

# OTHER JOURNALS IN BRIEF

A selection of abstracts of clinically relevant papers from other journals. The abstracts on this page have been chosen and edited by John R. Radford.

## BLEACHING – MANAGING SENSITIVITY?

### Effectiveness of a desensitizing agent before in-office tooth bleaching in restored teeth

Bonafé E, Loguercio A D *et al. Clin Oral Investig* 2014; **18**: 839–845

**Despite the use of a desensitising gel (5% potassium nitrate, 2% sodium fluoride), all subjects experienced tooth sensitivity following a harsh bleaching regimen.**

High concentrations of bleaching agents (35% hydrogen peroxide) do not confer superior whitening of teeth when compared with at-home bleaching with 10% carbamide peroxide (*Int J Periodont Restor Dent* 2012; **32**: 303–309). In the UK, 6% hydrogen peroxide (16% carbamide peroxide) is the maximum permitted concentration. The aim of this study was to find out if the use of a desensitizing gel reduced sensitivity following 'in office' bleaching. This study, carried out in Brazil, recruited 30 volunteers. The conditions used to evoke sensitivity were severe with the use of 35% hydrogen peroxide gel over two 45 minute appointments. In addition, each subject had up to five anterior composite restorations with the inevitable associated leakage. Tooth sensitivity was recorded daily for 7 days only, following bleaching. Irrespective of the use of a desensitising gel, all subjects experienced sensitivity, particularly from the lateral incisor teeth. However, the intensity of sensitivity was less in the test group. Satisfactory bleaching was achieved after 2 weeks with no 'color rebound' at 6 months.

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## 'OPENING A DIALOGUE'

### How we view complainants; an ethical dilemma?

Holden A. *Dent Update* 2014; **41**: 227–228

**A complaint and subsequent explanation may 'redress the power mismatch that exists between the professional and patient'.**

Complaints are to be celebrated as they drive up standards. Such platitudes are largely avoided although it is stated that 'it is possible to look upon them in a positive light.' But why do these occur for it is argued that *man is naturally good* (Jean-Jacques Rousseau). The cause of complaints may lie in the inherent power mismatch between the dentist and patient. Then any paternalistic attitude can lead to a breakdown in trust, particularly in a libertarian individualist culture. In addition, a paper is cited that reports 'empathy scores of dental students decline as they progress through dental school', there is a 'relentless drive to appear confident and competent in front of patients' and there are continuing pressures to deliver dental care in a resource limited service. When a complaint is made, the dentist should restore trust 'by opening a dialogue that makes way for a more honest and sincere relationship.' 'But which comes first - trust or trustworthiness?' (Baroness Onora O'Neill).

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## MINIMISING FIBRE POST FAILURE

### Do chlorhexidine and ethanol improve bond strength and durability of adhesion of fiber posts inside the root canal?

Bitter K, Aschendorff L *et al. Clin Oral Investig* 2014; **18**: 927–934

**Bonding of fibre posts are significantly improved if the dowel space was irrigated with ethanol immediately before cementation.**

It has been reported (*J Endod* 2012; **38**: 432–435) that 1 in 20 fibre posts failed over a 10 year period. It is noted however, that less than a third of these posts were followed up for the full 10 years. Several reasons have been ascribed for such failure including the breakdown of collagen by endogenous matrix metalloproteinases (MMPs). As well as chlorhexidine having well established antimicrobial properties, it is also a nonspecific MMP inhibitor. Nevertheless, in this *in vitro* study, pre-treatment of the dowel space with chlorhexidine did not improve push-out testing values for fibre posts. This is in contrast to what was observed with ethanol. Irrespective of pre-treatment regimen, the self-adhesive resin cement performed significantly better than the etch-and-rinse adhesive system. The push-out test has been criticised in that it does not simulate those forces associated with clinical failure. One minute pre-treatment with 99% ethanol before luting RelyX™ Fiber Posts with RelyX™ Unicem 2 (3M ESPE) resulted in superior bonding.

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## 'HARDSHIP PRODUCES A HEALTHIER SOCIETY?'

### Effects of a national economic crisis on dental habits and checkup behaviors – a prospective cohort study

McClure C B, Sæmundsson S R. *Community Dent Oral Epidemiol* 2014; **42**: 106–112

**In economic crises, some people may adopt a healthier oral lifestyle in order to allay the cost of expensive dental care.**

It was heart-rending to see the small proud Nordic nation of Iceland that prior to 2008 had a sense of economic prosperity with the fifth highest average income in the world, all but enter total economic collapse with uncontrolled inflation and high unemployment. Although somewhat inconsequential, what effect did this have on dental attendance and home oral care? As part of a national health survey into wellbeing, a questionnaire was used to gather information from a cohort of 4,100 subjects in 2007 and 2009. The numbers attending dental examinations did not change. In addition, 'neither gender had an observable decrease in daily brushing or flossing odds' and indeed men were more likely to brush and floss daily. Other studies are cited that show in such crises, although economically vulnerable groups and women suffer more stress and depression, of note people pursue healthier lifestyles such as quitting smoking.

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