

# The Effect of Diabetes, Smoking, Cyclosporin A, and Nifedipine on Periodontal Disease

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# Abstract

The aim of this study is to determine the effect of the following risk factors (smoking, diabetes mellitus, nifedipine, and cyclosporin) on periodontal disease.

The sample consisted of 120 subjects, age range (35-70) years of both sexes, the sample was divided into four groups 30 in each, all with chronic periodontitis and nearly equal plaque level which was 1.8.

The groups were:

1. **Smoker group:** patients smoking 10 cigarettes per day or more for ten years or more.
2. **The drug group:** patients taking medications (nifedipine, cyclosporin) for more than three months.
3. **Diabetic group:** patients with diabetes mellitus for ten years or more with poor control, this is taken by patients history and fasting blood sugar test (subjects with blood glucose levels greater than (126 ml/DL) were judged to be diabetic.
4. **Control group:** patients with chronic periodontitis but do not have any of the above risk factors.

The clinical evaluation consisted of registration of the following periodontal parameters:

1. Plaque index (*Silness and Løe, 1964*).
2. Gingival index (*løe and Silness, 1963*).
3. Probing pocket depth.
4. Attachment loss.
5. Retention index (*Bjorby and Løe, 1976*).
6. Teeth loss.

Results of this study showed that under similar plaque level which were (1.8). the diabetic group had more attachment loss and gingival inflammation among all groups. The smoker group showed the least gingival inflammation, while the drug group showed the least periodontal progression.

The conclusion was that the diabetic group which was the poorly controlled for 10 years or more was the highest risk group among all.