



## CASE REPORT: HAMARTOMOUS MALFORMATION: A CASE REPORT

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### ABSTRACT

Odontomas are the most common of the odontogenic tumors. They are considered as hamartomatous malformations. They are benign, non-aggressive and slow growing tumors. They are mostly asymptomatic, but they produce impaction or delayed eruption of the tooth. The present article presents a case report of odontome in a 13 year old male patient.

**KEYWORDS:** Complex odontoma, Compound odontoma, hamartomous malformation, Odontogenic tumors.

### INTRODUCTION

Odontomas are considered to be hamartomatous malformations resulting from the growth of completely differentiated epithelial and mesenchymal cells that give rise to ameloblasts and odontoblasts. These hamartomas are basically formed of enamel and dentin but they can also have variables amounts of cementum and pulp tissue.<sup>[1,2]</sup>

Odontomas are usually asymptomatic lesions and in most cases, they are associated with alterations in tooth eruption temporarily or permanently.<sup>[3]</sup> Odontomes commonly occur permanent dentition and are rarely reported in association with the primary or deciduous dentition.<sup>[4]</sup> The present article presents a case report of odontome in a 13 year old male child patient.

### CASE REPORT

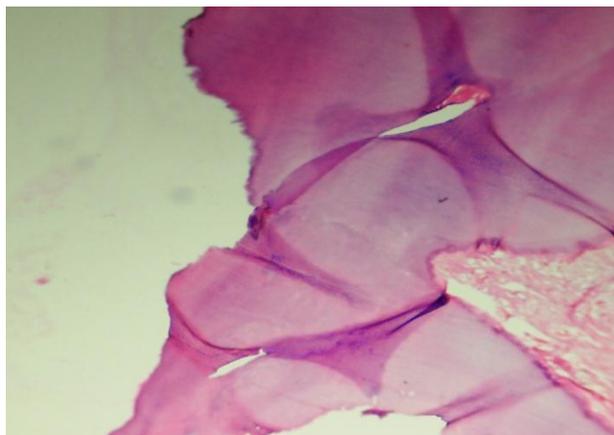
A thirteen year old male child patient came with a chief complaint of missing tooth in maxillary anterior region on right side. On examination maxillary right central incisor was found to be missing and radiographic examination shows presence of irregular radioopacity at the region of 11 and 12. (Fig. 1) On the basis of radiological examination, a provisional diagnosis of odontome was done and surgical excision was advised. After doing surgical excision, the hard tooth like tissue was sent for the histopathological examination. (Fig. 2) On histopathological examination, randomly oriented dentin and pulp like tissue was found. Therefore diagnosis of complex odontome was made. (Fig. 3).



**Fig. 1: Radiograph showing presence of radiopaque lesion in the maxillary right side anterior region.**



**Fig. 2: Excised hard tissue specimen.**



**Fig. 3: Histopathological slide after decalcification. (H & E Stain, original magnification, X100)**

### DISCUSSION

Two main types of odontoma are recognized: compound and complex.

Compound odontoma consists of tumor like malformation (hamartoma) with varying numbers of tooth-like elements (odontoids). Compound odontomas show a predilection for the anterior sector of the upper maxilla.

Complex Odontoma consists of calcified dental tissues which are simply arranged in an irregular mass bearing no morphologic similarity to rudimentary teeth. They are typically found in the posterior mandibular region.<sup>[5]</sup>

The pathogenesis is not clear, but trauma during primary dentition, heredity, and genetic mutation are possible etiologic factors. Odontomas often cause various disturbances in the eruption and position of the teeth. Therefore, the most frequent cause of discovering of an odontoma is the retention of permanent teeth, perhaps with the persistence of the primary tooth.<sup>[6]</sup>

The term odontoma was first coined by Broca in 1866, who defined it as a tumor formed by overgrowth of complete dental tissues. The second edition of the WHO histologic typing of odontogenic tumors classifies odontomas under the broad category of tumors containing odontogenic epithelium with odontogenic ectomesenchyme, with or without dental hard tissue formation. Under this classification three types of odontomas are listed: odonto-ameloblastoma, complex and compound odontoma. Odontomes are usually asymptomatic but sometimes, suppuration, pain, root resorption, delayed eruption and displacement of teeth are seen. Because of the very low recurrence, the treatment of choice is surgical removal of the lesion. As it is surrounded by connective tissue, its removal is surgical excision<sup>[7]</sup>. Special care should be taken to remove it totally in order to avoid a relapse which is specially critical in immature complex odontomas. Differential radiologic diagnoses such as cementoblastoma, osteoid osteoma or cement ossifying

fibroma can be ruled out clinically because these are not associated with impacted teeth.<sup>[7]</sup>

### CONCLUSION

Odontomas are the benign tumors found in the orofacial regions and many of the times it presents no symptoms. Early diagnosis is necessary to prevent further complications.

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