

Causes, Risk Factors and Treatment of Hypodontia

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Received: 04-Mar-2022, Manuscript No. OHDM-22-16098; **Editor assigned:** 04-Mar-2022, Pre QC No. OHDM-22-16098 (PQ); **Reviewed:** 18-Mar-2022, QC No. OHDM-22-16098; **Revised:** 25-Mar-2022, Manuscript No. OHDM-22-16098 (R); **Published:** 04-Apr-2022, DOI: 10.35248/2247-2452.22.21.987.

Introduction

Tooth agenesis is a condition in which teeth are missing and three Subdivisions of Tooth Agenesis are hypodontia, oligodontia, and anodontia. Hypodontia or generally called as Congenital Missing Teeth (CMT). It specifically describes the absence of one to six teeth, excluding third molars. Oligodontia refers to the absence of more than six teeth, excluding third molars, while anodontia represents a complete failure of one or both dentitions to develop. Subcutaneous administration or tumor is the most common cause of self-malformation in humans. It can occur as part of a recognized genetic syndrome or as an isolated characteristic of non-symptomatic. Most patients lack only one or two teeth and are most likely missing a permanent second premolar and maxillary lateral incisor. Both environmental and genetic factors are involved in the etiology of hypodontia, the latter playing a more important role. Patients with hypodontia often present significant clinical challenges to orthodontists as treatment times can be extended and treatment outcomes can be compromised in some cases. Therefore, identifying genetic and environmental factors may be particularly useful for early prediction of this condition and for the development of future preventive strategies and new therapies.

Causes and Risk Factors

The most common cause of hypodontia is inheritance. Hereditary CMT primarily affects one or two teeth. There are also other environmental and external conditions that lead to hypodontia. Dental defects are the result of increased maternal age, low birth weight, multiple births, early exposure to certain infections, and trauma or medication. Hypodontia is usually the result of hereditary disorders such as ectodermal dysplasia and Down's syndrome. There are several terms used to describe certain forms of partial tooth loss, such as the absence of six or more teeth, and the absence of teeth completely. Your mouth is designed to work with 36 teeth. Permanent teeth that are congenitally missing disturb the harmony of natural tooth growth. In addition to being unattractive, missing teeth patients

can suffer from problems such as misalignment, periodontal damage, inadequate alveolar bone growth, poor chewing ability, and obscure speech. There are also functional concerns when other teeth in the mouth shift into empty spaces and reposition their teeth. Your unusual tooth shape is visible to people while you talk and laugh. The remaining teeth begin to move into the empty space created by the congenitally missing tooth. This shift can cause speech problems, abnormal bone growth, and gum damage. Some tooth abnormalities that can result from CMT are ectopic canines, delayed rashes, and abnormally shaped teeth and in most cases, CMT affects wisdom teeth.

Diagnosis and Treatment

A diagnosis of hypodontia can be confirmed by dental x-ray. Other signs may be associated such as small teeth, peg-shaped lateral incisors, conical teeth, taurodontic molars, and spaced dentition. Genetic testing can be used to identify mutations in 560 known and candidate genes involved in orodontal diseases. They say "prevention is better than cure" but the problem is that most cases of hypodontia are hereditary there is not much you can do to prevent it. However, it should also be noted that not everyone needs to pass on their hypodontia to the next generation. Treatment of hypodontia consists of dental braces, dental implants, Bridges, and artificial dentures. Dentures are removable teeth that can help chew and improve the appearance of the mouth. Treatment can be started early in the case of hypodontia, or depending on the patient's needs. A removable prosthesis can be suggested for children up to 3-4 years old. These prostheses can be updated as the child grows up. If only front teeth are missing in hypodontia, a flexible system allowing slight movement of a bridge can be created by bonding an acrylic tooth to the support structure (abutment) with three orthodontic wires. Permanent methods of replacing missing teeth include dental implants. Therapeutic treatment of patients with hypodontia requires an multidisciplinary team that includes pediatric dentists, orthodontists, prosthodontics, and maxillofacial surgeons.