

Post-Traumatic Palatine Odontogenic Abscess: About 2 Cases

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Abstract

Introduction: Palatal abscess or cellulitis of dental origin is a rare clinical form of circumscribed cellulitis that can sometimes pose a diagnostic problem. It is the consequence of poor or non-treatment of dental caries or trauma. The aim of this study is to describe the clinical and therapeutic aspects of these two cases of palatal cellulitis of post-traumatic dental origin. **Observation:** The patients consulted for painful palatal swelling secondary to untreated dental trauma of the 21s. The diagnosis of palatal cellulitis was based on the inflammatory and fluctuating nature of the swelling. A probabilistic bi-antibiotic treatment and an incision and drainage associated with treatment of the portal of entry were carried out. Progression was favourable in both cases. **Conclusion:** Palatal cellulitis is a rare condition and can be prevented by systematic stomatological consultation after dental trauma. Diagnosis is clinical. However, CT scans are sometimes useful. The course is generally favorable with appropriate treatment.

Keywords

Abscess, Palate, Dental, Trauma

1. Introduction

Odontogenic infection is one of the most common diseases, accounting for 60% of all consultations in stomatology [1]. Among these odontogenic infections, circumscribed cellulitis is the most common. It is defined as an infection of the subcutaneous cellulo-adipose tissue of the face localized to a specific anatomical area [1] [2].

Palatal localization of cellulitis is rare and poses a difficult diagnostic problem for the clinician. This palatal abscess is generally the result of an infection of a maxillary molar and rarely the lateral incisors [3] [4]. The treatment is multi-pronged based on a drug prescription which can be associated with surgical drainage and an etiological treatment of the causal tooth [5].

The rarity of this localization and its diagnostic difficulty, encouraged us to take an interest in it in order to establish a well-codified diagram going from diagnosis to treatment through these 2 clinical cases that we report.

2. Our Observations

2.1. Case 1

Mr. KF, 25 years old, was admitted with palatal swelling that had been evolving for 7 days, preceded by odontalgia in the 21st cavity, motivating the use of NSAIDs. His history was marked by a coronary fracture of the 21 following a sports accident. The clinical examination revealed a preserved general condition, exo-bucally, there was nothing unusual and endo-bucally, there was pus on the neck of the dyschromic and carious 21, left palatal swelling slightly encroaching on the midline, extending from the collar of 21 at the tuberosity region ipsilateral, covered with an inflammatory, hot, painful and fluctuating mucosa (**Figure 1**). ENT and other device examinations were unremarkable. Treatment consisted of an incision draining the suppurative collection followed by extraction of 21, antibiotic therapy and local care. Bacteriological examination for pus came back sterile. The evolution was marked by healing after 10 days.



Figure 1. Left palatal swelling slightly encroaching on the midline.

2.2. Case 2

Child ZF, female, 7 years old, admitted for consultation for 4 days of palatal swelling following odontalgia of the 11 mobile and not carious. His antecedents

are marked by maxillofacial trauma secondary to a gaming accident. The clinical examination revealed a preserved general condition, a median palatal swelling, rounded, sensitive and fluctuating, covered with healthy mucosa, mobile 11 (**Figure 2**). The ENT examination found anterior muco-purulent rhinorrhea, and hypertrophy of the left inferior turbinate with nasal obstruction. Examination of other devices was unremarkable.



Figure 2. Median palatal swelling.

The CT Scan-sinus cavities revealed a complement of the left maxillary sinus (**Figure 3**). After ENT opinion, the treatment was multidisciplinary and consisted of incision drainage of the suppurated collection followed by the treatment of the maxillary sinusitis. The evolution was made by healing after 7 days. The patient was referred to dental surgeons for dental treatment.



Figure 3. CT image showing left maxillary sinusitis.

3. Discussion

Most oral cavity infections are odontogenic infections. The main etiology is caries, but it can also develop from the paraodont and the pericorony tissue [1] [3] [4]. Palatal abscess of dental origin is a rare pathology [3] [4]. These palatal abscesses are often due to the lateral incisors and palatal roots of the maxillary premolars and molars. In fact, strictly speaking, they are not cellulitis but a detachment of the fibro-mucous membrane following the collection of pus [6]. This abscess usually represents drainage directed toward the palate [3] [4] [6] [7]. The etiology in our 2 patients was dental post-traumatic and concerned the left central incisors. This causal tooth is unusual in this localization of circumscribed cellulitis and would probably be related to the notion of trauma. In fact, trauma without a fracture can lead to aseptic mortification which can sometimes be followed by attachment of blood-borne bacteria, bacteraemia being essential for this mode of infection. Hematological infection, also known as anachroresis, remains a very rare phenomenon. There are therefore many entry points for micro-organisms into the dental canals. The pulpo-dental complex is a very effective defense system, often capable of avoiding entry and eliminating any micro-organism. On the other hand, the necrotic pulp is a privileged site for bacterial growth [1] [2] [8]-[10].

Clinically, it is a paramedian palatal tumefaction, deforming the frosted glass palate, fluctuating or tense, covered with an inflammatory-looking mucosa [2] [3]. In our patients, we found a paramedian tumefaction and another median. This tumefaction sometimes poses a problem of differential diagnosis. In front of this tumefaction, we discussed a tumor of the accessory salivary glands, a salivary cyst. This differential diagnosis is made on the anamnesis and the examination intraoral meticulous.

The curative treatment of odontogenic abscesses begins with antibiotic therapy based on the antibiogram, but failing this, probabilistic broad-spectrum antibiotic therapy and a pulpectomy or extraction depending on the condition of the causal tooth. The principle of abscess treatment is the same as for any other abscess, ie drainage followed by multi-daily washing [1] [3] [4] [7] [9] [10]. This treatment was carried out in our 2 patients and the evolution was favorable.

4. Conclusion

Palatal cellulitis is a rare condition and can be prevented by systematic stomatological consultation after dental trauma. Diagnosis is clinical. However, CT scans are sometimes useful. Progress is generally favourable with appropriate treatment.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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