

# 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.

## TRIBOLOGY – IPS E.MAX PRESS, GOLD AND ENAMEL

### Wear behavior of human enamel against lithium disilicate glass ceramic and type III gold

Lee A, Swain M *et al.* *J Prosthet Dent* 2014; 112: 1399–1405

Another study showing that ceramic wears tooth more than gold.

These investigators used SEM to identify wear scars on flat enamel specimens. The enamel was subjected to wear, by spherical-ended cylinders of heat pressable lithium disilicate glass ceramics (IPS e.max Press, Ivoclar Vivadent AG) and type III polished gold. A horizontal wear testing apparatus was used that generated an amplitude of 200 µm. The specimens were subjected for up to 1,100 cycles and loaded to 9.8 N. Distilled water was used as a lubricant. The testing apparatus also incorporated a calibrated load cell to measure frictional forces. Despite methodological limitations, it was reported that IPS e.max Press resulted in more wear to the enamel has a higher friction coefficient than gold. Abrasive wear would appear to be the predominant wear mechanisms for IPS e.max Press. For gold, transfer of this malleable metal from the cylinder to the antagonist would imply adhesive wear. The surfaces tested were those as supplied from a laboratory; glazed ceramic and polished gold.

DOI: 10.1038/sj.bdj.2015.9

## TRIBOLOGY – ZIRCONIA AND ENAMEL

### In vitro wear behavior of zirconia opposing enamel: a systematic review

Passos SP, Torrealba Y *et al.* *J Prosthodont* 2014; 23: 593–601

Although these investigators concur with others that different methods for wear measurement result in different material rankings, taken in the round polished zirconia causes less wear than glazed zirconia.

Selected terms were used to identify 142 potentially, eligible studies. The search was restricted to monolithic zirconia restorations. Twenty-five papers were examined of which seven met inclusion criteria. All studies were carried out in the laboratory. A meta-analysis was not possible because of methodological heterogeneity. For example, 1) some studies failed to use a wear method with a sufficient large slide (for example 0.7 mm), 2) other studies used enamel specimens with no cusps, and 3) the testing regimen did not employ at least 200,000 cycles although this number is somewhat empirical. The key observation was the 'glazed specimens presented more antagonist wear than the polished specimens' when the zirconia was polished with 1,200-grit abrasive paper. But then there is low temperature degradation (LTD) of yttrium-stabilized ceramic. In the presence of water, LTD results in loss of strength of the material, surface degradation that in turn may affect wear characteristics. None of the studies examined LTD.

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## INTERNET – EMPOWERING PATIENTS?

### Internet information on xerostomia: what should patients expect?

Delli K, Livas C *et al.* *Oral Dis* 2015; 21: 83–89

www.medicinenet.com (search xerostomia) was ranked marginally higher than several other sites offering good quality information on this subject.

Two thirds of users search Google™, 17.9% Bing™, and 11.4% Yahoo!®. On average, only the first 8–10 results are opened. This study used the LIDA tool (www.minervation.com/lida-tool/), a free programme that can be used by developers of web sites to create good quality health information. The search strategy, using the above search engines and Ask™, revealed 240 sites on xerostomia. This paper gives LIDA data on a sample of 50 such sites. Ranked equal third behind www.medicinenet.com (LIDA = 84), was en.wikipedia.org (LIDA = 76). The site with the lowest score was www.irishhealth.com (LIDA = 43). This bald assessment of this site would appear to be harsh. The investigators also graded each site using the Flesch Reading Ease Score (FRES). Generally the Web information on xerostomia was found to be written in a 'fairly difficult' to '(very) difficult' style. Of note, there appeared to be little association between the LIDA and FRES scores. FRES score for the text only of this abstract was scored as 'difficult'.

DOI: 10.1038/sj.bdj.2015.11

## INTERNET CBCT – HELPING THOSE CHILDREN WITH ANXIETY

### Internet-assisted delivery of cognitive behavioural therapy (CBT) for childhood anxiety: systematic review and meta-analysis

Rooksby M, Elouafkaoui P *et al.* *J Anxiety Disord* 2015; 29: 83–92

Cognitive behavioural therapy could be delivered effectively 'by a non-specialist coach' with minimum training.'

What is 'the efficacy of online or computer-assisted CBT programmes for anxiety-disordered children?' The search strategy used by these investigators returned 696 publications, from which 38 met inclusion criteria. On examining these, the number was expanded to 47 papers. Final screening resulted in 6 papers. This systematic review did not state the cause of the anxieties in these children. It was conceded that there was selection bias within these studies; those families that accessed such services were sympathetic to this approach and, the children were usually from mid-high income families, as reflected by a home internet connection. Surprisingly, only two studies presented data on compliance and completion. However, meta-analysis showed 'a clear moderate effect size in a positive direction in favour of the online CBT intervention.' Notwithstanding this, when linking diagnosis and treatment outcome 'between 19 and 70% of children at post-intervention still remained within the diagnosis range.'

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