

COMPOUND ODONTOMA IN A PEDIATRIC PATIENT: CASE REPORT



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CASE REPORT: A 12 years old, female, caucasian, presented to the dental clinic with a proclination of 21 (Fig1). The medical history did not accuse any pathology or frequent medication. There was no previous dental trauma. In the intra-oral clinical examination it was noted that the patient was in mixed dentition. Radiographic examination revealed the presence of multiple radiopaque structures surrounded by a radiolucent image, near the root of 21 (Fig 2 and 3). In a 3D panoramic radiography (Fig4). It became clear the location of the included structure that had denticles structures inside and the diagnosis based on the characteristics was compound odontoma.



Figure 1- front view



Figure 2 - panoramic radiography

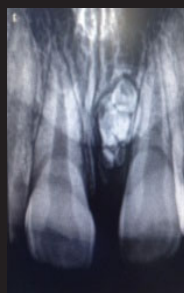


Figure 3- X-ray periapical



Figure 4 – 3D panoramic radiography

The proposed treatment was surgical removal with enucleation and curettage of the lesion.

Surgery was performed (Fig5) after oral antiseptics with 0.12% chlorhexidine digluconate (EluPro, Elgydium), followed by topical and infiltrative buccal, palatal and transpapillar anesthesia with articaine hydrochloride with epinephrine (Artinibsa 1: 100,000, Inibsa, Spain).

Palatal sulcular incision was made from 14 to 24 (871 B / 15, Martin Carl, Solingen, Germany) and detachment of palate in order to access the lesion. Because the lesion is at the bone surface it was easily identified and isolated, with manual osteotomy. The avulsion was performed with dislocation movements and the lesion removed with curette. The cavity was irrigated with saline solution. It was made a periapical X-ray to assess whether all the lesion had been removed. The surgical site was closed with silk suture 4/0's (TC14-CT22 mm ½, Aragón, Spain). Antibiotic, anti-inflammatory and analgesic were prescribed. The injury that contained ten dental like structures was histologically analyzed and the diagnosis of compound odontoma was confirmed.

After 7 days the suture was removed confirming a good tissue healing (Fig 6 and 7). 6 months post operative appointment should be done to control the position of the tooth 2.1. Orthodontic treatment may be needed in the permanent dentition.

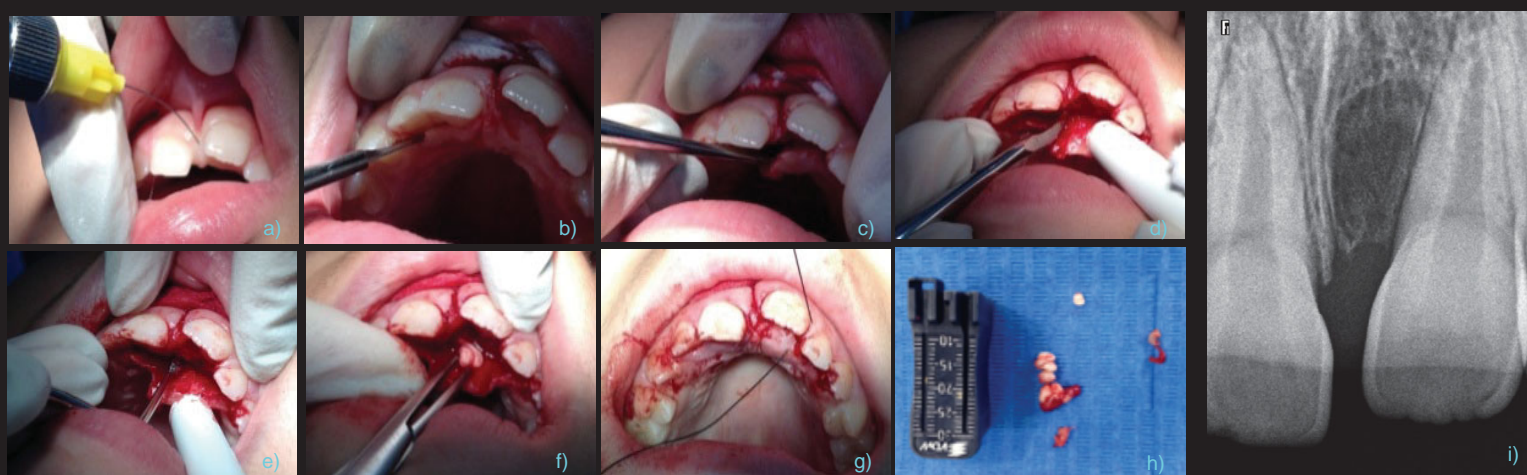


Figure 5 - a) anesthesia; b) incision; c) detachment; d- f) surgical removal of the lesion; g) suture; h) 10 dental like structures; i) x-ray after removal of the lesion

DISCUSSION: Odontomas are considered the most common odontogenic tumors ^{1,2,3,4} defined as a benign malformation. Cells reach full differentiation, reaching a stage in which all dental tissues are represented ¹.

Odontomas are usually asymptomatic and slow growing, being detected by routine radiographs ^{2,4}. They were classified by WHO in 1992 as compounds or complex ^{1,2,3,6,8}, odontomas. In the latter all dental tissues are represented in a more or less disorderly pattern, whereas in compound odontomas the dental tissues exist in a more orderly pattern so that the lesion consists of tooth-like structures. Radiographically odontomas appear as dense radiopaque lesions surrounded by a thin radiolucent layer ⁹.

They are in most cases located between dental roots ^{4, 11}. There is no predilection for sex and occur slightly more in maxilla than in the mandible ^{4,5}, and are detected mainly before age 20 ^{1, 10}.

The treatment for this type of injury is surgical excision, and the prognosis is usually excellent; recurrence is not expected¹.

In the present case report, the lesion was completely removed, but if it had been detected and removed earlier could have avoided the ectopic eruption of the tooth 21, avoiding the need for orthodontic treatment.

In this case we have to wait for the development of permanent dentition to evaluate the need for orthodontic repositioning.



Figure 6 – after 7 days



Figure 7- healing after 7 days

CONCLUSION: Compounds odontomas are common odontogenic lesions, which can affect the normal eruption of teeth. Surgical removal is the method used to eliminate these lesions. Early diagnosis with X-ray examinations, allows the adoption of less complex treatments.

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