

ROLE OF PROBIOTICS AS AN ADJUNCT TO SCALING AND ROOT PLANING IN CHRONIC PERIODONTITIS PATIENTS

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Probiotics are the “live microorganisms that when administered in adequate amounts confer health benefits on the host”.



Lactobacillus (L.casei, L.salivarius),

Bacillus, Enterococcus

Bifidobacterium, Streptococcus

Objective: To evaluate the influence of probiotic supplementation as an adjunct to scaling and root planing on periodontal inflammation in periodontitis patients.

In the field of periodontal healthcare, probiotics are emerging as a breakthrough approach to be used as an adjunct to conventional periodontal treatment.

MATERIALS AND METHOD: This study was carried out in the Department of Periodontics and Oral Implantology, PGIDS, Rohtak. The study population comprised 20 patients who were randomly allocated to two groups:

GROUP A (n=10): Scaling and root planning was done.

GROUP B (n=10): Scaling and root planing along with probiotic milk drink supplementation (65 ml) containing *Lactobacillus casei* strain once per day for one month was provided.



Chronic periodontitis patients with PD (pocket depth) \geq 4-6 mm and CAL (clinical attachment level) = 1-4 mm were included. (Stage 1 & 2 Periodontitis) as per World Workshop 2017 classification

The clinical examination included a full-mouth periodontal assessment: BOP (bleeding on probing), PI (plaque index), GI (gingival index), PD (probing depth) and CAL (clinical attachment level) at baseline and after one month.

RESULTS: Significantly fewer bleeding sites and decreased gingival inflammation were seen in Group B as compared to Group A at one month. Non-significant differences were seen in other periodontal parameters between both groups.

Parameters (1 Month)	GROUP A (Mean \pm SD)	GROUP B (Mean \pm SD)	P VALUE(A-B)
AGE	24.7 \pm 5.71	23.6 \pm 2.71	0.819
PI	0.81 \pm 0.40	0.79 \pm 0.45	0.821
GI	1.54 \pm 0.55	1.46 \pm 0.54	0.031
BOP	46.6 \pm 19.4	40.4 \pm 21.63	0.023
PD	4.13 \pm 0.25	4.04 \pm 0.44	0.102
CAL	1.55 \pm 0.60	1.37 \pm 0.45	0.545

CONCLUSION: The patients taking probiotic milk drink as an adjunct to scaling and root planing demonstrated a better improvement in gingival inflammation. However, a further long term, multi-centre study with a large sample size is recommended to determine its practical implementation.