Quest Journals
Journal of Medical and Dental Science Research
Volume 8~ Issue 5 (2021) pp: 70-72
ISSN(Online) : 2394-076X ISSN (Print):2394-0751
www.questjournals.org

Research Paper

Prosthodontic Correction for A Pedodontic Patient With Ectodermal Dysplasia: A Case Report

Dr. M. Bhuvaneshwari, B.D.S.[1], Dr. N. Raj Vikram, M.D.S., Ph.D.[2]
[1,2] *Private Practitioner (Smile n Shine Dental and Orthodontic Clinic, Chennai – 600102, Tamil Nadu, India.)*
Corresponding Author: Dr.M.Bhuvaneshwari

ABSTRACT: *Ectodermal dysplasia is an uncommon congenital condition that influences various ectodermal structures. Kids with this condition may have several manifestations that differ in severity and might involve dentition, epidermis, hair, nails, and sebaceous glands. The following case report addresses the management of a pedodontic patient with ectodermal dysplasia. The treatment includes fabrication of maxillary and mandibular dentures to aid in the psychosocial development and also in restoration of the vertical dimension, aesthetics, and function.*

KEYWORDS: *Ectodermal dysplasia, pedodontic patient, fabrication of maxillary and mandibular dentures, genetic conditions.*

Received 12 May, 2021; Revised: 23 May, 2021; Accepted 25 May, 2021
Published with open access at www.questjournals.org

I. INTRODUCTION

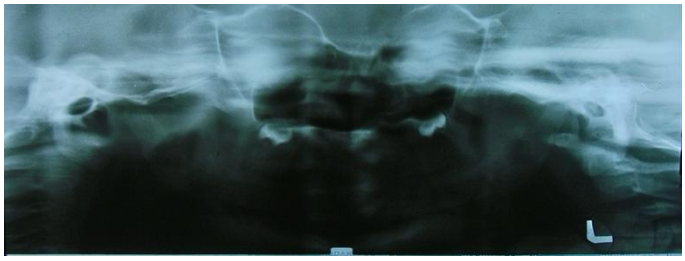
Ectodermal dysplasia is a collection of genetic syndromes arising from anomalies of the ectodermal components. Over one hundred and fifty distinct syndromes associated with ectodermal dysplasia have been recognised.

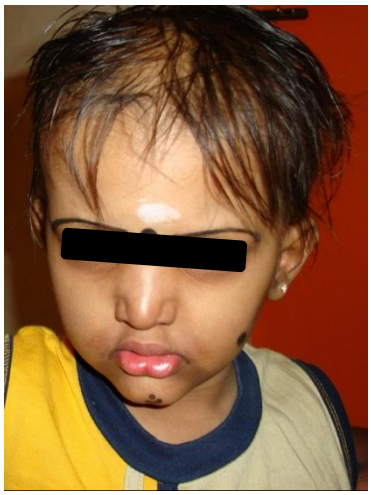
Although few of the syndromes present with differing genetic conditions, the symptoms these present with are occasionally comparable with each other. Ectodermal dysplasia is commonly diagnosed by clinical observation. This is generally carried out with the help of acquiring extensive familial histories, which also aids in the determination of the mode of inheritance is autosomal dominant or recessive.

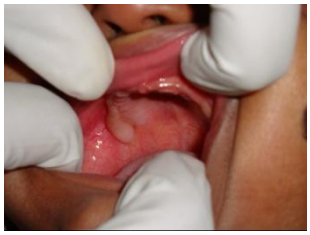
Ectodermal dysplasia often leads to congenitally absent teeth or/and may even lead to peg-shaped teeth due to the anomalies in the developing tooth buds. Cosmetic dental corrections are nearly always essential and the affected kids might require dentures as early as 2 years of age. Repeated replacements of the dentures are generally necessitated during the growth phases, and intraosseous implants can be considered after puberty.

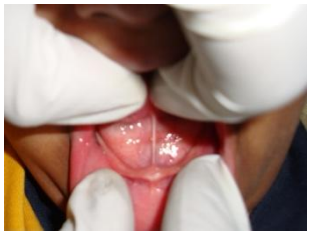
II. CASE PRESENTATION

A 6-year-old boy reported to Smile 'n' Shine Dental Clinic, Anna Nagar, Chennai, with opinion from his pediatrician for having a hassle in mingling with fellow peers and interacting socially (suggestive symptoms of clinical depression), additionally problem in ingesting food because of the absence of teeth. The mother and father desired a prosthetic correction that would assist the kid in ingesting and enhance his social acceptance. The boy was previously diagnosed with Anhidrotic Ectodermal Dysplasia. There was no evident familial history of Ectodermal dysplasia. The boy was fairly built with no eyelashes, anhidrotic skin, sunken nasal bridge, pouted lips, scarce eyebrows, and scarce hair in the head. The parents stated that the boy never sweats and his lips remain dry during all climates. Intraoral examination revealed edentulous ridges that were atrophic with diminished elevation. The boy had a shallow palate with normal but dry oral mucosa due to the scarcity of saliva. OPG revealed the absence of any impacted or erupted teeth in the oral cavity.



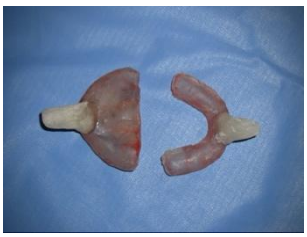


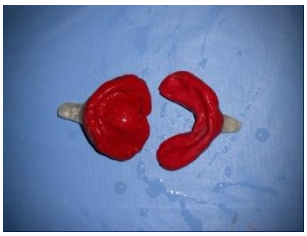


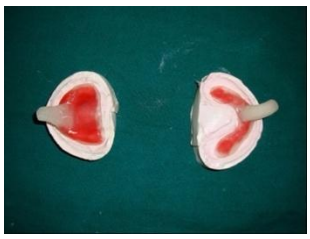


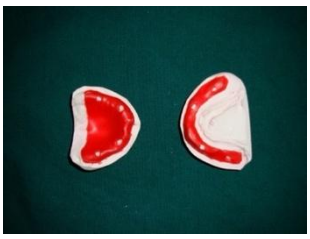
III. PROSTHETIC MANAGEMENT

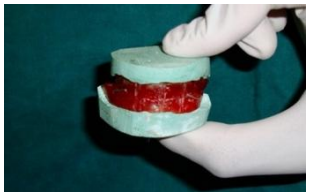
A preliminary upper and lower impression was taken using alginate. A custom tray with with a 2 mm wax spacer was fabricated. Secondary impressions were taken with Eugenol Free Zinc Oxide impression paste and the final master casts were poured. Occlusal rims on base plates were made and jaw relations were taken. Careful attention was given to the shape and size of the trimmed teeth based on the age, sex, and size of the patient. A denture trial was done and the final dentures were fabricated using heat-activated resin.

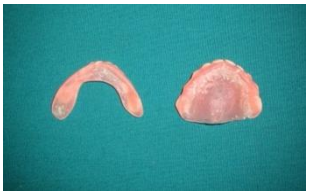


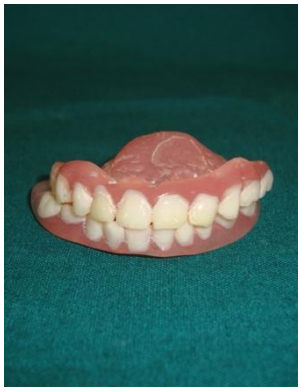


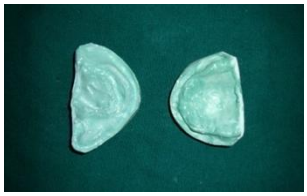
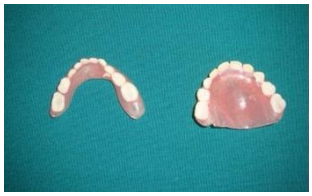










IV. CONCLUSION

The study presents the management of a kid with Anhidrotic Ectodermal Dysplasia with completely edentulous maxillary and mandibular ridges. The primary objective of the treatment is to reestablish the esthetic and function of the child during the development until the jaw development has been completed. The final treatment after the development of both the maxillary and mandibular jaw will be implant-supported prosthesis.

REFERENCES

[1]. Bhargava, A., Sharma, A., Popli, S., & Bhargava, R. (2010). Prosthodontic management of a child with ectodermal dysplasia: a case report. Journal of Indian Prosthodontic Society, 10(2), 137–140.
[2]. Franchi L, Branchi R, Tollaro I. Craniofacial changes following early prosthetic treatment in a case of hypohidrotic ectodermal dysplasia with complete anodontia. J Dent Child. 1998;65:116–121.
[3]. Bonilla ED, Guerra L, Luna O. Overdenture prosthesis for oral rehabilitation of hypohidrotic ectodermal dysplasia: a case report. Quintessence Int. 1997;28(10):657–661.
[4]. Pigno MA, Blackman RB, Cronin RJ, Cavazos E. Prosthodontic management of ectodermal dysplasia: a review of the literature. J Prosthet Dent. 1996;76:541–545. doi: 10.1016/S0022-3913(96)90015-3.