

## Case Report

### Surgical excision of an epulis: A case report of 1 year old lesion

Dr. Megha Sharma<sup>1</sup>, Dr. Harinder Gupta<sup>2</sup>, Dr. Harmesh Sharma<sup>3</sup>, Dr. Divya Jyoti<sup>4</sup>

<sup>1,4</sup>Post Graduate student, Dept. of Periodontology, Govt. Dental College & Hospital, Patiala, Punjab

<sup>2</sup>Professor & Head, Dept. of Periodontology, Govt. Dental College & Hospital, Patiala, Punjab

<sup>3</sup>Associate Professor, Dept. of Periodontology, Govt. Dental College & Hospital, Patiala, Punjab

#### ABSTRACT:

**Background:** Epulis, with a tumor-like appearance, is a kind of localized hyperplasia commonly seen in the gingiva. Hence; we hereby present the case report of surgical excision of an epulis of 1 year old lesion. **Case report:** A 38 year old female patient reported with the chief complaint of a gingival mass in the lower left anterior tooth region from past one year. There was no history of systemic disease. Oral hygiene was moderate. Clinical examination revealed a soft, reddish mass measuring approximately 2 x 2 x 1 cm<sup>3</sup>. The lesion was asymptomatic but caused some mastication problems. In radiographic examination, the underlying bone was normal and there was no radiolucency or erosion in the bone. Local anaesthesia was given and incision was made. Surgical removal was done. Afterwards; perio-pack was given. **Conclusion:** Because of rapid and regular wound healing, surgical treatment is useful for soft tissue surgery in modern dentistry.

**Key words:** Epulis, Surgical

Received: 24 November, 2020

Accepted: 20 December, 2020

**Corresponding author:** Dr. Megha Sharma, Post Graduate student, Dept. of Periodontology, Govt. Dental College & Hospital, Patiala, Punjab

**This article may be cited as:** Sharma M, Gupta H, Sharma H, Jyoti D. Surgical excision of an epulis: A case report of 1 year old lesion. Int J Res Health Allied Sci 2021; 7(1):48-50.

#### INTRODUCTION

Epulis, with a tumor-like appearance, is a kind of localized hyperplasia commonly seen in the gingiva. Some studies have indicated that this disease could be caused by low-grade local irritation, traumatic injury, hormonal factors, or some drugs. It has reported 4 cases of epulis arising from cyclosporine in patients with chronic graft versus host disease. In addition, epulis are most likely to occur at the age of 20 years old in women, because the hormone levels of women, such as such as estrogen and progesterone, are easily changed at this stage. The methods to treat epulis depend on its size and position and excisional biopsy is the recommended method for most epulis.<sup>1-4</sup>

The etiology and pathogenesis of gingival enlargement are still not well established. Most of the gingival enlargements are inflammatory in origin and therefore can be treated completely with conventional periodontal treatment such as internal bevel gingivectomy. Because of its unusual clinical features, the diagnosis and treatment plan can be complicated in some cases. Histopathologic examination is the

gold standard for the most reliable diagnosis of these lesions. Epulis granulomatosa refers to a tissue growth into the oral cavity which is a post- surgical lesion emanating from an extraction socket.<sup>4-8</sup> Hence; we hereby present the case report of surgical excision of an epulis of 1 year old lesion.

#### CASE REPORT

A 38 year old female patient reported with the chief complaint of a gingival mass in the lower left anterior tooth region from past one year. There was no history of systemic disease. Oral hygiene was moderate. Clinical examination revealed a soft, reddish mass measuring approximately 2 x 2 x 1 cm<sup>3</sup>. The lesion was asymptomatic but caused some mastication problems. In radiographic examination, the underlying bone was normal and there was no radiolucency or erosion in the bone. Local anaesthesia was given and incision was made. Surgical removal was done. Afterwards; perio-pack was given. No medication was prescribed for the patient. After 2 weeks, at the follow

up session, the site of surgery was completely healed. The sample was stored in 10% formalin and sent for histopathological examination. The histological examination revealed connective tissue elements consisting of proliferation of plump fibroblasts and endothelial cells with spindle shape nuclei. Numerous and various sized blood vessels with extensive infiltration of chronic inflammatory cells, mostly lymphocytes were also evident.



Figure 1: Pre-operative view



Figure 2: Gross specimen



Figure 3: Postoperative view

## DISCUSSION

The most common mechanisms in the development of soft tissue tumor-like lesion in the oral cavity included reactive hyperplasia and neoplasia, and the majority of localized overgrowths are considered to be reactive rather than neoplastic in nature. Described under a variety of names, the Epulis is a relatively common tumor-like lesion of the gingival. Epulis is considered to be a reactive massive lesion rather than true neoplasia, usually asymptomatic with a variable growth rate. Reactive lesions are swellings that develop in response to chronic and recurring tissue injury, which stimulates an exuberant or excessive tissue response.<sup>7-9</sup>

In the present case report, a 38 year old female patient reported with the chief complaint of a gingival mass in the lower left anterior tooth region from past one year. There was no history of systemic disease. Oral hygiene was moderate. Local anaesthesia was given and incision was made. Surgical removal was done. Afterwards; perio-pack was given. No medication was

prescribed for the patient. After 2 weeks, at the follow up session, the site of surgery was completely healed. The sample was stored in 10% formalin and sent for histopathological examination.



Figure 4: Pack given

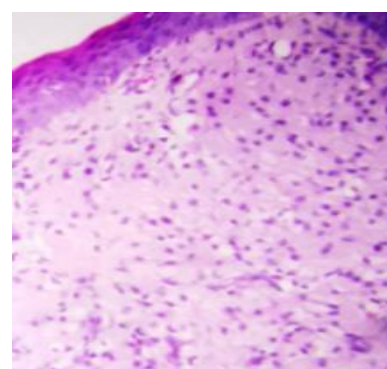


Figure 5: Histopathologic section of Epulis

Polizzi B et al described the treatment of a fibrous epulis (FE), the most common type of localized gingival overgrowths, with a Diode Laser. FE management involves causal periodontal treatment, surgical excision, usually performed with scalpel, and often the extraction of adjacent teeth. The Laser surgery has been proposed as a less invasive method based on the following advantages: better control of intra/post-operative pain and bleeding by coagulation, resulting in a bloodless surgical field, an excellent intra-operative visibility for the operator and an increase in surgical accuracy.<sup>10</sup> Ghadimi S et al reported an Epulis granulomatosa which was removed with diode laser (810 nm) due to child's fear related to traditional surgical instruments and bleeding. Lasers are useful for soft tissue surgery in modern dentistry, especially in relation to pediatric patients due to the rapid and regular wound healing without sutures.<sup>11</sup>

In the present study, the histological examination revealed connective tissue elements consisting of proliferation of plump fibroblasts and endothelial cells with spindle shape nuclei. Numerous and various sized blood vessels with extensive infiltration of chronic inflammatory cells, mostly lymphocytes were also evident. In adults, epulis frequently represents as firm, pink, un-inflamed mass, and it seems to grow from below the free gingival margin/interdental papilla. Most often the lesion is painless. Pain may be associated due to secondary traumata via brushing,

flossing or chewing. Histologically, the fibroma may show additional focus of calcification (peripheral calcifying fibroma), foci of cementicles or trabeculae of bone.<sup>11, 12</sup>

In a previous case report, Halliday H et al reported case presentation of an unusually large epulis on the maxillary gingiva of a 24-year-old woman. A 24-year-old woman had a red mass (2.4 x 1.4 cm) on her left maxillary gingiva (between teeth No. 11 and 12) that interfered with normal occlusion and speech. Although pyogenic granuloma was the clinical diagnosis, histopathologic examination revealed that the lesion was actually focal fibrous hyperplasia with focal mucinosis degeneration.<sup>13</sup> Ajagbe HA et al, in another case report, described the clinical features and treatment of 39 cases of fibrous epulis. Many of the epulides attained giant sizes before patients sought treatment. A few large or recurrent fibrous epulides were mistaken for malignant lesions, such as fibrosarcoma, Burkitt's lymphoma, or squamous cell carcinoma. Adequate excision and histological examination of all tissues excised were found to be the best management procedure for fibrous epulis.<sup>14</sup>

## CONCLUSION

Because of rapid and regular wound healing, surgical treatment is useful for soft tissue surgery in modern dentistry.

## REFERENCES

1. Chambrone L, Chambrone LA. Gingival recessions caused by lip piercing: Case report. *J Can Dent Assoc.* 2003;69:505–8.
2. Walters JD, Will JK, Hatfield RD, Cacchillo DA, Raabe DA. Excision and repair of the peripheral ossifying fibroma: A report of 3 cases. *J Periodontol.* 2001;72:939–44.
3. Boj JR, Poirier C, Hernandez M, Espassa E, Espanya A. Case series: laser treatments for soft tissue problems in children. *Eur Arch Paediatr Dent.* 2011;12(2):113–7.
4. Olivi G, Genovese MD, Caprioglio C. Evidence-based dentistry on laser paediatric dentistry: review and outlook. *Eur J Paediatr Dent.* 2009;10(1):29–40.
5. McCrea SJ. Microsurgical repair of labial gingival tissues following excision of an epulis: A case report with 18-month follow up. *Oral Surg.* 2009;2:126–35.
6. Lee YM, Kim JY, Seol YJ, Lee YK, Ku Y, Rhyu IC, et al. A 3-year longitudinal evaluation of subpedicle free connective tissue graft for gingival recession coverage. *J Periodontol.* 2002;73:1412–8.
7. Carvalho PF, da Silva RC, Cury PR, Joly JC. Modified coronally advanced flap associated with a subepithelial connective tissue graft for the treatment of adjacent multiple gingival recessions. *J Periodontol.* 2006;77:1901–6.
8. Agrawal AA, Mahajan M, Mahajan A, Devhare S. Application of diode laser for excision of non-inflammatory vascular epulis fissuratum. *Int J Case Rep Images.* 2012;3(9):42–5.
9. American Academy of Pediatric Dentistry (AAPD) Policy on the Use of Lasers for Pediatric Dental Patients. *Oral Health Policies.* 2013;36:75–7.
10. Polizzi B, Albanese A, Giannatempo G, Colella G, Campisi G. Laser-assisted surgery in oral medicine: treatment of fibrous epulis with diode 915 nm. *Ann Stomatol (Roma).* 2013;4(Suppl 2):37.
11. Ghadimi S, Chiniforush N, Najafi M, Amiri S. Excision of epulis granulomatosa with diode laser in 8 years old boy. *J Lasers Med Sci.* 2015;6(2):92–95.
12. Suhanya J, Aggarwal C, Mohideen K, Jayachandran S, Ponniah I. Cherubism combined with epilepsy, mental retardation and gingival fibromatosis (Ramon syndrome): a case report. *Head Neck Pathol.* 2010;4:126–131
13. Halliday H, Gordon S, Bhola M. Case report: an unusually large epulis on the maxillary gingiva of a 24-year-old woman. *Gen Dent.* May-Jun 2007;55(3):232–5.
14. Ajagbe HA, Daramola JO. Fibrous epulis: experience in clinical presentation and treatment of 39 cases. *J Natl Med Assoc.* 1978;70 5:317–319