

Effects of probiotics in periodontal diseases: a systematic review

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Abstract

Objectives This study was designed to determine the effects of probiotics in prevention and/or treatment of periodontal diseases.

Materials and methods We performed broad searches in the MEDLINE, Embase, and Cochrane databases and selected articles that satisfied the description of randomized clinical trials comparing the administration of probiotics versus placebo or another intervention to prevent or treat periodontal diseases in adult patients.

Results Four randomized clinical trials were analyzed in the final review process. For the primary outcome, probing pocket depth, there would be no clinical beneficial effect of probiotics. For secondary outcomes, probiotics have shown small benefits on plaque index and gingival inflammation.

Conclusions Based on the results of this review, the effectiveness of probiotics on the prevention and treatment of

periodontal diseases is questionable. There is currently insufficient evidence demonstrating the benefits of systematic preventative use of probiotics in patients with periodontal diseases.

Clinical relevance The use of probiotics are described to prevent or treat periodontal diseases in some clinical trials; therefore, a systematic review of the evidence for the effect of periodontal diseases is needed.

Keywords Systematic review · Probiotics · Periodontal diseases · Periodontitis · Gingivitis

Introduction

Periodontal diseases are divided into two general stages affecting a majority of adults: gingivitis and periodontitis

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