Benign Fibrous Histiocytoma of the Buccal Mucosa: A Case Report

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ABSTRACT: Fibrous histiocytoma represents a benign but diverse group of neoplasms which exhibit both fibroblastic and histiocytic differentiation. The most common location of fibrous histiocytoma occurrence is the skin of the extremities, where it usually presents as a small, firm nodule. Oral and perioral lesions are uncommon, but when seen they occur predominantly on the buccal mucosa and vestibule. This is case report of a healthy 62-year-old female referred to our department because of a slow-growing mass on the right side of the buccal mucosa. The mass grew over the last nine months. Clinically it was diagnosed as benign mucosal fibroma but histologically it confirmed as benign mucosal histiocytoma. It was treated by surgical excision of the lesion. After excision complete clinical resolution was obtained without any complications. The patient was found to be disease-free after 6-month follow-up.

KEYWORDS: Benign mucosal histiocytoma, Neoplasm, Trauma, Buccal Mucosa.

INTRODUCTION

Fibrous histiocytoma represents a benign but diverse group of neoplasms which exhibit both fibroblastic and histiocytic differentiation. The cell of origin is believed to be the histiocyte, but the varied microscope appearances of the lesion has led to the use of numerous alternative diagnostic terms, including dermatofibroma, sclerosing hemangioma, xanthogranuloma, fibroxanthoma, and nodular subepidermal fibrosis.1,3

The most common location of fibrous histiocytoma occurrence is the skin of the extremities, where it usually presents as a small, firm nodule. Oral and perioral lesions are uncommon, but when seen they occur predominantly on the buccal mucosa and vestibule.1,3 The oral lesion is typically found in middle-aged and older adults, where it presents as a painless submucosal nodule which can vary in size from a few millimeters to several centimeters. Deeper tumors tend to be larger and most lesions cannot be easily moved about beneath the epithelium.3

CASE REPORT

In January 2011, a healthy 62-year-old female was referred to our department with the chief complaint of a slow-growing mass on the right buccal mucosa. The mass grew over the last nine months. Intraoral examination revealed a nodule on buccal mucosal. On palpation the lesion, measuring approximately 1 cm in diameter, was not painful and seemed to be well encapsulated, mobile and of a firm-elastic consistency. The overlying mucosa appeared grossly normal. No lymph nodes were palpable. The oral hygiene of the patient was satisfactory. There were no other abnormalities in the oral cavity and the systemic conditions of the patients were good. The clinical appearance of the lesion suggested the possibility of a neoplasm of soft tissues (benign mucosal fibroma). (Fig. 1)

The lesion was excised under local anaesthesia and was easily removed; with blunt dissection of the mucosa from the underlying tissues. The wound was closed primarily with the placement of 3-0 silk suture. Antibiotic coverage and chlorhexidine gluconate mouth wash were prophylactically used. The post operative course was uneventful. The specimen consisted of an encapsulated mass measuring 1 cm; the cut surface showed a non-tender elastic-hard mass, well circumscribed, non attached to the lower tissue, with normal mucosal surface, not ulcerated and without erosion of the contiguous bone.

Histologically it was characterized by microscopic feature show parakeratinized stratified squamous epithelium overlying fibrolular stroma.Connective tissue show plump to spindle fibroblast and foamy macrophages.Prominent endothelial lined blood vessel with
extravasated RBCs seen. (Fig. 2)

After excision it was obtained clinical resolution and without side-effects or complications. The patients was disease-free after 6-month follow-up. (Fig. 3)

DISCUSSION

The aetiology of oral BFH is obscure. Chronic irritation, continuous trauma and spontaneous development have been reported for those located within the oral cavity.\textsuperscript{1,4,13-16}

The clinical diagnosis of oral BFH should shell out by clinical features as slowly enlarging, well-circumscribed lesion, no aggressive behaviour with overlying intact mucosa; however, at clinical level, the differential diagnosis with other soft tissue neoplasms is not possible. Histological examination as rare mitosis, absence of cellular atypia and immunohistochemistry patterns as high positivity for vimentin, CD38, factor XIIIa.\textsuperscript{1,4,6} The differential histological diagnosis includes the neurofibroma: this tumour is identified by positivity of S-100 protein.\textsuperscript{11} Some leiomyosarcoma are diagnosed incidentally when presumed BFH are removed. The negativity for SMA could differentiate this tumour from true BFH.\textsuperscript{1,5} Another lesion that can be differentiated from the BFH is dermatofibroma, so-called atypical-BFH.\textsuperscript{12} Atypical-BFH has similar response to the immunohistochemistry but the first arises in the subcutaneous tissue and the second one arises in the deep tissue. In the soft tissues of the oral cavity the principal lesion that requires a differential histological diagnosis from BFH is malignant fibrous histiocytoma (MFH). The immunophenotypes of these tumours aren't sufficient to make a differential diagnosis. Histological pattern is important: the high pleomorphism of the cells, the high mitotic activity, more than 5 per 10 high power fields, and infiltration of the capsule and into the surrounding tissue are present in MFH.\textsuperscript{7} In the cases presented, the neoplasms were clearly defined at clinical analysis and there were no signs of local invasion. Therefore, we decided to immediately perform surgical excision, postponing imaging analyses (TC-scan and MRI) to determine eventually secondary localizations of the tumour.

The prognosis of oral BFH is very good. Metastases haven’t been reported. Local recurrence is present when the excision is incomplete. Indeed, for the BFH of the buccal mucosa it’s necessary that the specimen has wide margins; the simple enucleation of the tumour from the surrounding tissue may facilitate local recurrences.\textsuperscript{1,4,10-12} In conclusion, it was described two cases of oral BFH, successfully diagnosed and managed by surgical excision.

REFERENCES


LIST OF PHOTOGRAPHS

Fig. 1: Pre Operative Intra oral Photograph

Fig 2: Histopathological Photograph

Fig 3: Post Operative Photograph