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.

INTERPERSONAL VIOLENCE

Public health and preventing violence. Information obtained when treating victims could help reduce future violence

Butchart A. *BMJ* 2011; **342**: d2882 doi:10.1136/bmj.d2882

'who, what, when, where, and why' – a population approach to prevent violence.

A multi-agency initiative has been described and shown to reduce gratuitous urban violence (see Florence C, Shepherd J *et al. BMJ* 2011; **342**: d3313 doi:10.1136/bmj.d3313). Such are the implications of this study, that an editorial was commissioned to put into context these issues and to suggest future work. The commentator revisits the reasons for examining this approach. These are to mould the triggers for violence such as accessibility to alcohol, parental supervision, behavioural problems and even economic inequalities. However, there is the continuing concern that such injuries are under-reported, particularly domestic violence. In addition, are these findings generalisable? This can only be confirmed by carrying out of a randomised control study 'with the city as the unit of randomisation'. It is conceded that there would be considerable logistical problems with carrying out such a study.

DOI: 10.1038/sj.bdj.2011.786

CREATING CONTACT AREAS

In vivo evaluation of different techniques for establishment of proximal contacts in posterior resin composite restorations

Cardoso P de C, Bastos de Oliveira AR *et al. Braz J Oral Sci* 2011; **10**: 12–16

All techniques produced satisfactory contact areas.

This *in vivo* study, compared the resin composite contact areas achieved by four different techniques used to restore interdental cavities. All employed a preformed metallic matrix (Unimatrix) to create the missing tooth surface and either a customised wooden or elastic interdental wedge. Two of the techniques used separating rings (Unimatrix Kit), one method a translucent contact spatula, and the fourth technique used resin inserts (3M ESPE). Each method was assessed and graded after placing ten resin composite restorations (n = 40 in total), by passing dental floss through the contact area immediately after restoration and 30 days later. No information was given on randomisation. No statistical difference was found between the different restorative techniques.

DOI: 10.1038/sj.bdj.2011.787

INTERPERSONAL VIOLENCE

Effectiveness of anonymised information sharing and use in health service, police, and local government partnership for preventing violence related injury: experimental study and time series analysis

Florence C, Shepherd J *et al. BMJ* 2011; **342**: d3313 doi:10.1136/bmj.d3313

'The Cardiff Model'.

This multi-agency programme works with emergency departments and the police to share anonymised information concerning interpersonal violence. This knowledge is then used to target local resources for violence prevention such as the use of plastic glassware, pedestrianising areas where there are bars and clubs and offering late night public transport. Using regression analysis, the investigators reported a significant reduction in hospital admissions for violence in Cardiff compared with comparable cities (Leeds, Reading, and Sheffield among others). Although it may appear counterintuitive, there was an associated increase in minor assaults. Possible explanations for this are 1) the more rapid deployment of police to 'hot spots' minimising an escalation of incidents and, 2) increased reporting of these less serious offences.

DOI: 10.1038/sj.bdj.2011.788

INFERIOR ALVEOLAR NERVE BLOCK

Applied anatomy of the pterygomandibular space: improving the success of inferior alveolar nerve blocks

Khoury JN, Mihailidis S *et al. Aust Dent J* 2011; **56**: 112–121

Sphenomandibular ligament.

The adage that those who pronounce they never miss an inferior alveolar nerve (IAN) block do not carry out dentistry, is confirmed by these authors who cite others that state that 1 in every 5 blocks do not result in effective anaesthesia. If the local anaesthetic agent is placed medial to the sphenomandibular ligament, that fibrous tissue that connects the lingula of the mandible to the spine of sphenoid, then diffusion is impeded. In addition, several motor nerves distant from the site for deposition of the anaesthetic agent for a direct (thrust) IAN block, can contain a sensory division that supply the mandibular teeth. For example, the mylohyoid nerve can branch from the IAN 1 cm superior to the lingula and then pass lateral to that pesky sphenomandibular ligament. Of note, the lingula is generally positioned higher than the coronoid notch in those with a prognathic jaw.

DOI: 10.1038/sj.bdj.2011.789