

Chlorhexidine mouthrinse effective short-term adjunct for dental plaque reduction

Clinical Question How effective is chlorhexidine mouthrinse as an adjunct to mechanical oral hygiene procedures for the control of gingivitis and plaque?

Bottom Line There was high-quality evidence of a large reduction in dental plaque with chlorhexidine mouthrinse used as an adjunct to mechanical oral hygiene procedures for four to six weeks and six months. There was also high-quality evidence of a reduction in gingivitis in individuals with mild gingival inflammation on average (mean score of 1 on the 0 to 3 Gingival Index scale), that was not considered to be clinically relevant. There was no evidence that one concentration of chlorhexidine mouthrinse was more effective than another. Rinsing with chlorhexidine mouthrinse for four weeks or longer causes extrinsic tooth staining. There were also other adverse effects such as calculus build-up, transient taste disturbance and effects on the oral mucosa (soreness, irritation, mild desquamation and mucosal ulceration/erosions). Chlorhexidine mouthrinse is indicated in particular clinical situations for short periods of time.

Caveat Over half of the included studies were either funded directly, received support for the study or were affiliated in some way with industry.

Context Dental plaque associated gingivitis is a reversible inflammatory condition caused by accumulation and persistence of microbial biofilms on the teeth. In susceptible individuals, gingivitis may lead to periodontitis and loss of the soft tissue and bony support for the tooth. It is thought that chlorhexidine mouthrinse may reduce the build-up of plaque thereby reducing gingivitis.

Cochrane Systematic Review [James P et al. Chlorhexidine mouthrinse as an adjunctive treatment for gingival health. Cochrane Reviews, 2017, Issue 3. Art. No.: CD008676.DOI: 10.1002/14651858. CD008676.pub3.](#) This review

contains 51 studies involving 5,345 participants.

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Oral Health

Chlorhexidine mouthrinse, adjunctive treatment, gingivitis, plaque, gingival health

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PEARLS summarise Cochrane reviews that are relevant to primary care. They contain the minimal information required for a clinician to either use an effective treatment or stop using an ineffective treatment. Where available they will contain numbers needed to treat and to harm.

PEARLS are created to assist with the dissemination of Cochrane reviews.

PEARLS are developed for trained health professionals in primary care. They are educational only and not meant to advise on specific clinical treatment.

We have started with the new reviews and will work our way back through the library.

PEARLS are developed by the Department of General Practice, University of Auckland, the Co-convenors of the Cochrane Primary Care Field New Zealand Branch of the Australasian Cochrane Centre and funded by the New Zealand Ministry of Health. **Brian McAvoy is an Honorary/Adjunct Professor of General Practice at the Universities of Auckland, Melbourne, Monash and Queensland.**