

Effect of the probiotic *Lactobacilli reuteri* (Prodentis) in the management of periodontal disease: a preliminary randomized clinical study

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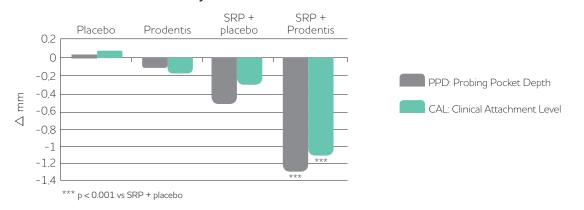
Demonstrates that L. reuteri Prodentis, alone or as an adjunct to scaling and root planing, improved clinical, inflammatory and microbiological measures of severity of periodontitis

#### Results

At day 42 compared to baseline:

- Plaque index, Gingival index and Gingival bleeding index were significantly improved by *L. reuteri* Prodentis compared to Scaling and Root Planing (SRP) + placebo and placebo alone.
- SRP combined with L. reuteri Prodentis gave maximum effects on reduction in Probing Pocket Depth (PPD) and enhancement of Clinical Attachment Level (CAL) compared to SRP alone (p<0.001). SRP alone had however significant effect compared to Prodentis alone and placebo.
- 90 percent reduction in the levels of the pathogens Aggregibacter actinomycetemcomitans, Porphyromonas ginigivalis, and Prevotella intermedia by SRP + L. reuteri Prodentis

## Reductions in PPD and CAL at day 42



### Conclusion

 L. reuteri Prodentis enhanced the effects of SRP and may be used in conjunction with non-surgical therapy and for subsequent maintenance

# **Facts**

- Study design: Prospective, randomized, double blind, placebo-controlled, and with split mouth design: in each subject
  two quadrants (either right or left) were treated with SRP whereas the remaining two quadrants were left untreated
- Subjects: thirty (30) adults, 34-50y, with chronic periodontitis
- Dosage: 1 lozenge twice daily (4 x 10°CFU/day)
- Duration: SRP was performed on Day 0, while L. reuteri Prodentis was used during days 21-42.

### Further reading

- Tekçe M et al. Clinical and microbiological effects of probiotic lozenges in the treatment of chronic periodontitis: a 1-year follow-up study. J Clin Periodontol. 2015;42:363-372.
- Ince G et al. Clinical and biochemical evaluation of Lactobacillus reuteri containing lozenges as an adjunct to non-surgical periodontal therapy in chronic periodontitis. J Periodontol. 2015;86:746-754.
- Teughels W et al. Clinical and microbiological effects of Lactobacillus reuteri probiotics in the treatment of chronic periodontitis: a randomized placebo-controlled study. J Clin Periodontol. 2013;40:1025–1035
- Martin-Cabezas R et al. Clinical efficacy of probiotic as an adjunctive therapy to non-surgical periodontal treatment of chronic periodontitis: A systematic review and meta-analysis. J Clin Periodontol. 2016;43:520–530.

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