Clinical and Immunological Changes Associated With Removable Partial Denture in Patients with Rapidly Progressive Periodontitis (RPP)

The present work carried out to study the clinical and immunological changes that may result after using the removable partial denture in patients with RPP. This study included the following groups:

Group I:
10 Healthy controls.

Group II:
10 RPP patients using heat curing acrylic partial dentures lined with soft liner.

Group III:
10 RPP patients using acrylic dentures without lining.

All the subjects were examined clinically for:
- Plaque index.
- Gingival index.
- Pocket depth.

Gingival biopsies were taken from the patients once before and the other six months after denture using and the tissue immunoglobulin level IgA and IgG was determined.

Results of the present study showed that RPP patients showed no significant change in the plaque deposits after using the acrylic removable partial dentures while an increase in the gingival inflammation, pocket depth was observed.

The immunological results showed significant increase in the level of IgA and IgG in RPP patients in comparison to the controls.

Also the results revealed an increase in IgA and IgG level after using the acrylic dentures that lined with soft liner-while in patients using dentures without lining, IgA level was decreased while IgG level was increased.

From the results we conclude that:

* It is preferable for RPP patients to use acrylic removable partial denture lined with soft liner to decrease the antigenic load over the supporting structures.
* Meticulous daily plaque control program must be performed while using prosthetic appliances for RPP patients.