

## A Brief Note on Dental Caries

Vihan Sharma\*

Department of Prosthodontics, University of Istanbul, Istanbul, Turkey

### Commentary

**Received:** 1-Mar-2022, Manuscript No. JPRPC- 60678; **Editor assigned:** 3-Mar-2022, PreQC No. JPRPC- 22-60678 (PQ); **Reviewed:** 15-Mar-2022, QC No JPRPC-22- 60678; **Revised:** 20-Mar-2022, Manuscript No. JPRPC-22-60678 (R); **Published:** 27-Mar-2022, DOI: 10.4172/2320-7949.10.3.004

**\*For Correspondence:**

Vihan Sharma Department of Prosthodontics, University of Istanbul, Istanbul, Turkey  
**E-mail:** Vihanhan@gmail.com

### DESCRIPTION

Caries of the teeth is the most common chronic illness. Dental decay is the result of the disease. A complicated interaction between acid-producing tooth-adherent bacteria and fermentable carbohydrates causes the condition. Acids in dental plaque can demineralize enamel and dentin in fissures and smooth surfaces of the teeth over time. The so-called white spot lesion is the first apparent symptom of dental caries. If demineralization continues, the white spot's surfaces will cavitate, forming a cavity. White spot lesions may demineralize and not progress if the demineralization environment is decreased or removed. High concentrations of cariogenic bacteria, frequent sugar consumption, insufficient salivary flow, insufficient fluoride exposure, poor oral hygiene and poverty are all risk factors for caries.

In order to reduce risk factors and boost preventive factors, caries prevention should be based on patient-centered and evidence-based practices. If overt disease is present, caries care should focus on assessing patient compliance and determining whether the disease will worsen, as well as tissue-preserving measures. Dental caries is a multifactorial, dynamic, biofilm-mediated disease that causes phasic demineralization and demineralization of dental hard tissues. Caries can occur at any age in both primary and permanent dentitions and can damage the tooth crown as well as exposed root surfaces in later life. The interaction of pathological and protective factors influences the onset and progression of caries. This interplay of factors underpins the categorization of individuals and groups into caries risk categories, allowing for a more tailored approach to care. Dental caries is a widely

dispersed, preventable disease that imposes significant economic and quality-of-life costs. The daily use of fluoride toothpaste is credited with the global decline in caries over the last few decades.

Dental caries, also known as cavities is a chronic infectious disease that affects more than 90% of adults in the United States. Recent changes in the epidemiology of dental caries have altered the disease's presentation, so that 75 percent of the disease is now experienced by 25 percent of the population among children aged 5 to 17 years. Furthermore, as our understanding of the disease process has grown, so has the range of management strategies for dental caries. There are interventions available to stop or reverse the demineralization process that characterizes the development of a carious lesion and several strategies for identifying the quarter of the population who will experience an increased incidence of dental caries have been reported. The increasing sophistication of available interventions for the prevention and nonsurgical treatment of dental caries is matched by an increase in the diagnostic methods for carious lesions. Carious lesion diagnosis has traditionally been a visual process based on clinical examination and radiograph review. Tactile data obtained by using a dental explorer or "probe" has also been used in the diagnostic process. Some alternative diagnostic methods such as Fiber-Optic Trans Illumination (FOTI) and direct digital imaging continue to rely on the dentist's interpretation of visual cues while other emerging methods, such as 3D imaging are relying on the dentist's interpretation of visual cues.

Electrical Conductance (EC) and computer analysis of digitized radiographic images for example, provide the first "objective" assessments in which visual and tactile cues are supplemented or supplanted by quantitative measurements. This relatively recent increase in the number of alternatives available for both diagnosis and management of dental caries has yet to be fully absorbed by dental practice. Thorough reviews of methods for diagnosing and managing dental caries should aid in this process. The clinical questions in this report were developed in collaboration with the Dental Caries Consensus Development Conference on the Diagnosis and Management of Dental Caries throughout Life's Planning Committee. The questions address three aspects of the diagnosis and management of dental caries in which the committee felt that clinical practice may not reflect current knowledge regarding efficacy and effectiveness or that a review of current evidence may help stimulate new research.