

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.

EXERCISE

Exercise to treat depression

Daley A, Jolly K. *BMJ* 2012; **344**: e3181

Exercise does not seem to benefit patients with depression who are already receiving 'good standard care'.

This editorial links a trial published in this edition of the journal (TREATment of Depression with physical activity – TREAD; *BMJ* 2012; **344**: e2758) with other studies that have examined this approach. The TREAD trial showed that additional physical activity did not improve depression nor reduce the use of antidepressants. But then patients in both test and control groups were already receiving appropriate care when recruited to this study. This finding is at odds with a Cochrane review that found that exercise had a moderate to large effect size. A possible explanation is that some studies had recruited volunteers who were 'more likely to be motivated to exercise and may be less severely depressed'. The beneficial effects of exercise also do not continue beyond the end of the intervention.

DOI: 10.1038/sj.bdj.2012.907

EXERCISE

Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy

Lee I-M, Shiroma EJ *et al. Lancet* 2012; **380**: 219–29

The risks from physical inactivity for poor health are '...similar to the established risk factors of smoking and obesity.'

In this study, the risks from physical inactivity were measured by calculating population attributable fraction ('the effect of a risk factor on disease incidence in a population'). Worldwide, they found that physical inactivity causes 6% of the burden of disease from coronary heart disease, 7% from type 2 diabetes, and 10% for both breast cancer and colon cancer. Whimsically perhaps, a historical study is cited that examined the dangers of exercise by comparing the longevity of Cambridge sportsmen with intellectuals. The sportsmen did not die younger. The authors comment that the 'breathtaking feats of athletes competing in the 2012 Olympic Games' or even those Cambridge sportsmen fifty years ago do not have to be emulated, but merely '15–30 min a day of brisk walking'.

DOI: 10.1038/sj.bdj.2012.909

OROPHARANGEAL CANCER

Male vaccination against human papillomavirus

Salisbury DM. *Lancet Infect Dis* 2012; **12**: 82–83

HPV vaccination of boys would appear unnecessary.

Some oropharyngeal cancers are associated with human papillomavirus (HPV 16). However, it has not been established if 'HPV vaccination prevents oropharyngeal cancer'. This commentary looks at the substantive paper published in this edition of the journal (*Lancet Infect Dis* 2012; **12**: 627–634) that reports on the Australian experience. In this country, girls have received HPV vaccination since 2007 and boys since mid-2010. To date, there has been a dramatic reduction in genital warts which are markers for some forms of cervical cancer. The more effective Australian vaccine is only just now available in the UK. As female-only vaccination is resulting in sufficient herd immunity in the UK, it is argued that vaccination of boys would contribute little to the reduction in numbers of cervical cancers in women. Similarly, this may apply to oropharyngeal cancers.

DOI: 10.1038/sj.bdj.2012.908

EXCLUDING SUBSTRATE

Infiltrating/sealing proximal caries lesions: a 3-year randomized clinical trial

Martignon S, Ekstrand KR *et al. J Dent Res* 2012; **91**: 288–292

Caries progression on proximal surfaces was arrested by both infiltration and sealing.

This study compared the efficacy of 1) infiltration (etching with 15% hydrochloric acid for two minutes before resin placement) and 2) conventional resin sealing, in order to control caries progression on the proximal surfaces of teeth. A split-mouth design was employed. To access the carious lesions, some of which had affected the outer third of the dentine, the teeth were separated by orthodontic elastic bands for two days. Radiographic examination at baseline and then after 1, 2 and 3 years showed that both infiltrating and sealing proximal carious lesions arrested the caries progression when compared with the control lesions. The harsh erosion caused by the HCl etching and then incomplete sealing could be the explanation as to why some of the infiltrated lesions progressed. Almost one third of the control sites did not progress.

DOI: 10.1038/sj.bdj.2012.910