

- Brush twice a day with a fluoride toothpaste
- Brush for three minutes
- Do not rinse following brushing
- Change toothbrush when it becomes worn

Table 1. Summary of toothbrushing advice.

New designs, such as the so-called 'sonic' brushes may offer further improvement.

SUMMARY

Toothbrushing is a proven method for plaque removal and topical delivery of chemotherapeutic agents (particularly fluoride) into the oral cavity. It is a widely practised oral healthcare habit and individuals should be given appropriate advice (Table 1) to get the most benefit from it.

REFERENCES

1. Dental hygiene behaviour. In: Walker A, Cooper I, eds. *Adult Dental Health Survey. Oral Health in the United Kingdom 1998*. London: HMSO, 2000; pp.325-336.
2. Bakdash B. Current patterns of oral hygiene product use and practices. *Periodontology 2000* 1995; **8**: 11-14.
3. Fischman SL. The history of oral hygiene products: how far have we come in 6000 years. *Periodontology 2000* 1997; **15**: 7-14.
4. Shibley O, Rifai S, Zambon JJ. Supragingival dental plaque in the etiology of oral diseases. *Periodontology 2000* 1995; **8**: 42-59.
5. Cancro LP, Fischman SL. The expected effect on oral health of dental plaque control through mechanical removal. *Periodontology 2000* 1995; **8**: 60-74.
6. Cummins D. Vehicles: how to deliver the goods. *Periodontology 2000* 1997; **15**: 84-99.
7. Volpe AR, Petrone ME, DeVizio W, Davies RM. A review of plaque, gingivitis, calculus and caries clinical efficacy studies with a fluoride dentifrice containing triclosan and PVM/MA copolymer. *J Clin Dent* 1996; **7** (Suppl.): 1-14.
8. Sutcliffe P. Oral cleanliness and dental caries. In: Murray JJ, ed. *Prevention of Oral Disease*. Oxford: Oxford University Press, 1996; pp.68-77.
9. Murray JJ, Naylor MN. Topical fluoride therapy. In: Murray JJ, ed. *Prevention of Oral Disease*. Oxford: Oxford University Press, 1996; pp.53-59.
10. Chestnutt IG, Schafer F, Jacobson APM, Stephen KW. The influence of toothbrushing frequency and post-brushing rinsing on caries experience in a caries clinical trial. *Community Dent Oral Epidemiol* 1998; **26**: 406-411.
11. Hodges CA, Bianco JG, Cancro LP. Dental plaque under timed intervals of toothbrushing. *J Dent Res* 1991; **60**: 425.
12. Sjögren K, Birkhed D. Factors related to fluoride retention after toothbrushing and possible connection to caries activity. *Caries Res* 1992; **27**: 474-477.
13. Gibson JA, Wvade AB. Plaque removal by the Bass and roll brushing techniques. *J Periodontol* 1977; **48**: 456-459.
14. Saxer UP, Yankell SL. Impact of improved toothbrushes on dental diseases. I. *Quint Int* 1997; **28**: 513-525.
15. Ashley PF, Attrill DC, Ellwood RP, Worthington HV, Davies RM. Toothbrushing habits and caries experience. *Caries Res* 1999; **33**: 401-402.
16. Khocht A, Simon G, Person P, Denepitiya JL. Gingival recession in relation to history of hard toothbrush use. *J Periodontol* 1993; **64**: 900-905.
17. Saxer UP, Yankell SL. Impact of improved toothbrushes on dental diseases. II. *Quint Int* 1997; **28**: 573-593.

ABSTRACTS

HOW CLEAN IS YOUR TOOTHBRUSH?

Microbial Contamination of Toothbrushes and Their Decontamination. P.N. Filho, S. Macari, G. Faria, S. Asses and I.Y. Ito. *Paediatric Dentistry* 2000; **22** (5): 381-384.

This paper reports a most simple investigation, with most disturbing results. A group of schoolchildren were given new toothbrushes to use once a day for five days. The brushes were then immersed in one of three solutions for 20 hours, prior to these solutions being incubated and cultured.

No bacterial growth was obtained from those brushes immersed in either 0.12% chlorhexidine or 1% sodium hypochlorite. However, those immersed in sterile water showed significant bacterial colonization by *Streptococcus mutans*. Furthermore, scanning electron microscopy revealed biofilm formation on the toothbrush bristles.

It may be concluded that simple disinfection of toothbrushes should be a regular part of an effective oral hygiene regime.

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ORAL NEGLECT

Oral Care in Cancer Nursing. K.E.O. Öhrn, Y.B. Wahlén and P.O. Sjöden. *European Journal of Cancer Care* 2000; **9**: 22-29.

As dentists we probably assume that non-dental nurses will know how to take over the oral care of patients in hospitals and care homes. This study from Sweden interviewed 137 nurses involved in the care of patients with lung cancer, head and neck cancer and haematological malignancies. Such patients under their care would receive radiation or cytotoxic drugs resulting in oral side effects.

A staggeringly low number of nurses stated that they had received some information on oral care during the course of their training or received

any continuing education in the matter; fewer still had had specific instruction in the oral care of patients receiving chemotherapy or radiotherapy but the majority cited a need for this.

Very few nurses examined the oral cavity daily and 19% never examined the mouth. Most only examined the oral cavity in response to complaint by patients. Just over a third of the nurses routinely gave information on oral hygiene but 52% never gave oral hygiene instruction.

Over two-thirds of the nurses felt that they received sufficient help from dentists and, not surprisingly, these nurses also felt that their knowledge of the oral cavity and management was better.

The study highlights the need for greater interaction between nursing staff and the dental profession, particularly with regard to the care of patients whose oral status may be compromised as a result of their medical treatment.

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