



**“Comparative Efficacy of Oil Pulling and Chlorhexidine on
Plaque Induced Gingivitis”**

by

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ABSTRACT

Background and Objectives: Mechanical plaque removal with the help of tooth brush and tooth paste is not sufficient to eliminate gingival inflammation. Studies have shown Chlorhexidine to be most effective adjunct in treating gingivitis. However, due to its reported side effects of tooth discoloration and altered taste sensation, equally effective herbal alternatives with minimal side-effects are now being explored. Ayurvedic text claims oil pulling to be a highly effective adjunct to reduce gingival inflammation. Due to the limited studies that have been documented on oil pulling therapy for reducing gingival inflammation, more clinical trials are needed to prove its efficacy before it can be recommended as a cost effective adjunct. This study was thus conducted to compare the efficacy of oil pulling with chlorhexidine on plaque induced gingivitis.

Methodology: This randomized, examiner blind, parallel 3-cell study was conducted with a follow up period of 30 days. At the initial visit, the gingival and plaque scores in 79 subjects were recorded using Loe and Silness Gingival index and Turesky, Gilmore, Glickman modification of Quigley Hein plaque index respectively. This was followed by a random allocation of the study subjects into 3 groups: Coconut Oil, Sesame Oil and 0.12% Chlorhexidine mouthrinse. The subjects were subsequently recalled after 15 days and 30 days for re-evaluation. The data recorded was subjected to one-way ANOVA test, Schiffe post hoc test and Student ttest using SPSS version 19.0 software.

Results: The mean percentage reduction in gingivitis scores after a 30 day period in subjects using Coconut Oil was 24.84%, in Sesame Oil was 11.74% and in 0.12% Chlorhexidine was 24.91%. Coconut oil was seen to be as effective as 0.12% Chlorhexidine in reducing gingivitis ($p>0.05$) but sesame oil showed a statistically significant difference as compared to chlorhexidine ($p<0.05$).

Conclusion: Oil pulling using Coconut Oil is as efficacious as Chlorhexidine in reducing plaque induced gingivitis.

Key words: Oil Pulling, Sesame Oil, Coconut Oil, 0.12% Chlorhexidine, Gingivitis.

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