

## Journal of Oral Hygiene & Health

**Open Access** 

# Dental Plaque and Etiology of Dental Caries

#### Salam Ezzat\*

Department of prosthodontics, Alexandria University, Egypt

### Editorial

Dental plaqueis the different microbial community plant on the tooth face bedded in a matrix of polymers of bacterial and salivary origin. Once a tooth face is gutted, a exertion film of proteins and glycoproteins is adsorbed fleetly to the tooth face. Plaque conformation involves the commerce between early bacterial colonisers and this film (the acquired enamel pellicle).

Dental plaques the name given to the aggregations of bacteria and their products which accumulate on the tooth face. Plaque collects fleetly in the mouth, although the factual rate of conformation varies from one existent to another. When plaque accumulates on the crowns of teeth the natural, smooth, candescent appearance of the enamel is lost and a dull, matt effect is produced. As it builds up, millions of plaques come more readily visible to the naked eye. Dental plaques a unique and dynamic biofilm, largely miscellaneous and poly-microbial, generally of a unheroic color, that develops naturally on the teeth's smooth shells [1-3]. Dental plaqueis a substance that consists of bacteria netted in a biofilm that covers the face of the teeth. Accumulations of dental plaque can lead to gingivitis (inflammation of the epoxies and soft apkins in the oral depression) and also periodontitis. Early stages of infection of this kind are limited to inflammation of the oral soft apkins (gingivitis) and don't leave traces in the bone. With advanced cases that progress to periodontitis, the periodontal ligaments and alveolus come involved and it's at this point that the complaint can be observed in cadaverous remains [3-5].

Dental caries, or tooth decay, is a complaint caused by dental shrine. Certain oral bacteria can raise sugars and other carbohydrates from foods and drinks to produce acids, similar as lactic acid. If the attention of the acid produced is sufficient to negate the girding buffering capacity and depress the original pH at the tooth face to below about5.5, it's possible for the enamel to dissolve, because the result conditions come under saturated with respect to the mineral [5-7]. When the acidic conditions persist, this can lead to expansive demineralization and the conformation of a caries lesion. In this process, mineral may be removed from underneath the anatomical face for several hundreds of microns, forming a pervious subsurface region that may be clinically apparent as a white spot. While in the early stages this subterranean lesion is reversible, after prolonged demineralization the face sub caste collapses, cavitation occurs and it's at this stage that the diseased tooth is most frequently diagnosed as carious. In addition, dental plaques considered to be the primary causative factor of goo complaint. Poor oral hygiene, performing in adding quantities of plaque at the gingival periphery, will beget a seditious response in the host, characterized by increased gingival greensickness, swelling and bleeding [8-10]. In the early stages, inflammation is confined to the superficial apkins and is nominated gingivitis. This condition is extremely common and occurs in the vast maturity of the population, fortunately, it's generally fully effortless and reversible, when treated by reducing the position of shrine, through bettered tooth brushing chops and/ or the use of antiplaque agents. However, still, the prolonged presence of inflammation in susceptible individualities may affect the deeper tooth- supporting apkins, if gingivitis isn't reversed. This involves loss of bone that can lead to tooth loosening and eventually tooth loss. Therefore, the junking and forestallment of dental plaque figure-up by regular and effective dental cleaning is essential for maintaining an overall healthy mouth. In addition, it's the general agreement that oral malodor results from bacterial metabolism of proteinaceous substrates present in the oral depression leading to the generation of odorous composites, similar as hydrogen sulphides, methyl mercapatan and dimethyl sulphides. Thus, the junking and forestallment of plaque figure-up can have fresh breath- revivifying benefits.

#### References

- Usha C, Sathyanarayanan R (2009) Dental caries A complete changeover (Part I). J Conserv Dent 12(2):46-54.
- Frencken JE, Sharma P, Stenhouse L, Green D, Laverty D, et al. (2017) Global epidemiology of dental caries and severe periodontitis - a comprehensive review. J Clin Periodontol 44(18): S94-S105.
- Velo MMAC, Scotti CK, da Silveira ITT, Mondelli RFL, Atta MT, et al. (2019) Management of dental caries guided by the ICDAS-LAA: a 28-month follow-up. Gen Dent 67(5): 24-28.
- 4. Marsh PD (2004) Dental plaque as a microbial biofilm. Caries Res 38: 204-211.
- 5. Patel M (2020) Dental caries vaccine: are we there yet? Lett Appl Microbiol 70 (1): 2-12.
- Socransky SS, Haffajee AD (2002) Dental biofilms: difficult therapeutic targets. Periodontol 28: 12-55.
- Gilbert P, Maira-Litran T, McBain AJ, Rickard AH, Whyte FW (2002) The physiology and collective recalcitrance of microbial biofilm communities. Adv Microb Physiol 46: 203-255.
- Marsh PD (2000) Role of the oral microflora in health. Microb Ecol Health Dis 12: 130-137.
- Marsh PD (2003) Are dental diseases examples of ecological catastrophes?. Microbiology 149: 279-294.
- Holmstrup P, Poulsen AH, Andersen L, Skuldbøl T, Fiehn NE (2003) Oral infections and systemic diseases. Dent Clin North Am 47(3): 575-598.

\*Corresponding author: Salam Ezzat, Department of prosthodontics, Alexandria university, Egypt; E-mail: ezzatsalam@yahoo.com

Received: 05-Jan-2022, Manuscript No: johh-22-52455; Editor assigned: 07-Jan-2022, Pre QC No. johh-22-52455 (PQ); Reviewed: 14-Jan-2022, QC No. johh-22-52455; Revised: 19-Jan-2022, Manuscript No. johh-22-52455 (R); Published: 26-Jan-2022, DOI: 10.4172/2332-0702.1000296

Citation: Ezzat S (2022) Dental Plaque and Etiology of Dental Caries. J Oral Hyg Health 10: 296.

**Copyright:** © 2022 Ezzat S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.