ARTICLE IN PRESS

REV ESP CIR ORAL MAXILOFAC. 2015;**XXX(XX)**:XXX-XXX



Clinical report

Large peripheral ossifying fibroma: Clinical, histological, and immunohistochemistry aspects. A case report

Gran fibroma osificante periférico: aspectos clínicos, histológicos e inmunohistoquímicos. Presentación de un caso

Introduction

The most frequent oral lesions are those expressed by reactive gingival growth^{1,2} and they usually present an indolent behavior. However, there is a great variety of different lesions which are clinically similar, and it is what makes the diagnosis difficult.³ For instance, we could mention peripheral ossifying fibroma which has a complex diagnosis as it shares clinical and histological characteristics which are common to other conditions.⁴

Basically, ossifying fibromas may be divided into two types: central and peripheral.⁵ Reports of intraoral peripheral ossifying fibroma started in the late 40's,² and nowadays it is a relatively common lesion corresponding to 9.6% of gingival biopsies.⁶ As regards to pathogenesis, it seems to be related to periodontal ligament,⁷ once it exclusively develops in the gingival portion of the maxilla, because of proximity of periodontal ligament and gum, and because of the presence of oxytalan fibers inside the mineralization of some lesions.³⁻⁸ In addition, the presence of trauma or chronic irritation is especially related to the etiology of these gingival conditions, for instance, presence of calculus, plaque, orthodontic braces, restorations and maladjusted prosthesis.¹ In the specific case of peripheral ossifying fibroma, many authors consider it as a focal, reactive, non-neoplastic lesion of soft tissue²⁻⁹ which usually develops from interdental papilla.4-7

Regarding clinical aspects, peripheral ossifying fibroma is usually presented as a single sessile- or pedunculated-based nodule covered by mucosa which has a color that ranges from pink to red,⁶ and its surface may be ulcerated or not, flat or uneven.^{2–7} The most frequent location of this lesion is the portion of upper incisor teeth⁴ and the size of most lesions does not exceed 1.5 cm.^{5,6,10} However, when we are dealing with gingival lesions, clinical characteristics are insufficient for a final diagnosis once they are common to several lesions, therefore, histopathological examination is always necessary to determine the diagnosis.³

Despite peripheral ossifying fibroma corresponding to a common gingival lesion, case reports describing it are scarce.⁹ Thus, due to the large size of the lesion that causes the destruction of tissues supporting the teeth involved, associated with its rarity in the mandible, the description of the authors who conducted this clinical case is relevant and important.

Case report

J.L.O., a 38-year-old patient was referred to treatment experiencing an extensive lesion involving anterior portion of lower alveolar border with a 10-year progress history. Upon extraoral examination, patient's difficult labial sealing was noticeable by virtue of change in the lower third of the face due to intraoral growth of the lesion. Intraoral clinical evaluation revealed a large-sized lesion involving the anterior portion of the mandible, promoting displacement of teeth 41, 31, 32, 33 and 34 (Fig. 1). Similarly, dental displacement was radiographically clear and the lesion presented slight radiopacity (Fig. 2). Despite the lesion being covered by intact mucosa of normal color, during planning we chose to perform an incisional biopsy prior to definite surgical treatment, by which diagnosis was of inflammatory fibrous hyperplasia. Surgical Access occurred through a wedge incision surrounding the lesion, associated with intrasulcular incision in involved teeth and tissue displacement was performed with the aid of a Molt separator (Fig. 3). Following complete removal of the lesion, dental extraction of involved teeth was performed since they presented compromise of supporting periodontium (Fig. 4). Tissue was repositioned using 5-0 Polypropylene

Please cite this article in press as: Célio Mariano R, et al. Large peripheral ossifying fibroma: Clinical, histological, and immunohistochemistry aspects. A case report. Rev Esp Cir Oral Maxilofac. 2015. http://dx.doi.org/10.1016/j.maxilo.2015.04.008

2

ARTICLE IN PRESS



Fig. 1 – Intraoral clinical appearance of the lesion in anterior portion of lower border.



Fig. 4 – Surgical wound following total exeresis of the lesion and extraction of involved teeth.



Fig. 2 – Panoramic radiograph evidencing tooth displacement due to lesion expansion.

wire and the piece was sent to histopathological examination. Lesion was microscopically described by the presence of dense fibrous connective tissue with multiple vital bone trabeculae, surrounded by uneven pavimentous epithelium (Fig. 5). The presence of mixed inflammatory infiltrate was also seen. In addition to routine HE staining, immunohistochemistry was performed for actin in smooth muscle tissue, in which positivity to HHF-35 was observed (Fig. 6), thus confirming myofibroblastic characteristic of the lesion. Therefore, the diagnosis of excisional biopsy was peripheral ossifying fibroma. The patient recovered with no incidents and clinical and radiographic 12-month follow-up revealed absence of relapses (Figs. 7 and 8).

Discussion

Reactive or inflammatory gingival lesions are commonly found in oral cavity, corresponding to over 90% of gingival biopsies.¹ The most mentioned ones are inflammatory fibrous hyperplasia, pyogenic granuloma, peripheral ossifying fibroma, and giant-cell granuloma.² Among them, peripheral ossifying fibroma stands out due to its relapsing



Fig. 3 - Displacement of the lesion.



Fig. 5 – Microscopic features of the lesion evidencing bone trabecula surrounded by dense connective tissue matrix.

Please cite this article in press as: Célio Mariano R, et al. Large peripheral ossifying fibroma: Clinical, histological, and immunohistochemistry aspects. A case report. Rev Esp Cir Oral Maxilofac. 2015. http://dx.doi.org/10.1016/j.maxilo.2015.04.008

Download English Version:

https://daneshyari.com/en/article/8708245

Download Persian Version:

https://daneshyari.com/article/8708245

Daneshyari.com