



Some evidence of improvement in glycaemic control with treatment of periodontal disease

Clinical question

How effective is treatment of periodontal disease for glycaemic control in people with diabetes mellitus (DM)?

Bottom line

Compared with no treatment or usual treatment, there was a small but significant reduction in HbA1c after 3–4 months of treating periodontitis (scaling/root planing and oral hygiene ± antibiotic therapy) in people with type 2 DM.

Caveat

Only seven studies met the inclusion criteria for the review, and individually these lacked the power to detect a significant effect. Only three studies were suitable to include in a meta-analysis, and two of these were assessed as being at moderate to high risk of bias. Most of the participants in the studies had poorly controlled type 2 DM, with little data from trials on the effects on people with type 1 DM.

Context

Long-term glycaemic control is of critical importance in preventing complications associated with DM. Research evidence has suggested the chronic inflammation and infection that results from periodontal disease could have an adverse effect on glycaemic control in people with DM, which in turn could lead to worsening gum disease.

Cochrane Systematic Review

Simpson TC et al. Treatment of periodontal disease for glycaemic control in people with diabetes. Cochrane Reviews 2010, Issue 5. Article No. CD004714. DOI: 10.1002/14651858.CD004714.pub2.

This review contains 7 studies involving 490 participants.

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