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Dentin Dysplasia Root less Teeth: A Rare Case Report

Dr. Mahera Khan[1], Dr. Vijay Duggi[2], Dr. Punit Bharadwaj[3],
Dr. Ishtiyaque Ahmed[4]

[1] *(2nd Year Post Graduation , Department Of Pedodontics And Preventive Dentistry , Vananchal Dental College And Hospital , Jharkhand)*
[2]*(MDS , Professor And Head Of The Department Pedodontics and preventive Dentistry , Vanachal Dental College and Hospital, Jharkhand)*
[3]*(MDS , Associate Professor Department Of pedodontics and preventive Dentistry , Vananchal Dental College and Hospital , Jharkhand)*
[4]*(BDS ,Yenepoya Dental College and Hospital , Mangalore , Karnataka)*
Corresponding Author: Dr. Mahera Khan

Abstract: *A case report of dentin dysplasia type I rare disorder reported to department of pediatric dentistry. Patient complaint of grade I and II mobility in maxillary right and left central incisors respectively.*

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I. Introduction

Dentin dysplasia is a rare disturbance of dentin formation characterized by normal enamel but compromised dentin quality with abnormal pulpal morphology. according to WITKOP dentin dysplasia is of two types , radicular dentin dysplasia (type I) and coronal dentin dysplasia (type II).

The etiology of dentin dysplasia is still not clearly known , but it is a hereditary disease , transmitted as autosomal dominant characteristic.

Clinically type I or radicular dentin dysplasia appears normal in colour and morphology . The teeth characteristically exhibit extreme mobility and are commonly exfoliated prematurely or after minor trauma as a result of absence of roots. Radiographically , in both dentition , the roots are short , blunt , conical , or completely malformed.

II. Case Report

A 7 years old girl (figure :1) reported to the department of pediatric dentistry with the complaint of mobile anterior teeth and wanted to be fixed. According to the history , there was no mobility before the trauma, which was happened 20 days back . on clinical (figure:2) examination no revealed signs of gingivitis and periodontitis . All the soft tissues were normal but there was grade I and II mobility found on maxillary right central and maxillary left central incisors respectively . After proper clinical examination and because of severe mobility in teeth ,patient referred for radiographic examination of maxillary central incisors. The radiographic examination was completed by taking both intra oral periapical and occlusal view radiographs . the radiographic analysis showed that the maxillary right and left central incisors had no roots at all (figure :3). It appears as though the crowns of the teeth were situated directly on the alveolar bone without any strong anchorage deeper in to the maxillary jaw bone.

III. Discussion

The condition may be considered as a case of malformation , resulting from root development arrested shortly after its initiation. The etiology of dentin dysplasia is not known precisely , while several factors considered as possible causes. At one time this was thought to be a single disease entity , but now it has been separated by Shields and his associates into type I (dentin dysplsia) and type II (anomalous dysplasia of dentin). The first description of the disease was that Of Ballschmied in 1920. Delayed root formation and abnormal tooth eruption also have been reported in a girl suffering from congenital kidney disease. Careful examination of radiograph in periapical region revealed obliterated pulp canal in this case .This obliteration in the permanent teeth commonly occurs pre-eruptively. Histologically coronal dentin is usually normal. Apical to this may be areas of tubular dentin , but most of that which obliterates the pulp is calcified tubular dentin , osteodentin , and fused denticles. The characteristic feature of dentin dysplasia described as ‘lava flowing around boulders’ seen because of normal dentinal tubule formation appears to have been blocked so that new dentin forms around obstacles.

TREATMENT

As because of severe mobility and absence of roots which unable to restore the teeth functionally and anatomically , so we advised the patient for extraction and replace it with prosthesis.

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Figure 1: clinical picture of patient

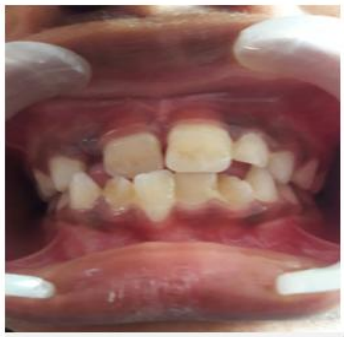

Figure 2: intraoral photograph

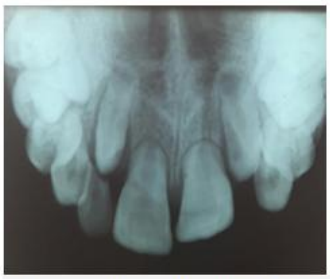

Figure 3: radiographic evaluation using occlusal view

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