

**Research Paper** 

**Medical Science** 

ANTIBIOTIC THERAPY IN PERICORONITIS: A CASE REPORT.

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ABSTRACT

# Silva

Aim: to describe a case of abscess caused by Pericoronitis which was treated with metronidazole for seven days and the infection ceased within this period, and the patient was sent for dental removal.

Methodology: this study was accomplished with the aid of articles concerning Pericoronitis in concomitant observation of the patient's general state of health, and antibiotic therapy was considered the best choice of treatment.

Results: Seven days later the patient was in good condition and ready for dental removal.

Conclusion: it was concluded that, in the presence of the acute phase of pericoronitis associated with abscess, metronidazole was an appropriate choice.

# **KEYWORDS**:

## Introduction

Pericoronitis can be described as an extremely painful condition usually associated with impacted lower third molars, affecting in the majority of cases, young adults<sup>1</sup>. The symptoms may vary according to the position of the third molar involved. Redness, swelling and sometimes purulent discharge are common findings, impeding the bearers to swallow and sometimes even closing their mouths<sup>2</sup>. Fever, bleeding and lymphadenopathy have also been reported, causing extreme discomfort and frequent changes in humor.

Like the majority of inflammatory processes linked to the oral environment, pericoronitis can be subdivided in the acute or chronic phases. The acute form is present when it lasts two days or three weeks and as chronic when it takes longer than this period, a condition where the symptoms decrease in intensity, and sometimes the patients get used to it until the next agudization takes place. Therefore, pericoronitis implies in urgent dental calls. However; during the intraoral examination, it is common to find the presence of edema along with purulent discharge that contraindicate the removal of the tooth or teeth involved in that specific moment, and the need of antibiotics prevails. Once the acute form of pericoronitis is installed, sometimes it is necessary the administration of antibiotics before the removal of the tooth or teeth be accomplished<sup>3</sup>.

The aim of the work is to describe a case report of a 19-year-old female patient who searched for dental assistance in the acute phase of pericoronitis and needed antibiotic therapy before dental removal.

## Case Report

A Brazilian caucasian 19-year-old female patient searched for dental assistance because of a "problem in the mouth" according to her own complaint. The patient was 39°C feverish, and could not eat or drink well for nearly 5 days, and therefore her physical condition was badly affected. Intraoral examination showed edema with purulent discharge located in the retromolar area and covered the whole crown of impacted tooth 38 in vertical inclusion, compatible with an abscess caused by pericoronitis (Figure 1).



Figure 1: Edema covering the whole crown of tooth 48 with purulent discharge compatible with pericoronitis.

Due to the intense edema and the risk of disseminating the infection, it was chosen antibiotic therapy concomitantly with analgesic The antibiotic of choice was metronidazole (400mg) three times a day for seven days, period in which the patient was instructed to make use of soft food and to rest as much as possible, associated with paracetamol. After the medication period, the patient returned to the following dental appointment (Figure2).



Figure2: Seven days later the edema had decreased considerably the patient was relieved and ready for dental removal.

#### Discussion

Dental extraction is many times necessary in case of impactions or when recurrent gingival infections take place 4,5, not only because of the risk of pericoronitis, but also because of the risk of cavity formation. Normal third molar eruptions are usually combined with some sort or discomfort and pain, but only until the crown is fully erupted. Not only do medialized impacted third molars retain more dental plaque, but they also work as a shelter for a number of microorganisms capable of producing toxins and proliferate. The difficulty in cleaning the crowns partially covered by damaged gingival tissue increases the bacterial substract and enhances the infection, which can only contained by surgical procedures, including dental extraction or operculectomy. Nevertheless, the use of antibiotics during the acute phase is advisable, especially when there is the presence of abscess. In this case report it was decided to diminish the edema in order to accomplish the removal of tooth 38 with the minimum risk of disseminating the infection.

The work of Mercier and Precious (1992) compared the risks and benefits of intervention versus nonintervention concerning third molar symptomatic surgery and concluded that there is no absolute indications or contra-indications for their removal, for the fact that there is no long term studies assessing this matter <sup>6</sup>, and therefore each case must be analyzed by their own terms and conditions. A study reviewed the painful consequences of pericoronitis in pre-antibiotics days and indicated their dental removal, according to our beliefs<sup>7</sup>.

### Conclusions

Pericoronitis is an inflammatory process that may have complications, including abscesses, causing throbbing pain and discomfort to the bearers. Although modalities of surgeries may be indicated, antibiotic therapy prior to their accomplishment showed positive results.

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