



21. DENTIGEROUS CYSTS: DIAGNOSIS AND TREATMENT STRATEGIES

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Introduction. Odontogenic cystic formations are not uncommonly discovered on routine X-rays. There are a number of various cyst-like lesions seen on radiographs, presenting as a notorious image: a well-defined radiolucent area surrounded by a halo of more opaque tissue, inside the maxillary or mandibular bone, involving an adjacent tooth or even encapsulating it. One of these many lesions is the dentigerous cyst, also known as a follicular cyst. Dentigerous cysts are pseudotumoral benign lesions resulting from impaired odontogenesis, presenting as the proliferation of the reduced adamantine epithelium and accumulation of cystic fluid between the crown of the tooth and the epithelium, or between the outer and inner layers of the epithelium.

Aim of study. Dentigerous cysts are one of the most common cystic formations in humans, also being one of the top benign odontogenic lesions in all ages. If left untreated, a dentigerous cyst can extend its margins into the surrounding bone tissue causing inflammation and bone destruction.

Methods and materials. The following search engines were used for the research: PubMed, Google Scholar, Web of Science. The keywords were dentigerous cyst, odontogenic follicular cyst, odontogenic cyst. There was shown a number of 809 articles according to the keywords entered, 10 of which were selected, which included the full case presentation, diagnosis and treatment and classified the dentigerous cyst according to the WHO classification. 10 patients (2 female and 8 male), ages 18-53 years old, diagnosed with dentigerous cyst were given the plan of treatment of either enucleation or marsupialization, according to each individual case's characteristics. The aim of the review was to study the individual characteristics of dentigerous cysts in order to correctly formulate a diagnosis, therefore to establish the strategy of treatment comparing the advantages and disadvantages of each technique.

Results. The diagnosis was made based on histological analysis and the treatment plan was chosen according to the patient's situation: from the 10 cases, 2 were treated by marsupialization and following orthodontic traction of the enclosed tooth; the other 8 cases were treated by enucleation (cystectomy and following odontectomy of the enclosed tooth).

Conclusion. Dentigerous cysts are cystic lesions occurring in an unerupted tooth due to perturbed odontogenesis. This type of cystic formation can be detected in both young and old patients. During pathogenesis, the cyst develops due to pathological proliferation of the reduced adamantine epithelium and the accumulation of cystic fluid between the epithelium and the crown of the tooth, or between the layers of the adamantine epithelium. Currently, dentigerous cysts are a problem due to their asymptomatic development and large incidence in various age groups. The key points of diagnosis are radiographs and histological analysis. Keywords: dentigerous cyst, enucleation, marsupialization, follicular cyst.