

REACTIVE CHONDROMATOUS METAPLASIA CAUSED BY DENTAL PROSTHESIS IN ANTERIOR MAXILLA

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Received: 12/08/2014; Accepted: 12/15/2014

ABSTRACT

Osseous and chondromatous metaplasia in maxillary bones is extremely rare, therefore this study is an important case report of the female patient, 48 years old, Caucasian, user of prosthesis for 20 years, complained of gingival enlargement in the anterior maxilla. The case was diagnosed by clinical, radiographic and histopathological findings, characterized by nodular increase of limits defined with atrophy of alveolar process, radiographically, edge with regular radiopaque appearance. Its histological features show metaplastic cartilaginous tissue, epithelial recoding keratinized with hyperplasia irregular of papillae and inflammatory infiltrate. The patient was treated by total excision of the lesion for subsequent oral rehabilitation.

KEYWORDS: Metaplasia, Maxilla, Dental Prosthesis, Case Report.

1. INTRODUCTION

The Osseous and chondromatous metaplasia caused by dental prosthesis in maxillary bones, also known as Cutright's Lesion is considered a benign representation of the cartilaginous and osseous metaplasia. Although it can occur in other body regions, only receives the name of Cutright's Lesion, when it affects the oral cavity, which may be associated with chronic trauma by the use of ill-fitting prosthesis, or result of reactivity of embryonic traces present in the papilla incisive or duct nasopalatine^{1,2,3}.

This injury, although rare character and little scientific disclosure has been described in the alveolar process underlying ill-fitting dentures, palate associated with the glandular tissue, or in the tongue associated with lipomas and fibrous tumor^{3,4,5}. Histopathologically, may have characteristics similar to sarcomas, which are not significant in maxilla lesions, and usually do not suggest malignancy^{2,5,6}.

In this context, it is understandable that accurate diagnosis is extremely important for better treatment planning that, in this case, should to be conservative and

favorable. Although some authors warn that poorly differentiated lesions may be considered potentially malignant and treated accordingly^{5,6,7}. Therefore, this study objective to report a case of reactive metaplasia chondromatous, diagnosed and treated at the Center for Dental Specialties in the city of João Pessoa, Paraíba State, Brazil.

2. CASE REPORT

A 48 years old female was attended of the diagnostic and oral surgery services in João Pessoa, Paraíba State, Brazil, complaining of pain when chewing, when the use of upper dentures. The anamnesis revealed a satisfactory general condition, with no history of systemic disease. Specifically, the patient claimed to be user of total dental prosthesis over about 20 years, and cultivate the habit of smoking for 30 years. When asked about the history of the disease, she said: "noticed 6 months ago an "increase" in the gum below the prosthesis, and nuisance while feeding".

The intraoral clinical examination, there was the presence of a nodular and sessile lesion with a smooth and not ulcerated surface, similar to the adjacent mucosa; and a fibroelastic consistency, measuring approximately 0.5 cm in greatest diameter, being located in the alveolar crest of anterior alveolar edentulous upper jaw. It was noted that the prosthesis had no stability, retention from the bone crest and poor oral hygiene. Additionally, was observed in a discrete bulging in the anterior bone surface of lesion, but not saw to the examination outside face. It is no presence of lymph nodes infarction during palpation of the head and neck.

To complement the clinical and diagnostic phase was requested an occlusal radiograph of the maxilla, which showed a radiopaque lesion in the anterior maxilla, oval format, defined outline. Additionally were observed mingling with the anterior nasal spine, in the most poste-

rior region of its perimeter, which corroborates the findings by Lello & Makek⁸, about the difficulty of accurate diagnosis of this injury, only when considered clinical and radiographic features. Given these findings, it was decided to excisional biopsy, with fixation in 10 % formalin and stained with hematoxylin-eosin. Histologic characteristics of tissue were compatible with the diagnosis of reactive metaplasia chondromatous showing metaplastic cartilaginous tissue, with intense proliferation, hypercellularity and hyperchromasia associated with an epithelial covering keratinised with irregular hyperplasia of the peculiar tissue slide of the papillae. An inflammatory infiltrate loosely organized and randomly distributed also was observed (Figure 1 and 2).

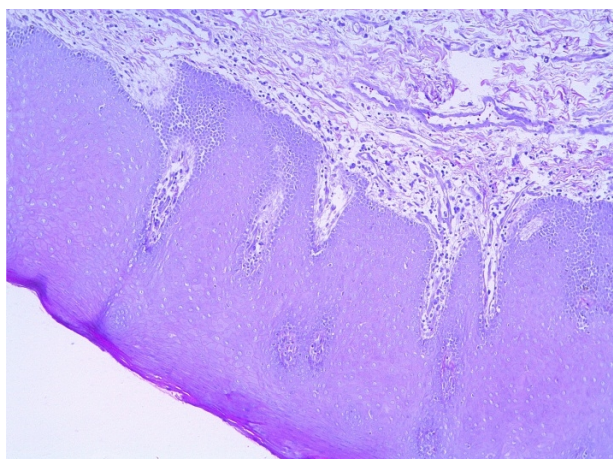


Figure 1. Histological court (100x) HE stained, with features epithelial and conjunctive compatible with the diagnosis of reactive metaplasia chondromatous.

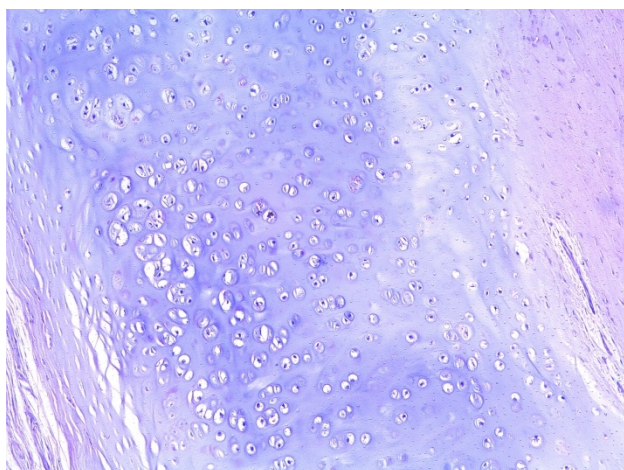


Figure 2. Histological court (100x) HE stained, with features of Young cartilaginous tissue compatible with the diagnosis of reactive metaplasia chondromatous.

The prognosis was considered favorable by the benign nature of this pathology, and therapeutic addressed characterized by preservation case, and full surgical removal. The latest patient follow dated six months after diagnosis, and no recurrence or new lesions was ob-

served in other intraoral region. And the patient could be rehabilitated through making new prosthesis, appropriate and well adapted.

3. DISCUSSION

Occasionally, cartilaginous and bone tissue can be discovered within soft tissue specimen removed from the oral cavity. Cutright², pioneer researcher chondromatous metaplasia caused by reactive bone in the oral region, described 31 cases of pathology, listing clinical and histopathological features. The epidemiological profile designed by the researcher showed a predisposition for females, between 5th and 6th decades of life and Caucasian, corroborating the account in question.

The literature describes this type of injury is rare in the anterior maxilla; its development can be established more frequently along the inferior and posterior alveolar ridge of former users of denture ridge atrophic^{6,9,10}. However, studies Cutright², showed a predilection for the anterior maxilla, also in edentulous individuals, possibly users of total poorly adapted prosthesis, and poor hygiene³.

The intraoral clinical aspect of the lesion resembled inflammatory fibrous hyperplasia, being very characteristic with the already stunted reported in publications whose clinical features in exophytic nodular lesion, painful on palpation, are fibrous consistency on palpation and surface ranging from smooth to ulcerated^{9,10}. Additionally, it can be observed similarities with lipofibroma, neurofibroma, rhabdomyoma, tumors of salivary glands minor and peripheral ossifying fibroma⁶.

The histopathological characteristics can vary from loose to dense stroma of connective tissue with cartilage and bone tissue, and areas of calcification. The cartilaginous tissue may resemble fibrocartilage or hyaline cartilage. This is may contain loci of calcification from individual cells while large calcified areas, which correspond to an amorphous, eosinophilic material. Both may contain areas of progressive differentiation of tissue mesenchymal osteoclasts². Islands of cartilage are formed amid conjunctive tissue⁸, and osteoclasts present in it can have different degrees of cellular atypia, like hyperchromatic nuclei and bi or multinucleated cells, with the worrying for sarcoma diagnosis⁹, contrasting the case.

In this case report, the treatment of the lesion was restricted to total surgical excision with safety margin, that we performed for diagnostic purposes. Therapeutic widely applicable to lesions of small diameter in prosthetic regions.

4. CONCLUSION

The reactive chondromatous metaplasia in maxillary bones is rare, nodular, exophytic lesion that affects

mainly users of poorly fitting dentures and extensive resorption of the process alveolar. Can be diagnosed by clinical, histopathological and radiographic's correlation, although sometimes can be hindered by the degree of cellular atypia and presence of associated injuries. The treatment in this case reported was effective and not remissive with accompaniment of 6 months, which supports the benign characteristics of the lesion.

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