

LEUKOCYTE FUNCTION AND PERIODONTAL DISEASES

- A REVIEW

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LEUKOCYTE FUNCTION AND PERIODONTAL DISEASES - A
REVIEW is a record of work done by the candidate Dr. Jayaprasad for
the M.D.S. degree in Periodontics during the period of study at S.D.M.
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15.7.97

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1997

Human beings are all times exposed to different varieties of microorganisms of which some are pathogenic or oppurtunistic. These pathogenic organisms causes serious diseases if they invade the deeper tissues. Our bodies have a special system for combacting the different infectious and toxic agents i.e. the host immune mechanism.

Human oral cavity breeds, nourishes and maintains numerous microbial species. The virulence and the pathogenicity of these organisms are kept under check by the defence mechanism of oral cavity. This includes the salivary function with hydrolytic enzymes and buffering property, the gingival crevicular fluid with antimicrobial activity and finally the foremost in the human immune system is the leukocytes. The leukocytes either act directly or indirectly on the pathogens destroying them by phagocytosis or by forming antibodies against antigens.¹³

The periodontal disease involve (i) local infection (ii) host response that may result in the connective tissue alterations.⁴

Immune system plays a major role in limiting the infections. The immune system also orchestrates the alteration of connective tissue in a complex remodelling process involving cycles of destruction and reconstruction.⁴

Histology reveals that the three primary lekcocytes participating in the immune response to periodontal disease are neutrophils, monocytes and lymphocytes. The leukocyte infiltrate the gingiva in a temporal and spatial order suggesting that the strategy is similar to that used to combact other