

Odontogenic keratocyst in the posterior mandible - case report

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1 INTRODUCTION

Authors described odontogenic keratocyst (OQ) as a developmental cyst⁽¹⁾. In 2006 the World Health Organization (WHO) classification of head and neck tumors placed the (QO) as an odontogenic tumor and not as a cyst.

However, periodically the World Health Organization (WHO) publishes an international classification for Head and Neck Tumors, and in 2017 the 4th edition was published, where again the (QO) returned to the classification of odontogenic cysts for presenting characteristics incompatible with neoplastic processes⁽²⁾.

The (QO) is of great relevance among oral and maxillofacial surgeons due to its high recurrence rate. The lesion can occur in any region of the maxillary bones, however, it has a predilection for the body and ascending ramus of the mandible $^{(3)}$.

Knowing that most of the time it is an asymptomatic pathology, the discovery of a (QO) is made through radiographic findings, where radiographically, it presents as a uni or multilocular bone rarefaction, with sclerotic edges, and may or may not be associated with an impacted tooth, usually this lesion has a predilection for anteroposterior growth.

Therefore, the diagnosis of a (QO) can be based on clinical examination, histopathological features, and the evaluation of imaging examinations.

Treatment of a (QO) can be conservative or invasive. It can be performed with just enucleation and curettage, marsupialization, or resection ^{(3).}

2 OBJECTIVE

To perform a case report on the excision of a (QO) located in the posterior region of the right mandible.



3 METHODOLOGY

A 40-year-old female patient, normosystemic, feoderma, attended the buccomaxillofacial surgery and trauma service of a university hospital. The patient had a panoramic radiograph, in which a radiograph showed a lucid, delimited radio image associated with an impacted third molar.

The patient was referred to the operating room for surgery under general anesthesia, oral intubation, infiltration with bupivacaine and epinephrine (5 ml), intra and extra-oral antisepsis with 2% aqueous chlorhexidine, apposition of the fields and installation of the oropharyngeal plug; intraoral access in the bottom of the right mandibular vestibule, mucoperiosteal detachment, exereses of the lesion and curettage (Figure 1 and 2). Access sutures with 4-0 vicryl, removal of the oropharyngeal plug, reversal of general anesthesia, extubation, and referral to the post-anesthesia recovery room. The patient was instructed about the risks of fracture in the region, in case she suffered any trauma of greater intensity, and she should avoid contact sports or any activity that could put the bone structure at risk.

Figure 1 - Access for incisi



Figure 2 - Access for exeresis and curettage of the lesion



4 DEVELOPMENT

In the case reported, the characteristics of the lesion are consistent with prevalence studies regarding the location of the lesion. Most cases are located in the posterior region of the mandible⁽¹⁾. In contrast, authors⁽⁴⁾ state that there is a predilection for males, our case was a female patient.

In the case of (QO), the growth is slow and asymptomatic and the diagnosis may be late in relation to this factor. Identifying it as early as possible helps a congruent intervention besides being able to define the prognosis⁽⁵⁾.

The aforementioned treatment has proven effective. Conventional surgical options include enucleation and curettage, enucleation and peripheral osteotomy, and bone resection with or without loss of bone continuity (segmental resection/marginal resection)⁽³⁾. In this case, enucleation was



performed together with curettage after excision of the lesion (Figure 3). The integrity of the surgical store observed guided the operative planning and ruled out the need for excision of adjacent soft tissues.

The patient was followed up every 6 months.



5 CONCLUDING REMARKS

Treatment success is due to a correct diagnosis, and it is indispensable for the (CTBMF) service team to have knowledge of the clinical, histological, and radiographic aspects of the (QO) for the correct diagnosis and effective treatment plan.

Total excision of the lesion was the treatment of choice for the (CTBMF) team and proved effective in treating (QO).



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