

# 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.

## Oral lichen planus – HCV

Hepatitis C virus infections in oral lichen planus: a systematic review and meta-analysis

Alaizari NA, Al-Maweri SA *et al.* *Aust Dent J* 2016; **61**: 282–287

**The authors assert that those with oral lichen planus should be screened for hepatitis C infection to expedite diagnosis.**

The prevalence of anti-HCV antibodies is lowest in those living in the United Kingdom and Scandinavia (0.01–0.1%) and highest in Egypt (15–20%). It is now over 20 years ago that lichen planus was first linked with hepatitis C infection. The authors of this paper report a systematic review and meta-analysis of case-control studies. Nineteen studies met the inclusion criteria. The summary estimate OR for all studies was 6.07 (95% CI: 2.73–13.48) with a significant association between hepatitis C virus seropositivity and oral lichen planus. The investigators suggest such a link (60% in the northern region of Japan but no association in Brazil) may reflect merely the incidence of hepatitis C in various parts of the world. Papers exploring associations between such seemingly disparate factors are usually littered with plausibility; in this paper, it was restricted to ‘the ability of HCV to replicate in the skin and oral mucosa.’

DOI: 10.1038/sj.bdj.2017.449

## ‘...the random position of the tongue...’

Can tongue shadow in panoramic radiographs be avoided by using the tongue repositioning maneuver?

Cordesmeier R, Engelke W *et al.* *Oral Surg Oral Med Oral Pathol Oral Radiol* 2016; **121**: e175–180

**A simple and low cost tongue manoeuvre to obtain better panoramic radiographs.**

Some indictment, with one third of panoramic radiographs rated as ‘unacceptable’. Indeed, only about 1% of such radiographs were free of errors. Positioning errors such as the dark shadow when there is a space between the tongue and palate resulting in a radiolucent shadow over the roots of the maxillary teeth accounts for about half of these errors. In this study, the investigators determined if a tongue repositioning manoeuvre reduced the occurrence of this radiolucent shadow. This tongue manoeuvre, first described over 10 years ago, is when the patient is asked to swallow and to keep the tongue in that position against the hard palate during the taking of the radiograph. Using this tongue manoeuvre, the tongue/palate distance reduced dramatically from about 7 mm to 2 mm compared with a control ‘conventional positioning technique’. Despite this, about one quarter of radiographs still showed a visible tongue space.

DOI: 10.1038/sj.bdj.2017.451

## Mercury

Long-term changes in health complaints after removal of amalgam restorations

Björkman L, Sjørusen TT *et al.* *Acta Odontol Scand* 2017; **75**: 208–219

**Of note, the symptom load was still high five years after removal of the amalgam restorations.**

And there was only a reduction in six of the 23 general health complaints; and these included decreased salivation/mucus, less fatigue and improved concentration. Apart from self-reported general health complaints, other outcome measures were changes in life satisfaction and personality variables. This study was carried out with 20 patients. There was no difference in life satisfaction (Cantril Ladder of Life Scale) over the 5-year period. Nor was there a change in the subjects’ psychological state (for example depression, hypochondriasis and addiction potential). This was measured using the 567-item Minnesota Multiphasic Personality Inventory (MMPI-2) that incorporates ‘lie’ scales making it very difficult to fake results. As with other studies, there was an increase in health complaints immediately following amalgam removal. There was no control group. Therefore it was not possible to ascribe this small associated improvement in symptoms to the intervention.

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## Iatrogenesis – ‘brought forth by the healer’

Microleakage around Class V composite restorations after ultrasonic scaling and sonic toothbrushing around their margin

Goldstein RE, Lamba S *et al.* *J Esthet Restor Dent* 2017; **29**: 41–48

**The investigators suggest handscaling should be carried out in proximity to cervical resin composite restorations.**

There would appear to be no evidence for, nor against, as to whether or not tooth scaling is associated with increased tooth sensitivity (*Am J Dent* 2013 **26**: 21–27). However, there are concerns that the use of ultrasonic scalers may disrupt the marginal integrity of restorations. In this *in vitro* study, the use of a piezoelectric ultrasonic device (Varios 750, NSK-Nakanishi Inc) at full power, but not the use of a sonic toothbrush (Sonicare, Philips Sonicare), was associated with microleakage at the cementum-composite interface but not the enamel-composite interface. Beveling the margins of the cavity had no effect. These observations were of no surprise as sonic toothbrushes operate at 260 cycles per second whereas piezoelectric scalers vibrate at 25,000–50,000 cycles per second. The investigators cite another study that found the use of magnetorestrictive ultrasonic scaling (the enduring Cavitron 660, Dentsply) had no effect of tooth restoration marginal integrity. Magnetorestrictive ultrasonic tips vibrate in an elliptical pattern and are active on all sides of the tip, whereas piezoelectric tips vibrate in a linear motion.

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