

Surgical Removal of 38 Odontomes in A Palatomaxillary Area

¹Dr. Priyaranjan, ²Dr. Rahul Tiwari, ³Dr. Heena Tiwari, ⁴Dr. Philip Mathew,

⁵Dr. Jisha David, ⁶Dr. Kaushal Charanpahari,

¹MDS, Public Health Dentistry, Consultant & Private Practitioner, Ranchi, Jharkhand.

²FOGS, MDS, OMFS & Dentistry, JMMCH & RI, Thrissur, Kerala.

³BDS, PGDHHM, Government Dental Surgeon, CHC Makdi, Kondagaon, C.G
MDS, HOD, OMFS & Dentistry, JMMCH & RI, Thrissur, Kerala.

BDS, Registrar, Department of Dentistry, JMMCH & RI, Thrissur, Kerala.

⁶PG Student, OMFS, Surendra Dental College & RI, Sriganganagar, Rajasthan, India

Corresponding Author: Dr. Priyaranjan

Abstract: Odontomas are nonaggressive, hamartomatous developmental malformations composed of mature tooth substances and may be compound or complex depending on the extent of morphodifferentiation or on their resemblance to normal teeth. Among them, complex odontomas are relatively rare tumors. They are usually asymptomatic in nature. Occasionally, these tumors become large, causing bone expansion followed by facial asymmetry. Odontoma eruptions are uncommon, and thus far, very few cases of erupted complex odontomas have been reported in the literature. Here, we report the case of an unusually large, painless, multiple odontoma located in the palatomaxillary region.

Key Words: Odontoma, Palate, Maxilla, Compound, Complex,

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I. Introduction:

Odontoma is a hamartomatous lesion of odontogenic origin involving both epithelial and mesenchymal tissues. Although it is not an uncommon lesion yet in certain conditions it can lead to complications if left untreated. Odontomas are tumours in which complete functional discrepancy of ameloblasts or odontoblasts occur with the development of enamel and dentin but in an irregular arrangement due to the lack of association of these cells to reach a usual state of morpho differentiation. This may be congenital or may occur due to an altered gene or intervention postnatally in the genetic pattern of tooth development. Some studies have focused on the remnants of dental lamina as the major etiological factor, however the exact aetiology of odontomas remains unknown [1]. There are two types of odontoma: complex and compound. A compound odontoma comprises of many separate, small tooth like structures, while a complex odontoma forms an irregular mass of dentin and enamel without likeness to a tooth [2]. Genetic incongruities like Gardner's syndrome, Hermann's syndrome, local trauma, infectious or inflammatory processes and numerous other pathological circumstances have been accredited to the causes of odontomas. Abnormalities like oesophageal, pulmonary, aortic stenosis, pneumonia, hepatomegaly and bronchiectasis were described by various authors [3]. Erdogan Ö et al., reported a patient with mild mental retardation and severe myopia [2]. No definite aetiology was identified in this case. Odontomas are appreciated generally in the second decade of life, but incidentally, it can be found at any age [4-6]. Less than 10% are found in patients over 40 years of age [7]. However, the literature of seven reported cases with multiple odontomas showed the age range between first and third decade. With a slight preponderance of males, the ratio differs between 1.2:1 and 1:1 for compound odontomas [8]. The literature of multiple compound odontomas involving both the jaws have reported three cases in females and five cases including the present case in males [2-4]. The most frequent location of compound odontoma is the anterior region of maxilla [3]. In all the cases, including the present case multiple compound odontomas were seen in both the jaws [Table/ Fig-5]. Odontomas are generally asymptomatic lesions that are revealed incidentally during routine radiography. Radiographic aspects of compound odontomas are characteristic. A well-defined radiolucency is usually seen surrounding the calcified structures which resemble teeth. The compound odontomas are associated more often with unerupted teeth [3].

II. Case Report:

A 9-year old patient reported with his parents complaining of delayed eruption of teeth. On clinical examination there was presence of deciduous teeth in the maxillary anterior region. The area was also confined with a mild vestibular swelling of the buccal side but there was no signs of any sinus discharge, infection or

paresthesia to the involved site. On palpation the area was non-tender. Extra oral and dental structures have no abnormality. An occlusal radiograph was advised which revealed multiple radiopaque structures on the anterior palatomaxillary area. (Fig. 1) Excision was planned under local anesthesia. Triangular flap was elevated to expose the lesion area. Lesion was exposed and with the help of micromotor handpiece and bur, the radiopaque structures were identified and excised. A total 38 odontomas were removed and area was thoroughly inspected and was cleared with betadine irrigation.(Fig. 2) Surgical closure was done. The patient was on regular follow up with no presenting complains.



FIGURE 1: IOPA SHOWING MULTIPLE ODONTOMES CLUBBED AND PRESENT IN THE MAXILLA



FIGURE 2.: POST-OPERATIVE REMOVAL OF 38 CLUBBED MULTIPLE ODONTOMES IN SINGLE ENTITY

III. Conclusion:

Odontomas are tumors of odontogenic origin that may or may not be associated with systemic diseases. These are asymptomatic and are found on routine radiographs. They rarely erupt into the mouth and tend to be associated with impacted teeth. Despite their benign nature, their eruption into the oral cavity can give rise to pain, inflammation, infection, and ulceration, but large odontomas can cause cortical expansion facial asymmetry and traumatic ulcers. Therefore, it is important to diagnose these lesions as soon as possible and treat them appropriately so as to avoid complications.

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