ERUPTED COMPLEX ODONTOMA: AN UNUSUAL PRESENTATION

ABSTRACT
Odontomas are the most common non-aggressive odontogenic tumors of the jaws. They are usually asymptomatic and are diagnosed routinely on radiological examination. According to WHO classification (2005) two types of odontomas are found: complex odontomas and compound odontomas, the latter is more common than the former. The eruption of odontomas in the oral cavity is infrequent, very rare occurrence and few cases are reported in the literature. Thus this article focuses on an erupted complex odontoma associated with impacted third molar which adds to the previously reported cases in the literature.

KEYWORDS
Complex odontoma, erupted, impacted third molar.

INTRODUCTION:
Broca first coined the term odontoma in 1866. According to 2005 WHO classification of odontogenic tumors, there are two types of odontomas, composite and complex. Odontomas are hamartomas and account for 22% of odontogenic tumors. They are the most common benign odontogenic tumors of epithelial and mesenchymal origin. The incidence of compound odontoma ranges between 9 and 37%, and complex odontome between 5 and 30%. Eruption of odontomes in the oral cavity is rare and complex odontomes are less common as compared to compound odontomes. Here we report a case of complex odontome which erupted in the oral cavity in the right mandibular third molar region. The aim of the article is to bring to light the unusual eruption of odontome in the oral cavity and adding it to the existing literature.

CASE REPORT:
A 23 year old male patient reported to the MGV’S KBH Dental College and Hospital, Nashik with the chief complaint of pain in lower right posterior region since 3-4 months. The pain aggravated on mastication. Intra oral examination revealed a yellowish irregular solid mass resembling calculus.

CBCT examination revealed the extent of the lesion to be 13.43 mm antero-posteriorly, 22.31 mm bucco-lingually and 14.43 mm superio-inferiorly. A-3D CBCT showed an irregular radiopaque mass surrounded by a radiolucent band in the right mandibular region extending antero-posteriorly from distal of 47 to mesial of 48. Horizontally impacted 48 was seen. Routine blood investigations revealed no abnormal findings and a biopsy was advised. Based on the clinical and radiologic findings, a diagnosis of horizontally impacted 48 associated with odontome was made and the differential diagnosis that were considered included complex odontoma, cemento-ossifying fibroma, cemento-osseous dysplasia and ameloblastic fibro-odontoma. Patient was then referred to the Department of Oral Surgery for surgical treatment. The lesion was excised and surgical removal of horizontally impacted 48 was done. The lesion came out in pieces and was then subjected to histopathological examination.

On gross examination multiple bits of specimen were obtained, out of which three were hard tissue bits including the horizontally impacted 48. Ground section and decalcification of hard tissue bits was performed. The histopathological examination of ground section revealed disorganized arrangement of hard tissues such as enamel and dentin. Enamel showed irregular arrangement of enamel rods and enamel lamellae were also noted.
tooth like structures of varying size and shape surrounded by a narrow radiolucent zone whereas a complex odontoma appears as a calcified mass which is also surrounded by a narrow radiolucent rim. Similar findings were present in our case report in which lesion appears to be surrounded by a narrow radiolucent rim. Microscopically, complex odontoma consists of disordered arrangement of odontogenic tissues. Cementum like substances are often admixed with dentinoid structures. Small spaces with pulp tissue, enamel matrix and epithelial remnants may be observed within calcified mineralized masses of dentin. Dentin encloses hollow circular structures that contain mature enamel. The spaces may contain small amounts of enamel matrix or immature enamel. The connective tissue capsule around the odontoma is similar in all respects to the follicle surrounding a normal tooth. Conservative surgical excision is the treatment of choice of complex odontoma.

CONCLUSION

Complex odontomas are less common compared to compound odontomas and the eruption of odontomas in the oral cavity are unusual and rare occurrences. Although odontomas are associated commonly with impacted third molars, the eruption of odontomas associated with the same are rare occurrences. Thus the aim of this case report is to carefully diagnose the lesion and to avoid misdiagnosing it as other lesions. Diagnosis should be done as soon as possible following conservative surgical approach. The prognosis is always good since these tumors do not tend to recur.

REFERENCES