

Dear Sir

I have been reading with interest the articles on Modern Endodontic Principles. In the article in the April issue (Managing Complex Situations) it states that chlorhexidine irrigation in retreatment cases has been shown to have a negative effect. I seem to remember reading in a paper in *Update* some years ago by Good, El Karim and Hussey that chlorhexidine had a place in retreatment cases as it was effective against *Enterococcus faecalis*, a known pathogen in this situation. Consequently, I have been using it instead of NaOCl since then. As a general practitioner it is difficult to know what to do. Clarification would be greatly appreciated.

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Author's response

Thank you for the letter on the subject of chlorhexidine (CHX) in endodontic retreatment cases. Without wanting to appear equivocal and unhelpful we must recognize that there will always be conflicting evidence and opinion on correct protocols in many aspects of dentistry. The prospective survival study by Ng and Gulabivala (2011) suggests worse outcomes when CHX is used but the authors struggled to provide anything other than scientifically plausible speculations as to why this may be. Other papers have supported the use of CHX. We would draw Dr Foxton's attention to the paper in this series on irrigation. In short, CHX has some limitations as an irrigant and in our humble opinion sodium hypochlorite should remain the gold standard.

Occasionally cases present that remain symptomatic after preparation or completion of root canal treatment. If the clinician knows that the treatment was undertaken to a high standard using copious irrigation with sodium hypochlorite, one may suspect a variety of pathologies from missed anatomy and root fractures to more virulent intra- or extra-radicular infections. *E. faecalis* is just one of many pathogens that are troublesome to remove and may explain failure. In these cases it is not unreasonable to add CHX to the irrigation protocol, but it is important to be realistic of what additional benefits this may offer when we are only second-guessing the pathology. It should be used in concentrations of 2% or more and

clinicians should take care not to mix it with other irrigants, especially sodium hypochlorite, as the precipitants formed may not only impede disinfection but could be carcinogenic. It may simply be more prudent to continue with sodium hypochlorite but take measures to improve its efficacy through ultrasonic or sonic agitation.

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Flossing, remoaning and remania – dentistry in denial

It is uncomfortable to be asked to face up to a reality which does not agree with our long established beliefs. In the past the powers that be just 'knew' that the sun went round the earth (which was, of course flat). Heretics were denounced, dismissed and even martyred for challenging dogma with evidence. But that couldn't happen today; could it?

Just as we are daily being told by the wise and totally informed 48% that the ignorant, misled 52% of the UK population should all be allowed to take a re-sit in plebiscites; so the internet is replete with those who 'know' that the recent AP report highlighting the ineffectiveness of flossing is obviously wrong; it's just the useless patients who can't master it! The lay press has merely noticed that 'Dental Heretics' have dared to question the benefits of flossing; how can they say such a thing?

The problem is we have known about flossing for almost a decade. Berchier *et al*,¹ after reviewing more than 1350 papers, found that these overall '...did not show a benefit for floss on plaque and clinical parameters of gingivitis' and concluded that '... a routine instruction to use floss is not supported by scientific evidence'. In relation to caries reduction, Hujoel *et al*,² in another systematic review (in the dental journal with one of the highest impact factors), found no reduction in interproximal caries when comparing patients who flossed and those who did not. There was, however, a significant reduction in high risk children when they received daily professional flossing. Reassuring, if only by bringing closer together dental professionals married to each other! If it doesn't prevent gingivitis or caries what is it for?

Fortunately, brushing works and some power brushes are more effective than

manual brushes.^{3,4} Fluoride toothpaste reduces caries.⁵ Let's tell patients the scientific facts and give up our long held and much cherished dogmas. Brush your teeth thoroughly at least once a day⁶ and make sure that your kids' teeth are also thoroughly brushed and are exposed to fluoride toothpaste twice a day.⁵

Cognitive Dissonance makes it tempting to make up all kinds of reassurance to patients to keep flossing, however, let's not go into denial and continue to mislead our patients. Over 80% do not floss regularly and it is hard to accept that these 'the great unflossed' were right and we, 'the highly educated intelligencia' may actually have been wrong. They will welcome the news with open arms and free of cyanotic fingertips.

Flossing doesn't work – get over it! And we are also leaving the EU – if you are also within the 48% highly educated intelligencia who just know the ignorant, misled 52% were wrong; get over that too!

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