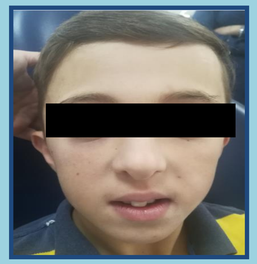
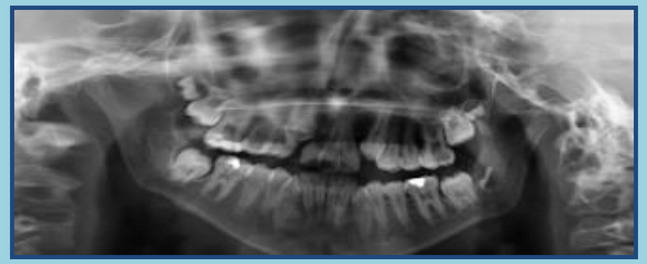
Solitary Maxillary Central Incisor Syndrome: Case Report and Comprehensive Management

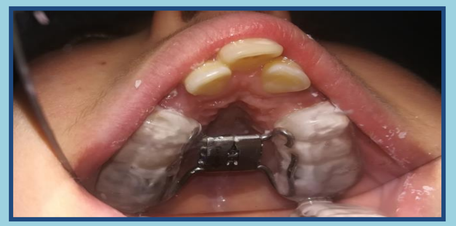
Ezza Abdullah, (NYU Langone) & Fouad Salama, (A.T. Still University - MOSDOH, St. Louis, MO)

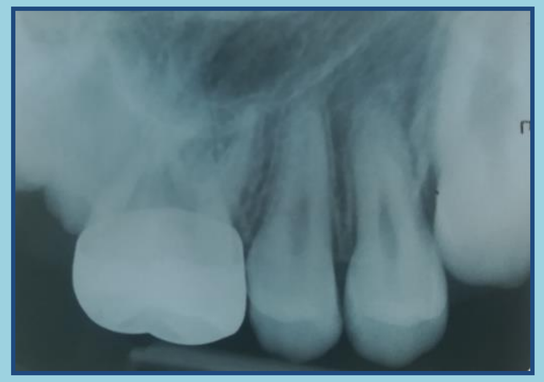
INTRODUCTION

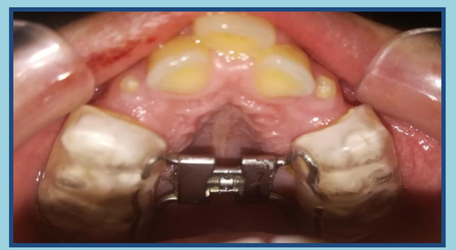
The single median incisor is a rare developmental anomaly in the permanent dentition with one single central incisor in the maxilla, positioned exactly in the midline. This condition has been associated with extra- and intraoral malformations in the frontonasal segment of the cranium and face. The condition could be isolated or could be part of many different syndromes or syndromic association.

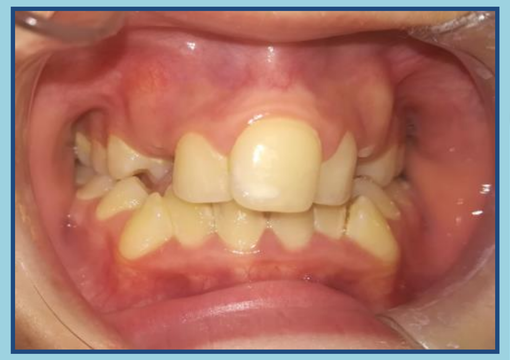


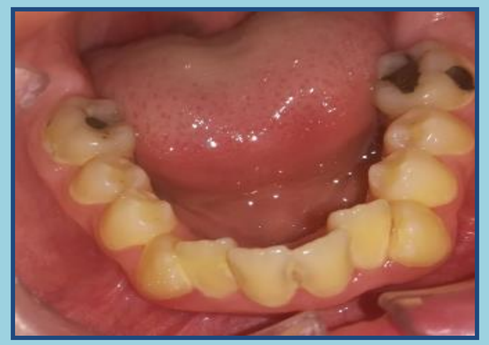


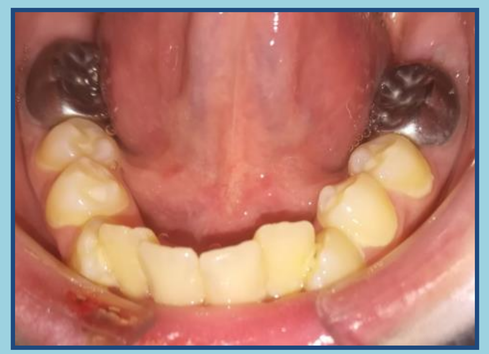












CASE REPORT

This case report details proper diagnosis, treatment, and follow-up of a 12-year-old male patient with a known medical history of maxillary central incisor syndrome. Radiographic examination confirmed presence of single median (maxillary) central incisor. First permanent molars showed signs of molar incisor hypomineralisation (MIH). Maxillary arch showed severe constriction. The child has a short stature, and decreased weight below the normal limits on growth charts, he is intellectually normal, but had delayed speech until age 4 then the child cached up, the child has normal hearing and vision abilities. Growth hormone analysis was done at age 3, and it revealed that the growth hormone for this child is just below the normal limits. Intra oral examination revealed a class II incisor relation, with a missing maxillary central incisor. The first permanent molars were treated with stainless steel crowns (SSCs). The severe constriction of the maxillary arch was treated by bonded rapid palatal expansion (screw) appliance. Follow-up showed improvement of the constriction of the maxillary arch.

SUMMARY

Early diagnosis of SMMCI is important as it may be a sign of other severe congenital or development abnormalities. Referral to a pediatrician for further investigations is important. The child with SMMCI syndrome may require long term comprehensive care by a multidisciplinary team.