

Bibliographic Reference: Rachiotis, C., & Vougiouklakis, G. (2015). Dental Caries [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-608

Abstract

This book is about dental caries. Dental caries is the primary disease of hard dental tissues and the leading cause of tooth loss. The book's content will describe and analyze the etiology of dental caries. It will refer to the role of biofilms, the formation of dental microbial plaque (DMP), the ecology of the oral environment, and their relationship with the disease. Additionally, the role of the host and the role of the tooth and saliva will be analyzed. The physical-chemical interactions of the oral environment with the hard dental tissues will be described and analyzed, and the concepts of demineralization and remineralization will be clarified. The stages of the histopathological zones of enamel and dentin caries will be described, and their correlation with the clinical picture of the lesions will be made. Also, the forms and the most common types of clinical pictures in which these lesions appear will be described. All modern methods of caries diagnosis that exist today will be described and analyzed with an emphasis on clinical examination, radiography, and fluorescence. Reference will be made to the leading epidemiological indicators, and caries indicators DMFS and DMFT will be described. Finally, the non-invasive way of treating carious lesions will be mentioned. In particular, the role of oral hygiene, fluoride, antimicrobial agents, calcifying agents, and diet advice in preventing and treating incipient carious lesions will be analyzed.



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