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Epulis Fissuratum

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Updated: Jul 6, 2009

Introduction

Background

Epulis fissuratum is a mucosal hyperplasia that results from chronic low-grade trauma induced by a denture flange.¹ Epulis fissuratum is analogous to acanthoma fissuratum of skin.

Pathophysiology

Epulis fissuratum arises in association with denture flanges. Consequently, epulis fissuratum is usually observed in the maxillary or mandibular vestibule.

Mortality/Morbidity

Significant morbidity does not occur with epulis fissuratum.

Race

Most cases of epulis fissuratum are observed in whites. This, no doubt, relates to the predominance of whites as denture wearers.

Sex

Most studies indicate a clear predilection for epulis fissuratum in females.² The fact that women are more likely than men to wear their dentures for prolonged periods because of their reluctance to be seen without them probably plays a significant role. In addition, more women than men wear dentures and are more likely to seek treatment. Possibly, atrophic epithelial changes secondary to menopause may influence an increased reaction to trauma in older females.

Age

Epulis fissuratum occurs in greatest numbers in the fifth, sixth, and seventh decades, but it can be observed at almost any age. Epulis fissuratum has been described in children. The fact that the lesions are related to denture wear and chronicity of an irritative process explains the higher incidence in older individuals.

Clinical

History

- Epulis fissuratum develops slowly over a prolonged period of time in patients with ill-fitting dentures. It is associated with a denture flange that may be either a full or partial denture.³
- Typically, patients with epulis fissuratum are asymptomatic.⁴

Physical

- Examination of an epulis fissuratum patient typically reveals folds of hyperplastic mucosa, which encompass the border of the denture flange. The edge of the denture usually fits in a groove between the folds. The lesions are most frequently observed at the facial aspect of the denture. The occurrence of this on the lingual surface is unusual. They are more often observed in the anterior portion of the jaws; however, a predilection for the maxilla or the mandible does not seem to exist.
- The surface of the epulis fissuratum mass tends to be smooth; however, occasionally, it is ulcerated (most often within the depth of the groove) or papillary.
- The size of the epulis fissuratum lesion is variable; some lesions are small, but they can be extensive and involve the entire length of the vestibule.⁵
- Although frequently of normal mucosal color, erythema may be associated with inflammation. Some lesions have a more pyogenic granuloma –like appearance because of capillary proliferation.



An epulis fissuratum in the anterior part of the mandible shows a central groove where the denture flange rests. Note the inflammatory erythema. The surface of the lesion is usually smooth as shown in the image.

Causes

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Causes

- The cause of epulis fissuratum is chronic low-grade irritation from an ill-fitting denture. Frequently, this is the consequence of resorption of the alveolar ridge so that the denture moves further into the vestibular mucosa, creating an inflammatory fibrous hyperplasia that proliferates over the flange.³

Differential Diagnoses

Metastatic Neoplasms to the Oral Cavity

Pyogenic Granuloma (Lobular Capillary Hemangioma)

Squamous Cell Carcinoma

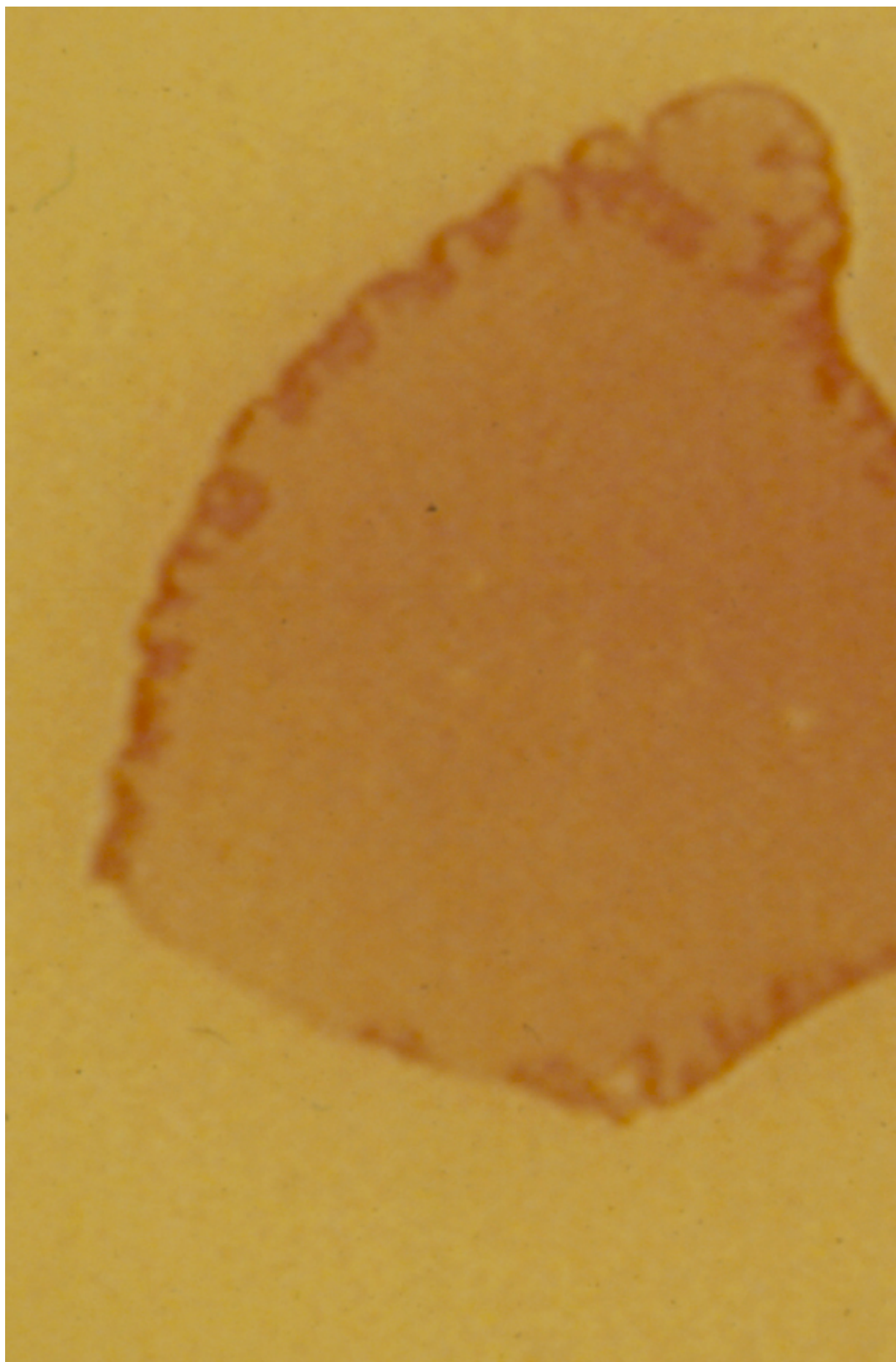
Workup

Procedures

- Surgically excise and microscopically examine the epulis fissuratum.

Histologic Findings

Epulis fissuratum is a hyperplastic reactive lesion, often with inflammatory and reparative phases. The histologic picture can be variable.⁶ Most frequently, a dense fibrous hyperplasia occurs, often with varying degrees of inflammation and vascularity. Because capillary proliferation is considerable, an overlap with pyogenic granuloma occurs. Mucous glands are often present in the specimen and may show a chronic sialadenitis. Occasionally, the glands may have an associated lymphoid hyperplasia and papillary ductal hyperplasia. The epithelium may be atrophic or hyperplastic and occasionally shows a pseudoepitheliomatous hyperplasia. Ulceration can occur. Infrequently, chondroid or osseous metaplasia can develop within the mass.



A view of a whole mount of a tissue section taken from an epulis fissuratum shows that it is essentially a fibrous hyperplasia. The central groove can be observed, and, in this patient, papillary hyperplasia is present in some areas.

Treatment

Surgical Care

Surgically excise the epulis fissuratum because even removal of the offending stimulus (ie, denture) will not result in complete resolution. In addition, correct the denture; otherwise, the lesion will recur. Either make a new denture or reline the old denture. The use of laser therapy is discussed in recent studies.⁷

Consultations

- Oral and maxillofacial surgeon for excision
- General dentist or prosthodontist for correction of the denture

Follow-up

Deterrence/Prevention

- Regular dental care can prevent epulis fissuratum. Patients who wear dentures frequently believe that they no longer require care, and, under these circumstances, dentures lose their correct fit and become the source of irritation.

Prognosis

- With correction of the poorly fitting denture, the prognosis for epulis fissuratum is excellent.

Patient Education

- Instruct the patient that regular dental care is necessary and that the oral tissues are changing constantly. This means that dentures are not permanent and need adjustments over time.

Miscellaneous

Medicolegal Pitfalls

- The potential problem is that masses that occur in the vestibular area and are associated with dentures tend to be dismissed as epulis fissuratum. Unfortunately, on rare occasions, these masses prov