DENTAL PLAQUE & ITS MICROBIOLOGY - RECENT CONCEPTS

LIBRARY DISSERTATION

BY

PRITI GOEL

DEPARTMENT OF PERIODONTOLOGY S.D.M. COLLEGE OF DENTAL SCIENCES SATTUR-DHARWAD



As the teeth develop and erupt in the oral cavity, there are appearance of other regions, such as pits & fissures on occlusal surfaces and proximal stagnant areas between adjacent teeth. These regions may provide suitable conditions for the growth of dental deposits. The various type of dental deposits found to be accumulated on the tooth surface are: plaque, materia alba, acquired pellicle and calculus. Although, it has been suggested that all soft, extraneous material adhering to the teeth should be called dental plaque, this term has been frequently reserved for the firmly adherent bacterial masses which possess a recognized histological architecture.

Bacterial plaque may be one of the predisposing factor in periodontal diseases²². The accumulation of plaque at the gingival margin is chiefly responsible for promoting inflammation. Absence of a good oral hygiene also leads to more plaque accumulation. The gingival crevice provide a suitable site for harbouring various micro organisms. The micro organisms growing within the tissues, may damage the tissues by releasing various toxins, enzymes and metabolic waste products. These toxins and enzymes, produced by the micro organisms, found in dental plaque are considered important in gingivitis and periodontitis¹⁷. Evidence from various fields of periodontal research documented the diseasive role played by microbial plaque in the initiation and maintainenance of gingivitis and periodontitis.

The significance of dental plaque in the development of periodontal disease lacked scientific basis until the middle of this century, till well designed epidemiological studies were performed. From such surveys it is now