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Review Article

IRRITATIONAL FIBROMA- A REVIEW

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ABSTRACT

The effects of chronic local irritation have been seen commonly in the form of fibroma or mucocele causing functional and esthetic problems. The lesion is a result of trauma/chronic irritation or may arise from cells of periodontium or periosteum. The traumatic irritants include calculi, overhanging margins, restorations, foreign bodies, chronic biting, retained root stumps/fragments, margins of caries, sharp spicules of bones and/or overextended borders of oral appliances. The synonyms include, irritational Fibroma, traumatic Fibroma, focal fibrous hyperplasia, fibrous nodule, and fibrous polyp. An irritational fibroma may occur at any oral site but is seen most common on the buccal mucosa along the plane of occlusion. It may also occur on the gingiva or tongue. Irritational Fibroma has been common lesion encountered in the dental clinics, thus a vast knowledge about this lesion would be helpful for the dentists in treating the patients.

Keywords: Fibroma, Focal fibrous hyperplasia, Irritational fibroma.

1. INTRODUCTION

Oral mucosa is constantly subjected to external and internal stimuli and therefore, manifests a spectrum of disease that range from developmental, reactive and inflammatory to neoplastic. These lesions present as either localized or generalized and may be defined as "an increase in the size of an organ or tissue due to an increase in the number of constituent cells, as a local response of tissue to injury [1] Reactive lesions are clinically and histologically non neoplastic nodular swellings that develop in response to chronic and recurrent tissue injury which stimulates an exuberant or excessive tissue response. They may present as pyogenic granuloma, fibrous epulis, peripheral giant cell granuloma, fibroepithelial polyp, irritational fibroma, peripheral ossifying fibroma, giant cell fibroma, pregnancy epulis and commonly manifest on the gingiva [2]. Such reactive lesions are less commonly seen in other intraoral sites such as the cheek, tongue, palate and floor of the mouth. Fibromas are benign tumors composed of fibrous or connective tissue. They can grow in all the organs arising from mesenchyme tissue [3]. They appear either as pedunculated or sessile growth on any surface of the mucous membrane.

The lesion can become more than 3 cms in size but, is usually less than 1 cm. It occurs at all ages and in either of the sex. The fibroma is best treated by conservative, surgical or by laser. They do not have a malignant potential and recurrence is mostly as a result of failure to completely eliminate the chronic irritation involved [4].

Clinically, these reactive lesions often present diagnostic challenges because they mimic various groups of pathologic processes. They appear to be clinically similar, but; possess distinct histopathological features.

2. DISCUSSION

Fibrous growths of the oral soft tissues are fairly common and include a diverse group of reactive and neoplastic conditions. Enlargements of the oral cavity often presents a diagnostic challenge because, a diverse group of pathologic processes can produce such lesions. Within these lesions, a group of reactive hyperplasias which develop in response to a chronic, recurring tissue injury stimulates an exuberant or excessive tissue repair response [5].

Irritational fibroma, also known as traumatic fibroma or focal fibrous hyperplasia is the most common non neoplastic soft tissue exophytic lesion occurring in the oral cavity. It is a reactive lesion, caused mostly

by chronic trauma to the oral mucous membranes. There is no gender or racial predilection and the most common sites are the buccal and labial mucosa and the lateral surfaces of the tongue. A typical lesion usually presents as a smooth, dome-shaped or pedunculated nodule with the color of the surrounding mucosa. The clinical presentation and epidemiology of most non neoplastic growths in the oral cavity are quite similar; thus identification is dependent on histopathological differentiation [6].

Histopathologically, irritational fibroma are characterized by their dome shape with a keratinized stratified squamous epithelium, dense bundles of collagen fibers, spindle- or fibroblast-like cells, relatively few blood vessels and inflammatory cells in the submucosa [7].

The irritational fibroma is treated by conservative surgical excision. Recurrence is extremely rare. However, it is important to submit the excised tissue for microscopic examination because other benign or malignant tumors may mimic the clinical appearance of a fibroma [8].

Table 1: Differential diagnosis [10, 11]

Lesion	Age	Sex	Site	Surface	Presentation	Radiograph	Size
Fibroma	20+	F	Gingiva/buccal mucosa	Smooth Keratinized	Dunculated or sessile	None	1+Dcm
Pyogenic granuloma	20+	F	Gingiva	Ulcerated	Pedunculated	None	2-3Dcm
Papilloma	30+	M/F	Lips, tongue	Papillary	Pedunculated	None	Small
Peripheral ossifying fibroma	10+	F	Interdental papilla	Smooth Keratinized	Dunculated or sessile	None	>1Dcm
Giant cell fibroma	20+	M/F	Mandibular gingiva	Papillary	Dunculated or sessile	None	>1Dcm
Peripheral odontogenic fibroma	Any	M/F	Attached gingiva	Smooth	Dunculated or sessile	Sometimes	1-2Dcm
Peripheral adenomatoid odontogenic tumor	10+	F	Anterior maxilla	Smooth Keratinized	Nodular swelling	None	0.5-1Dcm
Peripheral giant cell granuloma	<30	F	Gingiva/alveolar ridge	Ulcerated	Dunculated or sessile	None	0.5-1Dcm
Neurofibroma	45+	M/F	Gingiva or tongue	Smooth	Dunculated or sessile	None	1-3Dcm
Lipoma	40+	M	Parotid area or buccal mucosa	Smooth Keratinized	Sessile	None	0.5-3Dcm
Peripheral ameloblastoma	50+	M	Posterior gingival	Smooth or pebbly	Sessile	Sometimes	0.5-1Dcm
Intraoral neurilemoma	Any	M/F	Tongue	Smooth Keratinized	Sessile	None	0.5-1Dcm
Peripheral calcifying odontogenic cyst	60+	M	Anterior mandible	Smooth	Sessile	rosion of bone	0.5-1Dcm

Worsaae and Pindborg [9] also reported similar cases and noted that the lesion presents an equal sex distribution, is painless, sessile, round or ovoid, broad-based swelling, lighter in color than the surrounding tissue due to reduced vascularity. The surface may be ulcerated and diameter may vary from 1 mm to several centimeters.

The differential diagnosis for a soft tissue growth can be extensive, but, a good history and careful clinical examination will usually eliminate many diagnostic possibilities. Ultimately the diagnosis is arrived at by correlation of clinical and the histopathologic findings. Table 1 shows various possibilities of diagnosis for patients with similar exophytic growths and their characteristic features.

3. CONCLUSION

The multiple causes and clinical features of irritational fibroma often create a confusing maze through which the clinician must carefully proceed in order to develop an accurate diagnosis and provide an effective treatment. Management for these patients depends upon the results of the investigations, patient's esthetic considerations and severity of the condition.

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