

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.

EBOLA – 'QUENCH THE REMAINING EMBERS'

Editorial. The Ebola endgame, and what comes after

Lancet Infect Dis 2015; **15**(6): 615. doi: 10.1016/S1473-3099(15)00032-8.

In tackling Ebola, it has been estimated (*Lancet Infect Dis* 2015 [http://dx.doi.org/10.1016/S1473-3099\(15\)70124-6](http://dx.doi.org/10.1016/S1473-3099(15)70124-6)) that some additional eleven thousand deaths can be attributed to malaria.

On 28 March 2015, the last person to have died from Ebola in Liberia was buried. A death too many, but as there have now been no new cases of Ebola in Liberia for more than 42 days, relief for this country that it is now Ebola-free. And in Guinea and Sierra Leone, there is also grounds for optimism. Nevertheless there is no reason for complacency, for there are still reports of Ebola identified only at post-mortem, new cases with no known contacts, and remaining unsafe burial practices. There have been other knock-on effects apart from additional deaths from malaria; untreated respiratory and diarrhoeal diseases and stifled vaccination programmes. A strategy for preventing another outbreak of Ebola or other devastating diseases is the establishment of the African Centres for Disease Prevention and Control. This is to be welcomed but with a budget of just US\$6.9 million to the end of 2016 and only 11 staff, this resource is totally inadequate.

DOI: 10.1038/sj.bdj.2015.455

DENTAL AESTHETICS – CANINE TEETH

The effect of canine characteristics and symmetry on perceived smile attractiveness when canine teeth are substituted for lateral incisors

Rayner WJ, Barber SK *et al.* *J Orthod* 2015; **42**: 22-32

Of note, the control image with 'accepted ideal smile characteristics' was not rated as that having the most pleasing appearance by lay people, dentists and orthodontists.

A possible explanation for this is that full-face images were rated in this study, whereas most other studies restricted their images to the teeth and circumoral structures. Such would also chime with a study (*J Am Dent Assoc* 2010; **141**: 40-46) that concluded '...even the smiling mouth, received less than 10 percent of the viewers' visual attention.' The investigators in this study also found that lack of symmetry around the maxillary dental midline '...were not perceived as being significantly less attractive than the smiles with symmetrical dental arrangements.' This study invited lay people, dentists and orthodontists (n = 30 in each group) to rate smile attractiveness of an 'ideal smile', and other images with different configurations of canine appearance, all morphed from an image made up from four average female faces. As shown by other studies, lay people were comfortable with the appearance if the canine tooth was in the position of the lateral incisor tooth.

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ORTHODONTICS – SLEEP-DISORDERED BREATHING

Class II malocclusion and sleep-disordered breathing

Kandasamy S, Goonewardene M. *Semin Orthod* 2014; **20**: 316-323

'...we have to be mindful of the impact our treatment may have on their airway in the long term.'

This narrative review focuses on links between orthodontic treatment for those with a Class II malocclusion and sleep-disordered breathing. On one hand the authors argue that there is no evidence that a non-extraction approach maintains airway spaces but then urge caution when using camouflage treatment (extraction of either upper first or second premolar teeth and retraction of incisors) for those with a Class II malocclusion and sleep-disordered breathing. This is because the patient may be 'committed to both maxillary and mandibular advancement' surgery. The authors, of course, concede that orthognathic surgery is invasive. A middle ground, that may meet the patient's dental aesthetic requirement without potentially compromising airway space, is to accept a residual overjet at the completion of orthodontic treatment. Management of sleep-disordered breathing should be in collaboration with the physician whose approach would be CPAP. Overnight polysomnography remains the gold standard for diagnosis of sleep-disordered breathing.

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INVISALIGN®

Lower incisor extraction treatment with the Invisalign® technique: three case reports

Giancotti A, Garino F *et al.* *J Orthod* 2015; **42**: 33-44

ClinCheck® (invisalign-g6.com/en-XA/files/ClinCheck-Pro-FAQ-en-XA.pdf) is a 3D tool that allows the dentist to plan out the intended movement of teeth before the fabrication of the aligners.

For those not familiar with Invisalign®, this orthodontic technique uses a series of removable aligners. At first Invisalign® was used to correct mild malocclusions by dental tipping, but its applications have been developed to treat more complex malocclusions such as open bites and Class II malocclusions. It is now more than 10 years since this technique was first described to align the lower anterior sextant. This latest paper illustrates the treatment of three patients following extraction of a lower incisor tooth. The following points are made: 1) the treatment goals are set out using ClinCheck®, before fabrication of the aligners; 2) rectangular vertical attachments allow three-dimensional control of tooth movement and horizontal rectangular attachments facilitate vertical anchorage; and 3) treatment involves a first phase and then a second refinement phase, the first phase using upwards of 30 or so aligners, particularly in the arch receiving treatment.

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