

THE ROLE OF SALIVARY IGA IN PERIODONTITIS WITH DIFFERENT SEVERITY

A Thesis

*Submitted to the College of Dentistry
University Of Baghdad*

*In Partial Fulfillment of the Requirements for
the Degree of
Master Of Science in Periodontics*

By

*Saif Sehaam Saliem Juma
B.D.S.*

Supervised by

Professor

Dr. Khalid B. Mirza.

Rammahy

Assistant Professor

Dr. Abdul-Khaliq Al-

Baghdad-Iraq

2003

ABSTRACT

The aim of this study was to determine and compare quantitatively the concentration of salivary IgA in different severity of chronic and aggressive periodontitis, and to determine the role of salivary IgA in different periodontal parameters.

Unstimulated whole saliva was collected from 100 individuals of both sexes, all these subjects had no history of systemic diseases, which possibly could disturb immunological mechanism. The human sample was divided into four groups 25 in each group.

The groups were:

Group I : Chronic periodontitis patients with mild severity (1 to 2mm clinical attachment loss)

Group II : Chronic periodontitis patients with severe destruction (≥ 5 mm clinical attachment loss)

Group III : Aggressive periodontitis patients.

Group IV : Individuals with clinically healthy gingiva, no pockets, no bleeding on probing & no evidence of bone loss (control group).

The clinical evaluation consisted of registering the following periodontal parameters:

1. Plaque index (Silness & Loe, 1964).
2. Gingival index (Loe & Silness, 1963).
3. Bleeding on probing (Newbrun, 1996).
4. Probing pocket depth.

5. Clinical attachment loss (Glavined & Loe, 1967).

Salivary IgA was determined by single radial immunodiffusion technique of Mancini *et al* (1965) using low concentration of immunodiffusion plates for quantitative determination of proteins in low concentration ranges.

The results of this study showed elevated level of salivary IgA in periodontitis groups compared to control and this increase is more in severe periodontitis group also there is an increase in all periodontal parameters included in this study accompanying a concomitant increase in IgA concentration.