Soft tissue myxomas are benign tumours of uncertain differentiation, arising in somatic soft tissues as muscles, dermal and subcutaneous tissues. In oral cavity they are extremely rare. Histologically, it showed spindle-shaped cells in a myxoid stroma. This paper relates a case of soft tissue myxoma at the right posterior superior alveolar ridge in a 34-year-old male. An excisional biopsy was made and presented with recurrence six months later. The current findings in the literature are also highlighted, in order to expand the peculiar characteristic of this unusual lesion.

Key words. Soft tissue myxoma; oral cavity; alveolar ridge; benign neoplasm

INTRODUCTION

Soft tissue myxoma is a true mesenchymal benign neoplasm composed of undifferentiated stellate cells in a myxoid stroma, uncommonly localized in intra-oral region. It exhibits slight predominance in females at the fourth decade. It could present as a mucous, multinodular mass. Most cases were misdiagnosed clinically as irritation fibroma, fibroepithelial polyp, and tumor of minor salivary glands.

The pathogenesis of soft tissue myxoma is unclear. Ultrastructural studies suggested that the cells constituents were predominantly fibroblast-like cells and that the composition of the extracellular matrix of myxoid tumours of soft tissue is heterogeneous, consisting of, amongst others, glycosaminoglycans and albumin, which appear to play an active role in their morphogenesis. Another theory attributed the origin to mesenchymal elements derived from dental papilla, dental follicle or periodontal membrane.

Due to the rarity of this lesion in the oral cavity, the authors related a case of soft tissue myxoma located in region of right posterior superior alveolar ridge.

CASE DESCRIPTION

A 34-year-old male, presented to diagnosis at the clinics complaining of an asymptomatic mass with an evolution of about two years.
Clinical examination showed a tumoral soft mass, redding, exophytic, in the region of right later alveolar ridge, measuring 6 x 3 cm (Figure 1). Radiologically, observed neither evidence of bone involvement (Figure 2). The preoperative clinical diagnosis was fibroma. Excisional biopsy was performed and the tissue was sent for histological examination (Figure 3), where revealed a lesion hypocellular exhibiting spindle-shaped and stellate cells in a myxoid fibrous stroma, with slight collagen fibres distributed uniformly (Figure 4). On the basis of these histological findings, the final diagnosis was oral soft tissue myxoma. Recurrence was present at a six months follow-up and a new excision was realized. The patient is being following at eighteen months without evidences of other recurrences.

DISCUSSION

Most of soft tissue myxoma is situated in the skin, subcutaneous tissues, genitourinary or gastrointestinal tract. Localization in facial soft tissues is very rare. In the head and neck region 43 cases were reported, and, specifically within the oral cavity, only 25 cases. The case here related is the first in the literature located in the alveolar ridge region. This feature makes this myxoma an unusual case. Regarding to the most affected gender, there is disagreement. Most authors affirm that this lesion is more frequent in females. Mandibular myxomas accounted for 66.4% of the total, with 33.6% in the maxilla. Whereas 65.1% of the mandibular cases were located in the molar and
premolar areas, 73.8% cases were seen in the same areas of the maxilla.\textsuperscript{14}

Concerning the pathogenesis of oral soft tissue myxoma, the literature is controversial. There is a theory that assumes soft tissue myxomas to be a peripheral myxoma, distinguishing of odontogenic myxoma, which is intraosseous,\textsuperscript{2} by localization. Other authors believe that the origin of soft tissue myxoma would be associated with the presence of altered fibroblasts or miofibroblasts that probably produce an excessive amount of mucopolysaccharides and generally lose the potential to produce mature collagen.\textsuperscript{7,8} There is also the assumption that the mesenchyme of a developing tooth or the periodontal ligament could be the origin of these tumors.\textsuperscript{17}

The differential diagnosis at first, in this case was traumatic fibroma. However, histologically, hypocellular areas comprising paucicellular myxomatous lesions with dispersed, inconspicuous spindle and stellate cells without pleomorphism, with slight collagen fibers and with sparse capillary blood vessels were observed, differently of the traumatic fibroma that would exhibit dense collagen fibres.\textsuperscript{18-20}

But the soft tissue myxoma can be also differentiated from odontogenic fibroma and neurofibrossarcoma.\textsuperscript{13,18,21,22} Odontogenic fibroma exhibits cords of odontogenic epithelium immersed in a mature collagen rich stroma,\textsuperscript{5} and the neurofibrossarcoma shows strong positive reaction to the S-100 protein, while soft tissue myxoma has no reaction to this protein.\textsuperscript{13,23} Authors evaluated p53, MIB-1, and Bcl-2 expressed by the epithelial and stromal elements in odontogenic myxoma of the jaws. The cells of the odontogenic epithelium were positive for Bcl-2, p53 and MIB-1. The stromal cell showed a high positivity for MIB-1. Based in these results, the authors concluded that the strong proliferation of stromal components is related to the growth of this odontogenic tumor.\textsuperscript{24}

Because soft tissue myxoma is a benign tumor, conservative surgical resection is the treatment of choice.\textsuperscript{6,16} In the case here reported, although a complete excision of the lesion was made, it recurred after six months. Another excision was realized. The patient is at eighteen months follow-up without evidence of recurrence. Our case is the first in the oral cavity that recurred. The recurrence rate is variable, from 3 to 30%,\textsuperscript{16,25,26} however, a longer following-up is required, as well as more cases, so to confirm the indolent behavior of these lesions.

**DISCLOSURE**

No potential conflict of interests relevant to this article was reported.

**REFERENCES**