

Benign Fibrous Histiocytoma: Report of Case

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Abstract

Benign fibrous histiocytoma is a rare and usually painless oral neoplasm found in adults that may affect either soft tissue or bone typically noted in their fifth decade. This case was found in a 32 year-old Caucasian male who presented with a fairly well circumscribed unilocular radiolucent lesion extending from the mandibular right first incisor to the left first premolar and reaching the inferior mandible on a panoramic radiograph. A bony window was created and the intrabony lesion was curetted. Multiple sections revealed a cellular tumor composed of uniform spindle-shaped cells arranged in a prominent whorled or storiform pattern. Scattered xanthoma cells, multinucleated giant cells, lymphocytes, and deposits of hemosiderin were noted throughout the lesional stroma. Although malignant fibrous histiocytoma of the bone is relatively well known, benign fibrous histiocytoma of the bone is very rare.

Keywords: Benign histiocytoma, oral neoplasms, malignant fibrous histiocytoma

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Introduction

Benign fibrous histiocytoma is a rare oral neoplasm that may affect either soft tissue or bone. It is a lesion of adults, typically noted in the fifth decade. It presents as a mass that may be ulcerated and is usually painless.¹

Case Report

A 32-year old white man was seen in May 2001 because of swelling in the left region of the mandible. A panoramic radiograph was taken which showed a fairly well circumscribed unilocular radiolucent lesion extending from the right first incisor to the left first premolar and reaching the inferior mandible. (Figure 1)



Figure 1

The patient was suitably prepared and draped for excision of the intraosseous left mandibular lesion. Local anesthesia was achieved using 2% lidocaine with 1:100,000 epinephrine given by both block and infiltration techniques. The incision was started at the mandibular left second molar, extended forward around the cervical aspects of the teeth to the right canine, and then directed obliquely to terminate in the mucobuccal fold at the apex of the right canine. The mandibular body was exposed by elevation of the mucoperiosteal flap outlined by the incision. A bony window was created and the intrabony lesion was curetted. The bony edges were smoothed, the defect irrigated, and the incision closed with 3-0 silk suture. All tissue that was removed was placed in formalin and submitted to an oral pathologist for examination. Multiple sections showed a cellular tumor composed of uniform spindle-shaped cells arranged in a prominent whorled or storiform pattern. Scattered xanthoma cells, multinucleated giant cells, lymphocytes, and deposits of hemosiderin were noted throughout the lesional stroma. (Figure 2)

Discussion

The fibrous histiocytomas are a diverse group of lesions with a variable histologic appearance, clinical presentation, and biologic potential.² The dual population of fibroblast and macrophages must be present before a diagnosis of benign fibrous histiocytoma can be considered.¹ Enzinger et al., describe the fibrous histiocytoma in the World Health Organization publication on histological typing of soft tissue tumors as a benign unencapsulated and often richly vascular growth made up of histiocytes and collagen producing fibroblast like cells which are arranged in a whorled or cartwheel pattern.³

There is a histological similarity between a benign fibrous histiocytoma of soft tissue or bone and a non-osteogenic fibrous and metaphyseal fibrous defect.⁴ In fact, Huvos considered the majority of non-ossifying fibromas to be synonymous with benign fibrous histiocytoma.⁴ While it may not be possible to separate all non-ossifying fibromas from benign fibrous histiocytomas based on the histologic appearance or even fundamental cell of origin, it is probably reasonable to consider them as separate lesions based on their different radiographic and clinical presentation.⁵ Although malignant fibrous histiocytoma of the bone is relatively well known, benign fibrous histiocytoma of the bone is very rare.⁶ Dahlin found only 7 tumors out of a series of 6,221 that he would classify under this heading and considered this an entity of debatable nature.⁷ The findings of Hansangi et al. were the same as Hajdu who defined benign fibrous histiocytoma of bone was able to locate only four case reports under this heading.⁶ Elizabeth et al. found three additional reports which represent examples of this uncommon tumor in a review of the literature involving the oral and maxillofacial region.⁸ All three cases occurred in the posterior

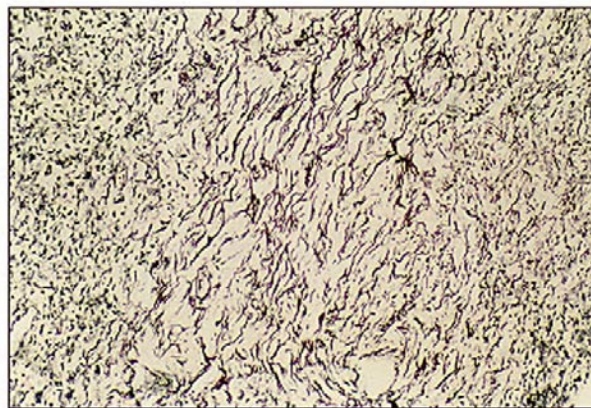


Figure 2

mandible. Surgical excision is the treatment of choice for benign fibrous histiocytoma.^{1,5,4} Clark and colleagues have reported three of seven patients treated with intralesional excision experienced local recurrence. In the Bertoni study,

of the eight patients who underwent intralesional excision (curettage), all but two had a recurrence.⁴ Petel et al. treated 18 patients with surgical excision; no recurrences have been reported.¹⁰

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