



Best treatment for ameloblastoma with lower risk of tumor recurrence.

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LITERATURE REVIEW

Abstract

Ameloblastoma accounts for 10% of living tumors of odontogenic origin. Ameloblastoma has an epithelial origin, more commonly occurring in the jaw bone. As much as it is a benign tumor, ameloblastoma tends to be invasive and aggressive, making total tumor resection with a safe margin, with the aim of to prevent future recurrences. This tumor has its own clinical and radiographic aspects, being able to be found in its primordial stage of expansion . The ameloblastoma lesion maintains several alterations in its clinical signs, which may manifest periods of tumor aggressiveness. Its cause is uncertain, so it appears in a variety of ways.

Keywords: Ameloblastoma, recurrence and surgical treatment.



Melhor tratamento para ameloblastoma com menor risco de recidiva do tumor.

Resumo

O ameloblastoma faz parte de 10% dos tumores de origem odontogênica viventes. O ameloblastoma tem origem epitelial, ocasionando de forma mais corriqueira no osso da mandíbula. Por mais que ele seja um tumor benigno, o ameloblastoma tende a ser invasivo e agressivo, passando a ser essencial ressecção total do tumor com uma margem segura, com o propósito de evitar futuras recidivas. Esse tumor possui aspectos clínicos e radiográficos próprios, sendo capaz de ser encontrado em seu estágio primordial de expansão. A lesão de ameloblastoma mantém diversas alterações em seus sinais clínicos, que podem manifestar os períodos de agressividade do tumor. A causa dele é incerta, assim aparece de formas diversificadas.

Palavras chaves: Ameloblastoma, recidiva e tratamento cirúrgico.

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1. Introduction.

The ameloblastoma itself was referred to in an exordial way in the year 1827, therefore, it only managed to be historically portrayed in 1853, by Wedl, demonstrating the manifestation of the tumor (EBLING et.al, 1974).

Ameloblastoma is sustained by an aggressive tumor, with a possible rate of recurrence and originating from the odontogenic epithelium. It is an aggressive tumor that causes facial dysmorphism, with a malignant action and is VERY recurrent (Saddy et.al, 2005).

The etiology is a distinct cause. This tumor manifests itself in the mandible or maxilla, with a high potential to invade adjacent tissues. Histologically, it does not form metastases, obtaining the appearance of benign . However, it is therapeutically able to be seen as a malignant tumor, respectively its invasive behavior (Dolan et.al, 1981).

Ameloblastoma is a tumor that differs into 3 types: unicystic (13%), multicystic or solid (86%) and peripheral (1%), with variations in symptomatology and tumor location. And radiographically, the ameloblastoma appears radiolucent, with opaque edges, avoiding being unilocular or multilocular with the appearance of a soap bubble. Thus, this work aims to maintain safer modes of treatment with a lower rate of recurrence (Martins et.al, 2004).

2.Methodology

For the construction of this Literary Review, searches were carried out using descriptors in PUBMED Central, BVS/BIREME, Web of Science, Scielo, The Cochrane Library, Google Scholar and books on the subject, classified as gray literature. of theses and scientific articles obtained by the methods mentioned above.

3. Literature review

3.1 Etiology

Before WHO, ameloblastoma in 1992 was categorized as a benign odontogenic tumor. To make the diagnosis of an ameloblastoma lesion, it is possible to take into account the



clinical history, physical examination and complementary tests from the incisional biopsy (CAWSON et.al, 1998).

And its etiology may be associated with remains of dental laminae in the development of the dental organ, related to an impacted tooth or to basal cells of the oral mucosa. Its involvement is mainly in young adults between 30 and 50 years of age, without gender preference, although its initial stimulus for its development is still not well defined (Sampson et.al, 1999).

A tumor will express its bellicosity through the stage of embryogenesis in which it consists of resembling itself. That said, such cells that will disguise themselves in the substantial stages of embryogenesis, will result in aggressive tumors, due to the decrease in the variety of cell differentiation (Nasri et.al, 1995).

3.2 Clinical and histopathological aspects

Ameloblastoma is a neoplasm of odontogenic origin, normally without symptoms and with slow expansion. It can lead to facial disharmony, and the structure does not harmonize with the benign formation of the tumor. The increase in ameloblastoma is particularly slow. However, it has a high index of tissue destruction (Olaitan et.al, 1998).

Ameloblastomas are commonly asymptomatic, managing to be identified through routine and complementary exams, such as radiographs, or by palpation and visualization of the bone expansion that it obtains. They are invasive tumors that cause disruption of cortical bones (Medeiros et.al, 2008).

The symptomatology of the ameloblastoma lesion is balanced. Being able to obtain a tumor in the submucosal region, tooth mobility, pain, malocclusion and even paresthesia. In rare cases, swelling may follow. Usually, the signs are not discovered quickly, and ameloblastoma is sporadically diagnosed in the primordial stage of enlargement. Clinically, it is capable of presenting an intraoral or extraoral bone enlargement, with a very uncommon occurrence of pathological fracture. The mucosa at the tumor site is usually normal and sometimes shows infections (Rosa et.al, 1999). palpation, having the capacity to be rigid (solid or unicystic) or soft and floating (cystic degeneration). It presents well-defined borders, and constantly has the potential to cause removal from the site of origin and resorption of the tooth root that is intimate to the tumor (Zachariades, 1998).



Although ameloblastoma is benign, it can lead to a malignant formation and stimulate metastases in different parts of the human body. Due to the aggressiveness of the tumor, there is a high probability of recurrence. The prognosis depends on multiple aspects in terms of defining the tumor procedure, which are: clinical, histopathological and radiographic (Cardoso et.al, 2009).

Although it is identified histologically as a benign and slow-expanding neoplasm, ameloblastoma is excessively hostile, with complex therapeutic control and has a chance of succeeding in the loss of bone structures and even leading to death. Ameloblastoma lesions demonstrate a great diversity of histological forms. However, these diversifications do not verify its functioning, nor can they foresee cases that may have metastases. The index of aggressiveness of the tumor requires the embryogenic phase of the cell that will undergo mitosis. So that the ameloblastoma has cells that disguise themselves as an initial phase of dental embryogenesis, the lesion becomes invasive, with possible local recurrences (Vayvada et.al, 2006).

Even though it is difficult, ameloblastoma can lead to two types of malignancy. Malignant ameloblastoma usually expose hematogenous metastases, however it does not modify its histological structure. Ameloblastoma undergoes a malignant histological change, leading to metastasis. In some cases, the organs most affected by metastases are the lungs (Júnior et.al, 2006).

3.3 Treatment

In surgical or therapeutic interventions for ameloblastoma there are two positions for the tumor procedure. The most radical treatment requires getting rid of recurrences of the lesion, even though the surgery involves mutilation beyond the tumor, therefore the most conservative treatment prioritizes the removal of the tumor without mutilating the tissue, not opting to remove a safe margin. Less aggressive treatments include treatments such as curettage and tumor enucleation, with a view to protecting the tissue margins. (Huang et.al, 2007).

Among these treatments, the most used is the marginal or segmental resection of the mandible with a safe margin removal so that it does not considerably reduce the possibility of tumor recurrence (Pogrel, 2009). Enucleation followed by curettage is also widely used as conservative methods that cryotherapy can be used in sequence in these cases, and in cases



where the tumor enlargement is more severe, the use of the en-bloc hemimandibulectomy technique should be evaluated to avoid the risk of spreading further in the body and trying to eliminate the risks of recurrence(Sham et.al,2009; BARBACHAN et.al,1985).

4. Final considerations

Given this, this review requires helping and demonstrating the best way to make the diagnosis, and the best treatment indicated with the lowest risk of recurrence (Li et.al,1997;Adebayo et.al,2011). The detailed technique that was used is the marginal resection of the tumor, since this treatment option is more recommended, due to the fact that these treated lesions have a high rate of recurrence, when more conservative techniques are used. oral and maxillofacial and the dentist to obtain an improvement in the understanding of the subject, so that she can understand the pathology with total control. al,2002; NEVILLE et al,1998).

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