Root caries a challenge to the restorative dentist in the next decade

Caries on the surface of the tooth with receded gums would be a challenge to treat with its anatomical location at the cervical third on the exposed root surfaces, mostly associated with enlarged gums, leading to difficulty in diagnosis and restoration. Understanding the risk factors, methods of restoration, and prevention strategies of root caries needs immediate attention with focus of clinical research to alter the future.

Changing clinical presentation of root caries in the last decade is related to:

- 1. Age group affected Not geriatric anymore. The adults are also quite prone to root carries. This could be related to the lifestyle, chronic systemic illness, and poor oral hygiene. In addition, diet and nutrition play an important role in the development of root caries
- 2. Clinical presentation of caries has also been altered. This could be due to the poor immune system in the oral cavity, which is related to the general health of the patient and salivary composition and nature.^[2]

Dysbiosis in the oral cavity is due to the systemic health, which leads to change in the composition and nature of saliva, leading to increase in the opportunistic microorganism, thus resulting in root caries.

The typical feature of root caries, clinically, is that it is located at the cervical third, which is a difficult area to access anatomically, and it continues to spread lly around the tooth at the neck of the tooth leading to breakage of the crown. Another important feature of root caries is that it spreads to all teeth When it is not been treated which classifies it as rampant root caries.

There is no adequately validated risk assessment tool for root caries; the available indices specifically for root caries do not help in evaluating or comparing the clinical studies.^[3]

Future research needs to be focused on investigating risk factors and prevention strategies that can be used and planned accordingly to prevent root caries.

Increase in life span, decrease in nutrition, poor oral hygiene and chronic systemic illnes are the predisposing factors for root caries, 30% of the Indian population may be affected by root caries in future which would alter the quality of life and well-being of the Indian population. Oral health policies focusing on the risk factors, validation, and prevention of root caries need to be formulated.^[4]

Shishir Singh, Mithra Hegde¹

Editor in Chief, Journal of Conservative Dentistry and Endodontics, Dean, Professor and Head of Conservative Dentistry and Endodontics Department, Terna Dental College, Nerul, Navi Mumbai, Maharashtra, 'Section Editor, Journal of Conservative Dentistry and Endodontics, A P. Shotty Momerical Institute of Dental Sciences, Mangalore,

A B Shetty Memorial Institute of Dental Sciences, Mangalore, Karnataka, India, President, Aesthetic Dentistry Association of India, Secretary, Association of Conservative Dentistry and Endodontics of Karnataka, Past President, Indian Dental Association, Dakshina Kannada Branch, Past Vice President, Indian Association of Conservative Dentistry and Endodontics

Address for correspondence:

Dr. Shishir Singh,

Editor in Chief, Journal of Conservative Dentistry and Endodontics, Dean, Professor and Head of Conservative Dentistry and Endodontics Department, Terna Dental College, Nerul, Navi Mumbai, Maharashtra, India.

E-mail: drshishirs@gmail.com

Date of submission: 01.07.2024 Date of acceptance: 01.07.2024 Published: 07.08.2024

REFERENCES

- Warreth A. Dental caries and its management. Int J Dent 2023;2023;9365845.
- Sen S, Kumar S, Chakraborty R, Srivastava S, Mishra G, Choudhary A. Prevalence and risk factors of root caries in the geriatric population in the rural sector. J Family Med Prim Care 2020;9:771-6.
- Radaic A, Kapila YL. The oralome and its dysbiosis: New insights into oral microbiome-host interactions. Comput Struct Biotechnol J 2021:19:1335-60.
- Shetty J, Hegde M, Devadiga D, D'Souza N. Prevalence of root caries in Indian population – A systematic review and meta-analysis. Evid Based Part 2022;24:112

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online Quick Response Code: Website: https://journals.lww.com/jcde DOI: 10.4103/JCDE.JCDE_415_24

How to cite this article: Singh S, Hegde M. Root caries a challenge to the restorative dentist in the next decade. J Conserv Dent Endod 2024;27:789.