

Surgical management of Epulis fissuratum caused by ill-fitting dentures: A case report

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Abstract

Epulis fissuratum is a benign hyperplastic lesion of the oral mucosa that develops as a result of chronic mechanical irritation, most commonly caused by ill-fitting dentures. This lesion typically occurs in the oral vestibule and is characterized by fibrous folds of mucosa along the denture border.

The aim of this case report is to present a clinical case of epulis fissuratum located in the mandibular vestibule and its surgical management.

A 62-year-old female patient presented to the Oral Surgery Clinic with a soft tissue mass in the right mandibular vestibular mucosa, associated with local irritation during denture use. Based on clinical examination, a provisional diagnosis of epulis fissuratum was made. The lesion was treated by surgical excision under local anesthesia, and the excised tissue was submitted for histopathological examination.

Histopathological analysis confirmed the diagnosis of papillomatosis gingivae and epulis fibromatosis. Following surgery, the wound was sutured, and the patient was instructed on postoperative care and prosthetic rehabilitation. Surgical treatment combined with elimination of etiological factors represents an effective approach for the management of this lesion.

Keywords: Epulis fissuratum; Fibrous hyperplasia; Denture-induced lesion; Reactive lesion

1. Introduction

Epulis fissuratum is a reactive hyperplastic lesion of the oral mucosa that develops in response to chronic mechanical irritation. It is most commonly associated with ill-fitting dentures, which cause continuous trauma to the soft tissues of the oral cavity.

Clinically, epulis fissuratum presents as fibrous folds of mucosa along the denture border, typically located in the oral vestibule. The lesion is usually asymptomatic but may be associated with inflammation, ulceration, or discomfort in cases of prolonged irritation.

Diagnosis is primarily based on clinical examination and is confirmed through histopathological analysis. Treatment involves elimination of the etiological factors and surgical excision of the hyperplastic tissue. This report presents a clinical case of epulis fissuratum managed surgically at the Oral Surgery Clinic.

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2. Case Presentation

A 62-year-old female patient presented to the Oral Surgery Clinic with a complaint of a soft tissue mass in the right mandibular vestibular mucosa. The patient reported long-term use of a denture, which caused irritation and discomfort during oral function.

Clinical examination revealed a hyperplastic lesion with fibrous consistency and smooth surface, located along the denture border. The lesion appeared as a fold of mucosal tissue in the mandibular vestibule.

Following preoperative preparation and administration of local anesthesia, complete surgical excision of the lesion was performed using a scalpel. After removal of the hyperplastic tissue, a hemostatic agent was applied, and the wound was closed with interrupted sutures.

The excised tissue was submitted for histopathological examination. The histopathological findings confirmed the diagnosis of papillomatosis gingivae and epulis fibromatosis.

The patient received postoperative care instructions and was advised to undergo prosthetic rehabilitation after complete healing in order to prevent recurrence.



Figure 1 Preoperative clinical view of the hyperplastic lesion in the mandibular vestibular mucosa

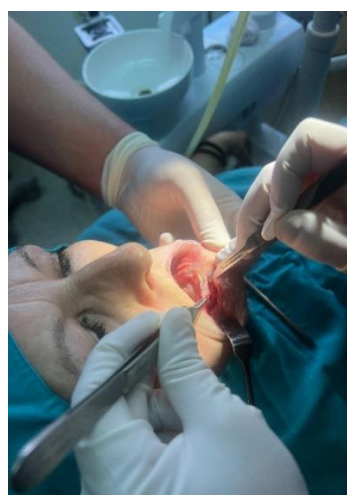


Figure 2 Exposure of the lesion during the surgical procedure



Figure 3 Surgical excision of the lesion using a scalpel



Figure 4 Dissection and removal of the lesion from its base. Surgical defect after complete excision of the lesion

3. Discussion

Epulis fissuratum is a benign reactive lesion that develops as a result of chronic irritation of the oral mucosa. The main etiological factors include ill-fitting dentures, poor oral hygiene, and prolonged denture use without regular dental follow-up.

This lesion is more frequently observed in elderly patients who have used dentures for extended periods. Chronic trauma to the mucosa leads to fibrous tissue proliferation and formation of characteristic mucosal folds.

Treatment of epulis fissuratum involves elimination of the irritative factors and surgical excision of the hyperplastic tissue. Various treatment modalities have been described in the literature, including conventional scalpel excision, CO₂ laser, electrocautery, and cryosurgery.

Conventional scalpel excision remains the most commonly used method due to its effectiveness and the ability to obtain adequate tissue for histopathological examination. In the present case, the lesion was successfully managed through surgical excision followed by suturing of the surgical site.

Histopathological findings confirmed the diagnosis of papillomatosis gingivae and epulis fibromatosis, excluding any malignant transformation. Elimination of etiological factors and proper prosthetic rehabilitation are essential to prevent recurrence.

4. Conclusion

Epulis fissuratum is a benign reactive lesion of the oral mucosa closely associated with chronic irritation caused by ill-fitting dentures. Early diagnosis and appropriate treatment are essential to prevent functional and aesthetic complications.

Surgical excision of the lesion, combined with elimination of etiological factors and appropriate prosthetic rehabilitation, represents an effective treatment approach. Histopathological examination remains essential for definitive diagnosis.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare that there is no conflict of interest.

Statement of informed consent

Informed consent was obtained from the patient for publication of this case report and the accompanying clinical images.

Statement of ethical approval

"This case report was conducted in accordance with the ethical principles of the Declaration of Helsinki. As a single-patient case report involving routine clinical care, formal ethical committee approval was not required at the University Clinic of Oral Surgery "Saint Pantelejmon", Faculty of Dentistry, Saints Cyril and Methodius University, Skopje, North Macedonia. Written informed consent was obtained from the patient prior to all clinical procedures and for publication of this case report and the accompanying clinical images."

References

- [1] Neville BW, Damm DD, Allen CM, Chi AC. Oral and Maxillofacial Pathology. 4th ed. St. Louis, MO: Elsevier/Saunders; 2015.
- [2] Regezi JA, Sciubba JJ, Jordan RCK. Oral Pathology: Clinical Pathologic Correlations. 7th ed. St. Louis, MO: Elsevier; 2016.

- [3] Shafer's Textbook of Oral Pathology, Rajendran R, Sivapathasundharam B, editors. Shafer's Textbook of Oral Pathology. 7th ed. New Delhi: Elsevier; 2012.
- [4] Jainkittivong A, Aneksuk V, Langlais RP. Oral mucosal conditions in elderly dental patients. *Oral Dis.* 2002;8(4):218-223.
- [5] Kaur G, Verma M, Singh S. Epulis fissuratum: a review of clinical features and management. *J Clin Diagn Res.* 2014;8(3):ZE01-ZE03.
- [6] Canger EM, Celenk P, Kayipmaz S. Denture-related hyperplasia: a clinical study of a Turkish population group. *Braz Dent J.* 2009;20(3):243-248.
- [7] Coelho CMP, Sousa YTCS, Daré AMZ. Denture-related oral mucosal lesions in a Brazilian school of dentistry. *J Oral Rehabil.* 2004;31(2):135-139.
- [8] Anneroth G, Sigurdson A. Hyperplastic lesions of the gingiva and alveolar mucosa. A study of 175 cases. *Acta Odontol Scand.* 1983;41(2):75-86.