

## Case Report

# Giant Epulis with Suppuration: A Case Report

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**Abstract:** Introduction: Epulis is a benign, circumscribed, gingival pseudo tumor located at the neck of one tooth or two adjoining teeth. It is a gingival outgrowth resulting either from local irritation, or from hormonal or hematological variations. It is generally of small size but can reach a considerable volume leading to significant functional and aesthetic discomfort. Observation: A 12-year-old patient living in Mauritania, who presented at the odontostomatology service of the Grand Yoff General Hospital in Dakar, Senegal, a giant tumor of the gum evolving for several years. Clinical and radiological data permitted us to give a diagnosis of a giant epulis. Excision was done under general anesthesia with a good evolution noted. Discussion: Epulis generally has an evocative clinical aspect. However, when large, epulis can cause; difficulties in hygiene control, dental displacement and or mobility, alveolar bone lysis and total loss of the tooth or teeth, as well as infections. Surgical excision is the treatment method of choice. However, there can be recurrence in case of incomplete treatment. Conclusion: The giant epulis can occur at any age. It causes both aesthetic and functional damage. It is important to set up health strategies in order to facilitate their management.

**Keywords:** Giant epulis, pseudotumor, infection, Grand Yoff General Hospital.

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## INTRODUCTION

The epulis is a benign, circumscribed, gingival pseudotumor localized at the neck of a tooth or two contiguous teeth, sometimes causing their displacement. It is a gingival overgrowth resulting either from chronic local irritation from tartar, a poorly fitted prosthesis or dental debris, or from hormonal or hematological variations (Messanga, C. B. *et al.*, 2006; & Adouko-Aka, J. A. *et al.*, 2015). We distinguish clinically, sessile and pedunculated forms. Histologically, the epulis may have inflammatory, giant cell, fibrous, granulomatous forms (Messanga, C. B. *et al.*, 2006). Despite the histological varieties, this tumor is very common in daily practice and its diagnosis is fairly easy. When neglected, it can reach a considerable volume, causing significant functional and aesthetic discomfort (Adouko-Aka, J. A. *et al.*, 2015; & Akazane, A., & Hassam, B. 2014).

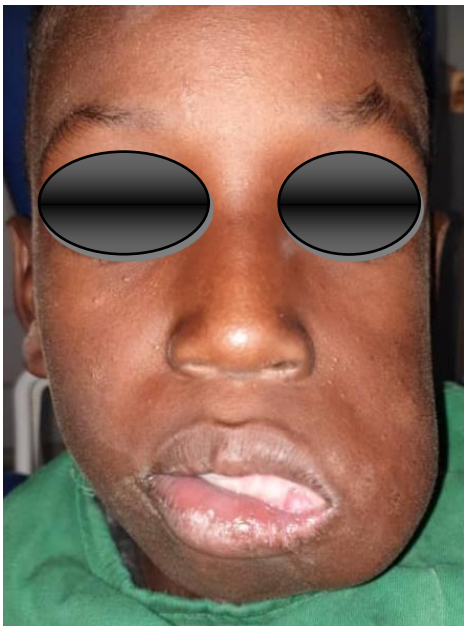
The case presented here is that of a 12-year-old boy living in Mauritania, who came to the odontostomatology service of the Grand Yoff General

Hospital in Dakar, Senegal for a giant gum tumor that has been evolving for several years.

## OBSERVATION

It was a 12-year-old male patient living in Mauritania who came to the odontostomatology service of Grand Yoff General Hospital in Dakar, Senegal for a large gum mass in the mandibular body. left evolving for several years. During the interrogation, he complained of functional (phonation, chewing) and aesthetic disturbances. The medical history was without particularities. On general examination, the patient was asthenic.

## ICONOGRAPHY



**Figure 1 :** extraoral view, jugale swelling with facial assymetry and labial inocclusion.

Extraoral examination revealed a facial asymmetry involving the left genial region and labial inocclusion on the same side. The integuments had uniform coloration (Figure 1). Palpation was non-tender and there was no sensitivity disorder. However, the presence of lymphadenopathy under the left unilateral mandible was noted.



**Figure 2:** intraoral view showing epulis with vestibular supuration.



**Figure 3 :** intraoral view showing tilt driven by the epulis.

In intraoral examination, a bulky mass covered with whitish coating implanted between teeth 34 and 35. This mass was bumpy, pediculated, reddish in color. On palpation, it was firm, painless, purulent vestibular discharge on palpation of the base of the epulis (Figure 2). This mass measured 12 cm in its longest axis. It occupied the entire left vestibule as well as the lingual side covering two thirds of the floor. The tongue was pushed behind and up, which could lead to obstruction of the upper respiratory and digestive tract (Figure 3). Palpation of the attached gum next to the lesion was inflamed. There was a vestibular rotation and a shift to the right of the mandibular incisors and canines (33-43) including the first left mandibular premolar. Teeth number 32 to 34 were affected by terminal mobility. Oral hygiene was poor. There was a large deposit of tartar on the teeth (Figure 2). On the basis of the clinical examination, the diagnosis of a giant epulis with secondary infection was made and squamous cell carcinoma as differential. Additional examinations were requested.



**Figure 4 :** orthopantomograph showing bone lysis between 34-35 and dental displacements.

On the orthopantomograph, we noted a harmonious bone lysis between the 34 and 35, mesial rotation of the teeth 34 to 31 and distal rotation of 41 and 42 (Figure 4).



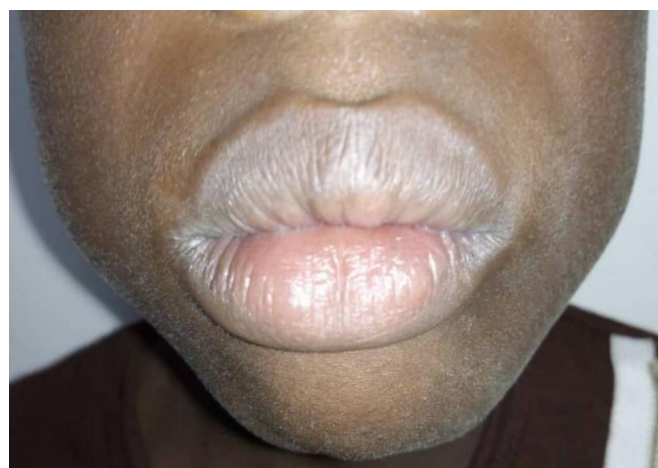
**Figure 5 :** intraoral view of the epulis before operative resection



**Figure 8:** intraoral view of the operating site three months after removal of the epulis.



**Figure 6 :** intraoral view of the epulis after resection.



**Figure 9:** extraoral view of the operating site three months after removal of the epulis



**Figure 7:** operating room image of resected epulis and avulsed teeth.

Based on clinical and radiological examinations, the excision of the tumor was scheduled. Antibiotic therapy (Amoxicillin 500mg and Metronidazole 250mg) was implemented. A first-level analgesic (paracetamol 500 mg) and a local antiseptic with Chlorhexidine based mouthwash were administered as well. Scaling of the oral cavity was done and the patient was sent for a pre-anesthetic visit. A week later, the tumor was removed under general anesthesia. Careful curettage of the implantation site was done, followed by dental extraction of 32 to 35 (Figure 5, 6). The excised mass was sent to the pathology department for analysis (Figure 7). Histological examination of the mass confirmed the diagnosis of inflammatory epulis. Reviews were made on day 1, day 7, day 14, day 30 and day 90. Post excision evolution was simple. Patient regained his normal appearance few weeks after the epulis was removed. Good healing of the lesion site was observed after three months (Figure 8, 9).

## DISCUSSION

Gingival epulis is a hyperplastic tumor-like growth of the gum. It is most commonly seen in middle-aged women (Messanga, C. B. *et al.*, 2006; & Adouko-Aka, J. A. *et al.*, 2015). In our case the patient was 12 years old and male.

The epulis is usually located at the level of the gingival papilla of a tooth or between two teeth in the incisor-canine region. Clinically, the epulis is generally small, painless, circumscribed, reddish in color, sometimes bleeding on contact. It is slow-growing and shows no signs of malignancy (Akazane, A., & Hassam, B. 2014; Kwedi, K.G.G. *et al.*, 2019; & Nokam, A.M.E. *et al.*, 2005). In our case, the epulis was located at the level of the left mandibular body and measured 12 cm along its longest axis.

The gigantism observed in our case could be due to a delay in consultation associated with a continuous irritation of the mass during life activities such as chewing, swallowing or phonation (1). Other traumatic factors have been described by authors which can also lead to an excessive development of the tumor mass (Messanga, C. B. *et al.*, 2006; Adouko-Aka, J. A. *et al.*, 2015; & Nokam, A.M.E. *et al.*, 2005).

Giant epulis can cause dental displacement as well as difficulty in chewing, phonation and hygiene control (Messanga, C. B. *et al.*, 2006; Adouko-Aka, J. A. *et al.*, 2015). Although it is of gingival origin, the giant epulis often develops at the expense of the alveolar bone by bone lysis. This bone lysis can lead to dental mobility, or even total loss of neighboring teeth (Messanga, C. B. *et al.*, 2006; Adouko-Aka, J. A. *et al.*, 2015). Difficulties in hygiene control and bone lysis due to the development of epulis can be factors favoring the occurrence of periodontal infection. Indeed, these two factors greatly influence the proliferation of bacteria within the oral cavity making the environment conducive to the occurrence of infection (Kwedi, K.G.G. *et al.*, 2019). In our case, there was an underlying infection manifested by the presence of lymphadenopathy under the left mandible and purulent vestibular discharge on palpation of the base of the epulis. The use of antibiotics dual therapy helped act against the current infection.

The diagnosis of an epulis is histological, however the differential with squamous cell carcinoma is made on the basis of clinical (slow progression, absence of spontaneous bleeding) and radiological data. This step was confirmed by the histological examination returned in favor of an inflammatory epulis.

Surgical excision treatment is the method of choice for epulis (FATY NDIAYE, C. *et al.*, 1995; & Traore, H. *et al.*, 2013); however, incomplete treatment allows the tumor recurrence (FATY NDIAYE, C. *et al.*, 1995). Associated with careful curettage of the lesion site after bone denudation under general anesthesia, which allowed us to have good patient compliance after clinical follow-up.

## CONCLUSION

Giant epulis can occur at any age. It causes both aesthetic and functional harm that can lead to stigma and social exclusion of the person affected by himself or those around him. The possibility of secondary infection at the site of the lesion should not be overlooked due to the oral changes undergone. This can strongly affect the person's prognosis. The precarious living conditions and the lack of information of our populations are factors favoring this effect. It is important to set up management strategies in order to limit the discomfort caused and improve the functional and aesthetic prognosis of those affected.

**Conflict of Interest:** There is no conflict of interest.

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