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A Case Report of Solitary Median Maxillary Central Incisor Reported in Tehsil Headquarter Hospital, Gujjar Khan, Pakistan

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Abstract

A solitary median maxillary central incisor (SMMCI) is a rarely occurring dental anomaly and is referred to as a syndrome. This complex disorder seems to be associated with several congenital anomalies. Therefore, early diagnosis and recognition by dentists are emphasized. This case report presents a clinical case of SMMCI with missing maxillary and mandibular frena, along with brain growth retardation in Tehsil Headquarter Hospital, Gujjar Khan, Pakistan. Aligned with the literature early diagnosis and correction of SMMCI is of prime importance as the condition is associated with developmental problems. Moreover, the case should be managed by a team of health professionals to achieve optimum health-related outcomes.

Keywords Case report, solitary, median, maxillary, central incisor, case report

1. Introduction

SMMCI is a rarely occurring dental anomaly and is referred to as a syndrome. It is characterized by the presence of a single central incisor along with other midline developmental abnormalities (1,2). It was first reported by Scott in 1958 (2). As per available literature, its incidence is 1:50,000 live births predominantly affecting females (3,4). It is a complex disorder that may present as an isolated dental defect or may exist in the form of a syndrome (4). The etiology is related to some unknown factors affecting the fetus between thirty-fifth to thirty-eight days of gestation (5). The disorder has also been found linked with short stature and is referred to as a condition of monosuperoincisivodontic dwarfism (6). The literature available on this disorder is limited, therefore this paper aims to present clinical evidence and illustration of SMMCI syndrome through a case report.

2. Case Report

This study reports a case of a 2-year-old female child, reported to Tehsil Headquarter Hospital, Gujjar Khan, Pakistan with the complaint of a large tooth affecting her physical appearance. She was a full-term born child and now suffering from growth retardation. On physical examination, a single median deciduous maxillary central incisor was observed. The oral assessment revealed an absent normal midline labial frenulum along with the presence of a low vaulted palate as shown in figures 1, 2, and 3.

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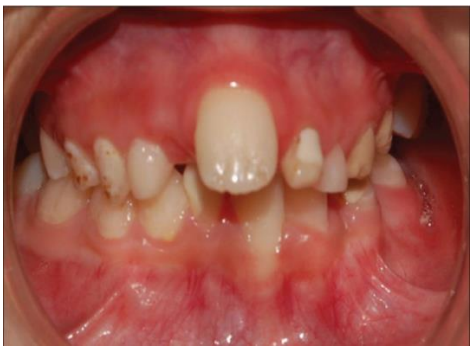

Fig 1: Pictorial presentation of SMMCI

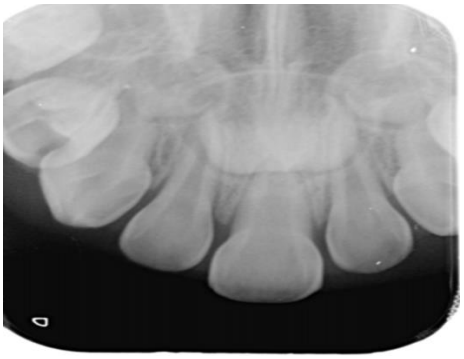

Fig 2: Radiographic of SMMCI

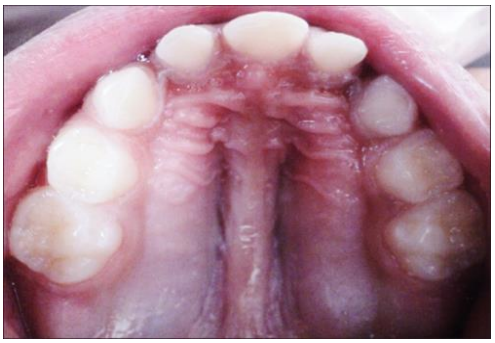

Fig 3: Picture of oral cavity showing low vaulted palate

The patient was diagnosed with a SMMCI along with brain growth retardation and short stature. This was a case of an SMMCI along with the presence of other developmental disorders and was further referred to a pediatrician for further diagnosis and treatment plan.

3. Discussion

In this case report, patient history supported by the clinical and radiological findings established that this patient was a case of SMMCI which was supported by missing maxillary and mandibular frena, along with brain growth retardation. Treatment options for this patient may include widening the palate to the provision of enough room for SMMCI tooth to move a side of the midline (7). After widening the palate an artificial central incisor can be implanted at the age of 17-18 years (8). Literature supports that SMMCI is a rarely occurring developmental disorder of abnormal positioning of the upper central incisor (9,10). The syndrome has also been found associated with multiple congenital abnormalities most commonly including midline nasal cavity defects, cleft lip and palate, microcephaly, congenital heart diseases, and ambiguous genitalia (5,6,11). Short stature has also been reported among the significant number of diagnosed cases (6,12,13). As per the available literature and evidence of associated conditions with SMMCI disorder early diagnosis is important to treat the cases (2,8,14). The cases of SMMCI may need long-term treatment, therefore, a multidisciplinary team of healthcare professionals including the dental surgeon, speech therapist, and psychologist is required for better health outcomes (10,15).

4. Conclusion

SMMCI is a unique syndrome, and early diagnosis and treatment are important. A case of SMMCI needs to be treated with possible consideration of congenital and developmental abnormalities. A complete and thorough assessment of the patient should be carried out and a multidisciplinary team should be involved in treatment.

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