

Powered toothbrushing more effective than manual for oral health

Clinical question	How effective are powered and manual toothbrushes in everyday use, by people of any age, in relation to the removal of plaque, the health of the gingivae, cost, reliability and side effects?
Bottom line	Rotation oscillation brushes showed statistically significant reductions in both plaque (11% at 1 to 3 months and 21% after 3 months) and gingivitis (6% at 1 to 3 months and 11% after 3 months). All other brushes, apart from side-to-side, showed some statistically significant findings, but not consistently across both outcomes and time points. Cost, reliability and side effects were inconsistently reported. Any reported side effects were localised and only temporary.
Caveat	The clinical importance of these findings remains unclear. The longer term result was based only on 14 trials, compared with 40 trials for the short-term analysis.
Context	Good oral hygiene through the removal of plaque by effective toothbrushing has an important role in the prevention of gum disease and tooth decay. Dental plaque is the primary cause of gingivitis and is implicated in the progression to periodontitis. The build-up of plaque can also lead to tooth decay. Both gum disease and tooth decay are the primary reasons for tooth loss.
Cochrane Systematic Review	Yaacob M et al. Powered versus manual toothbrushing for oral health. Cochrane Reviews, 2014, Issue 6. Art. No.: CD002281.DOI: 10.1002/14651858.CD002281.pub3. This review contains 56 studies involving 5068 participants.
Pearls No. 449, December 2014, written by Brian R McAvoy	

[References]

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners. They are funded by the New Zealand Ministry of Health and are written by Prof. Brian McAvoy, Honorary/Adjunct Professor of General Practice at the Universities of Auckland, Melbourne, Monash and Queensland.

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