

Incidental Finding of a Large Dentigerous Cyst Associated with an Impacted Mandibular Canine

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Abstract

Dentigerous cysts (DCs) are developmental odontogenic cysts associated with impacted teeth. DCs are generally asymptomatic and the majority of the cases are fortuitously detected on conventional imaging techniques used in dental practice such as panoramic radiographs. This “clinical image” presents a large DC associated with an impacted mandibular canine.

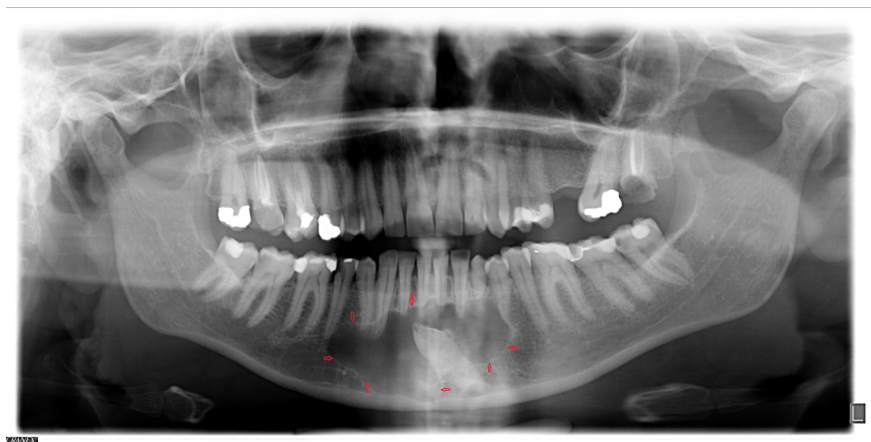


Figure 1: *Digital panoramic radiograph showing the large cyst (red arrows) associated with the permanent left mandibular canine*

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Clinical image

A healthy 35-year-old male presented for a dental check-up. Panoramic radiograph revealed a well-defined radiolucency, in the anterior region of the mandible, extending horizontally from the root of tooth #34 to the apical region of tooth #45, and vertically from the upper third of the alveolar bone to the lower border of the mandible, associated with impacted left mandibular canine (#33). Borders are scalloped and roots of teeth #73 and #32 to #44 are involved in the lesion. A presumed diagnosis of a dentigerous cyst (DC) was made at this point based on the radiographic appearance (Figure 1).

DCs are developmental odontogenic cysts associated with impacted or partially erupted teeth. They are considered the second most common cysts of the oral cavity after the radicular cysts. They account for nearly 20% of all odontogenic cysts in adults and 30% in pediatric patients. In decreasing order, DCs are most frequently associated with mandibular third molar, maxillary canine, mandibular premolar, and maxillary third molar. Mandibular canines are less commonly affected [1-4].

Clinically, patients with DC are usually asymptomatic unless the cyst becomes secondarily infected [1]. Thus, most of the DCs are discovered fortuitously when radiographs are taken to investigate a tooth eruption failure [2]. Radiographically, they present as well-defined unilocular radiolucency arising at the cement-enamel junction and surrounding the crown of an impacted tooth [1]. Treatment modalities of DC are enucleation and decompression/marsupialization. Despite its favorable prognosis, some important factors must be considered for the treatment

plan, such as the lesion's size and proximity to anatomic structures, the patient's age, and the possibility of saving the involved tooth [1, 3, 4].

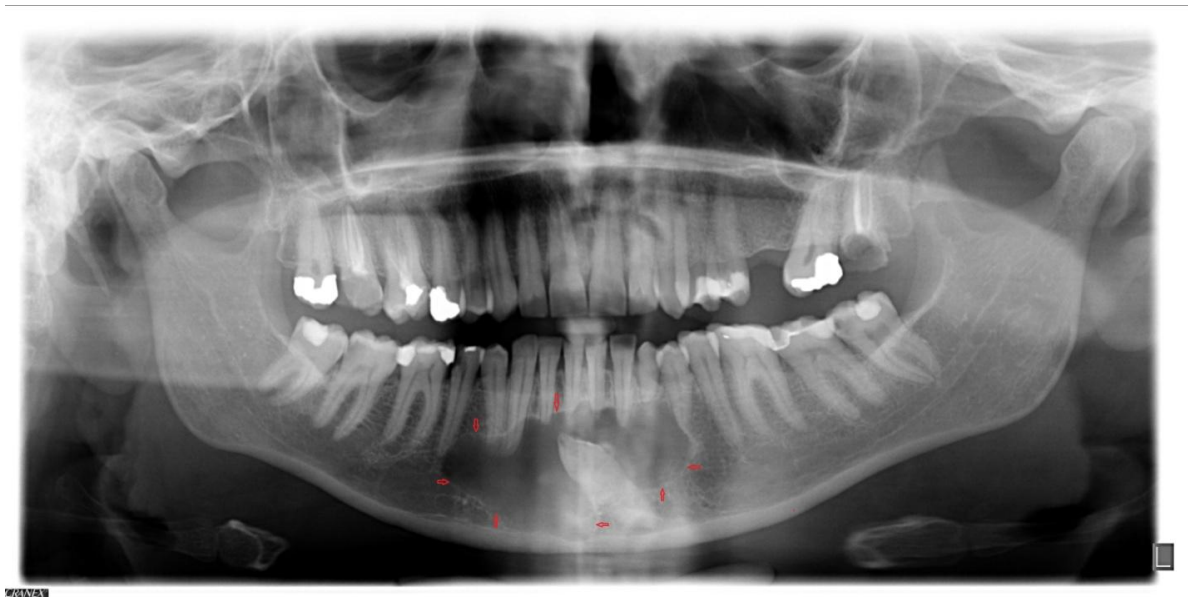


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