of the tooth 48

2º Incisional Biopsy

3º Surgical Suturing

Formol Fixation

Histological Analysis

DIFFERENTIAL DIAGNOSTICS

(Same Morphological Pattern)

HYPERPARA-
THYROIDISM

CHERUBISM

ANEURYSMAL
BONE CYST

Blood Tests

Clinical Evaluation

Histological Evaluation

HISTOLOGICAL RESULT (Dr. Saudade André, anatomopathologist): Numerous giant cells osteoclast-like, whose distribution is associated to hemorrhage areas, in a well vascularized stroma, wich includes fibroblasts, miofibroblasts and histiocytes.

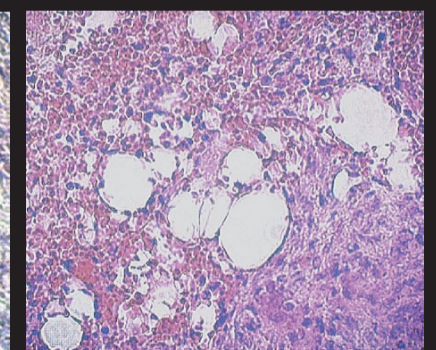
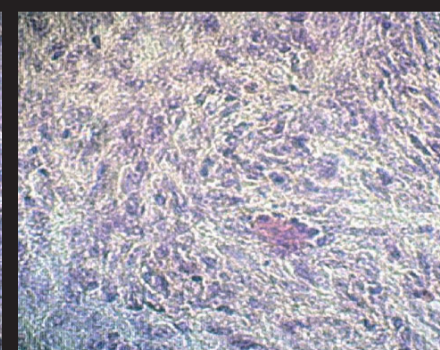
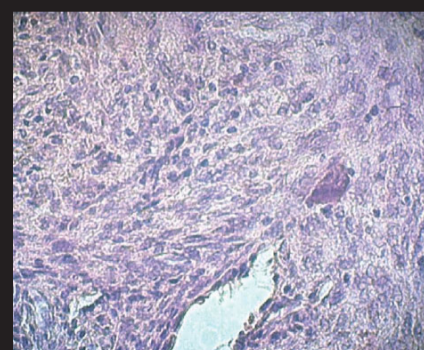
DIAGNOSTIC: Central Giant Cell Granuloma (CGCG), inserted in the group of Giant and Cystic Cell Lesions of the 4th Ed. Of the WHO Classification for Head and Neck Tumours

RADIOGRAPHIC CONTROL

1 year



[Picture 9] Periapical radiograph for control after 1 year of enucleation of the lesion



[Pictures 6 - 8] Histological images of the analysed sample of the lesion, in which is possible to see Giant Cells osteoclast-like (20x0,22) [6 and 7] as well as immune cells like macrophages and fibroblasts in a hemorrhagical background (10x0,22) [8]

DISCUSSION

The patient of the present case had several of the clinical features that characterize the CGCG, like mostly appearing in female patients under 30 years and being asymptomatic. [2-3] [5-7] However, most of the CGCG appear in the anterior maxilla and mandible, wich didn't happen in this case, and being so, the CGCG was not proposed as a diagnostic hypothesis. The definit result was given by the histological analysis of the sample, that showed the typical characteristics of these types of lesions. [2-3] [5-7] The treatment for this case was the total enucleation of the lesion followed by the curretage of the cyst loca, as it is currently established by the literature as the therapy to follow. [2-] [7-8]

CONCLUSION

Although typically not aggressive, the Central Giant Cell Granuloma may appear with a destructive and painfull character, and can be similar, either radiographically or histologically, to other conditions that are more aggressive or have a systemic envolvment, making the early diagnostic and intervention of extreme importance.



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