

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.

TOOTH SHADES

Identifying the tooth shade in group of patients using Vita Easyshade

Elamin HO, Abubakr NH *et al.* *Eur J Dent* 2015; **9**: 213–217

Yet another tooth colour space.

The objective when taking a shade is to 'locate' it in a three-dimensional colour space. The Munsell colour system is descriptive and requires estimates for value, chroma and hue. The CIE Lab is linked to Munsell, but is more quantitative and uses the following three colour coordinates: L* for lightness, a* for redness and b* for yellowness and blueness. In promotional material (see *Accurate, esthetic shade matching made easy*, VITA®), it is stated that the range of different tooth colour shades form a banana in an upright position. Yet a study with American subjects showed that the tooth colour space was an elongated oval, and another carried out with Germans formed a circular space. The key finding from this study, is that in a selected sample of Sudanese subjects (n = 227), the tooth colour space formed a parallelogram. As expected, the shade of young people's teeth were lighter than those of older people. In this study, shades were recorded using both the VITA 3D-MASTER Shade Guide and a spectrophotometer (VITA Easyshade®).

DOI: 10.1038/sj.bdj.2015.631

RESIN COMPOSITE RESTORATIONS: SENSITIVITY

Does the adhesive strategy influence the post-operative sensitivity in adult patients with posterior resin composite restorations? A systematic review and meta-analysis.

Reis A, Loguercio AD *et al.* *Dent Mater* 2015 <http://dx.doi.org/10.1016/j.dental.2015.06.001>

No difference in post-operative sensitivity between the use of an etch-and-rinse system and a self-etch system.

The United Nations Environment Programme in concert with other august bodies, have advocated a 'phasing down' rather than a 'phasing out' of dental amalgam. A pragmatic approach, but this can only be achieved if the properties of alternative materials are improved. This meta-analysis examined only the characteristic of post-operative sensitivity, following two different regimens for the placement of resin composite restorations. Such sensitivity has usually been attributed to the etch-and-rinse system (total-etch) based on phosphoric acid. Then there are the self-etch adhesives containing acidic monomers when the tooth is etched and primed at the same time. In this study, 2,600 publications were retrieved of which 13 were analysed. There was no difference in post-operative sensitivity between the etch-and-rinse system and self-etch system. And the relative risk (when a relative risk of 1 means there is no difference between teeth restored with resin composite and the control material) of postoperative sensitivity was 0.99 (95% CI 0.63 to 1.56, or 95% 'sure it lies between these values').

DOI: 10.1038/sj.bdj.2015.632

RESIN COMPOSITES – EFFECTS ON THE PULP

Endodontic complications in teeth with vital pulps restored with composite resins: a systematic review

Dawson VS, Amjad S *et al.* *Int Endod J* 2015; **48**: 627–638

Notwithstanding the shortcomings of the included studies, 'there is no pronounced difference (on the effect of the pulp) between composite resins and amalgam'.

In this systematic review, the investigators used the PICO question; when P for population was 'vital permanent teeth', I for intervention was 'direct composite resin restorations', C for comparison was 'all other direct restorations', and O for outcome was 'endodontic complications such as pulpal sensitivity, apical periodontitis or root filling following coronal restoration'.

Using the PubMed database, 1,043 publications were identified. Only ten papers met the inclusion criteria. The investigators assert that, as the 'level of evidence was assessed as low', 'No conclusions could therefore be drawn.' Is this a reflection of the quality of research in this field? Not necessarily, as there were distinctions between the PICO question asked by these investigators and the research aims of the included studies. Yet seven of the ten studies, all of which explored outcomes following placement of restorative materials, 'lacked a clear description of how pulpal status was assessed'.

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PRIMUM NON NOCERE

Inhalation or ingestion of orthodontic objects in Finland

Varho R, Oksala H *et al.* *Acta Odontol Scand* 2015; **73**: 408–413

But practitioners may be reluctant to report untoward incidents.

The aim of this study was to investigate inhalation and ingestion of orthodontic objects. Questionnaires were distributed electronically to all members of the orthodontic section of the Finnish Dental Society (dentists = 251, dental hygienists = 437). Fifty-six percent of dentists and 35% of hygienists responded. Twenty percent of dentists reported that one patient, but as many as 15 patients, had ingested an orthodontic object. This is in contrast to 6.9% for dental hygienists. However, dental hygienists have only recently been carrying out orthodontic tasks. The total number of incidents were some 180. Dental hygienists reported that these incidents usually occurred in the surgery, in contrast to that reported by dentists when they stated this took place outwith the surgery when patients were sleeping or eating. There were only two reports of inhalation both requiring surgical intervention. This number of inhalations in this study, was considerably lower than that found in other studies that have reported 7.5–20.0%.

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