INTERCEPTIVE MANAGEMENT OF MIDLINE DIASTEMA RELATED TO MESIODENS: A CASE REPORT

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ABSTRACT

Supernumerary teeth which occur both in the primary and the permanent dentition are seen more frequently in the permanent dentition causing a variety of pathological and occlusal disturbances. Presented herewith is a case report of a patient with a mesiodens which had caused problems in esthetic appearance and spontaneous eruption of right sided upper lateral incisor. Extraction of the mesiodens was carried out, subsequently followed by the space closure utilizing simple fixed orthodontic therapy.

Key words: Interceptive orthodontics, Malocclusion, Mesiodens, Midline diastema

INTRODUCTION

Supernumerary teeth are teeth in excess of the normal number which can occur in both primary and permanent dentitions. A mesiodens is the most common supernumerary (extra) tooth. It is located in the maxilla in the midline (hence the special name which means "middle tooth"). The etiology is unknown, but hyperactivity of the dental lamina is the most widely accepted theory. In some cases, there appears to be a hereditary tendency for the development of supernumerary teeth. The prevalence has been estimated to be 0.15 to 2.2% of the population with a preference to male. Mesiodens is usually found to be impacted but can also be fully or ectopically erupted. The presence of a mesiodens or supernumerary teeth in the maxillary arch could be deleterious from the esthetic and functional point of view. Although the literature associates these problems as etiological factors to midline diastema, the presence of both situations in the same patient is very uncommon. The Pediatric Dentistry practice include incorporation of more interceptive orthodontic procedures. If children receive proper guidance in the development of occlusion and appropriate orthodontic treatment, they will reach adulthood with aesthetic and functional occlusion. Certain phases of orthodontic treatment are very well within the realm of pediatric dentistry as pediatric dentists come across children at the earliest. Early recognition and interception could avoid long term laborious orthodontic treatment. Interceptive procedures are required for developing basal dysplasia, cleft palate problems, anterior diastema, habit problems, arch length deficiency problems and so forth.

It is strongly advised that the diagnosis of mesiodens should be made as early as possible due to its association with disturbances in tooth eruption such as delayed eruption of the permanent incisors, crowding or interference with the alignment of the maxillary incisors, dental impaction, resorption of adjacent tooth, development of dentigerous cyst and one of the common sequel, a midline diastema.

Since there is a lack of information in the literature regarding patients with midline diastema associated to mesiodens, it is necessary to report clinical cases in order to facilitate the knowledge of this issue.

The purpose of this article is to present a case report of a 9 year-old boy with mesiodens causing midline diastema which was treated with a simple interceptive orthodontic approach achieving satisfactory results.

CASE REPORT

A 9 year-old boy reported to the Department of Pediatric Dentistry, Manipal College of Dental Sciences, Mangalore