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.

Zoster

Intradermal zoster vaccines: good for the old and the young Ogunjimi B, Hens N. Lancet Infect Dis 2016; 8: 869–871

This 'dose-sparing, and thus cost-sparing, intradermal vaccine' may not only reduce the burden of illness in the elderly population, but also chickenpox in children.

During the prodromal stage of shingles, toothache may be the only presenting symptom. Following an earlier paper (*N Engl J Med* 2005; **352:** 2271–2284), there has been little appetite in many countries for the universal adoption of a subcutaneous zoster vaccine; although there was a 61% reduction of zoster-related burden of illness in adults older than 60 years, the efficacy waned and it was expensive. This commentary was based on the substantive paper published in the same journal (*Lancet Infect Dis* 2016; **16:** 915–922) that reported an intradermal zoster vaccine had a greater increase in antibodies to varicella-zoster virus compared with subcutaneous zoster vaccine. Of note, another vaccine, the GSK varicella-zoster virus glycoprotein E subunit vaccine, has more than 94% effectiveness in preventing zoster, 3 years after vaccination. An unintended consequence of a universal chickenpox vaccination is an increase in zoster.

DOI: 10.1038/sj.bdj.2016.857

NSAID/heart failure

Non-steroidal anti-inflammatory drugs and risk of heart failure in four European countries: nested case-control study

Arfè A, Scotti L et al. BMJ 2016; **354:** i4857

Although dentists should be aware of the link, the association between NSAIDs and heart failure should not be of concern in their practice.

Among other conditions, diclofenac is contra-indicated in those with ischaemic heart disease and used with caution in those with a history of cardiac failure. NSAIDs should be avoided in those that have a hypersensitivity reaction, and used with caution in the elderly, pregnant women, nursing mothers and those taking oral anticoagulants. This was a nested case-control study (more efficient than a case-cohort design in that only a subset of controls is compared to the incident cases). In this study, 92,163 hospital admissions for heart failure were identified and matched with 8,246,403 controls. The investigators looked for association between risk of hospital admission for heart failure and use of NSAIDs. The use of any NSAID in the preceding 14 days was associated with a 19% increase of risk of hospital admission for heart failure (odds ratio 1.19; 95% confidence interval 1.17 to 1.22). The risk was greatest for those who took daily, an NSAID in high doses. Although the investigators only looked at those NSAIDs that had been prescribed, this association 'might apply to NSAIDs obtained over the counter'.

DOI: 10.1038/sj.bdj.2016.859

Shifting blame

Apportioning blame in the North American hepatitis C virus epidemic Spaulding AC, Miller LS. *Lancet Infect Dis* 2016; DOI: http://dx.doi.org/10.1016/S1473-3099(16) 30002-0

"...reuse of glass and metal syringes was common medical practice." In this COMMENT, there is a dated picture of a group of relaxed-looking young people listening to a guitarist; it has always been considered that the 'high seroprevalence of hepatitis C virus among baby boomers (can be attributed) to the risky individual behaviour of the Woodstock generation in the late 1960s.' In the substantive paper, (Lancet Infect Dis 2016; 16: 698–702) an alternative explanation is proposed. Just as the cause of the high prevalence of hepatitis C in Egypt was the unintended consequence of employing multi-use needles when administering intravenous tartar emetic for schistosomiasis, it is suggested that unsafe medical injection practices and blood transfusions were linked with hepatitis C in the US. This association was made from modelling phylogenetic analysis of genotype 1a sequences, before and after the 1960s. Although the medical establishment should accept blame for hepatitis C among the baby boomers, these commentators argue that those with hepatitis C from 'Generation Y' will be further stigmatised.

DOI: 10.1038/sj.bdj.2016.858

Anti-programmed cell death monoclonal antibody

Nivolumab for recurrent squamous-cell carcinoma of the head and neck Ferris RL, Blumenschein G Jr et al. N Engl J Med 2016; DOI: 10.1056/NEJMoa1602252

Increased overall survival with nivolumab albeit only 7.5 months *vs* 5.1 months, and a better quality of life.

Those with platinum-refractory recurrent squamous-cell carcinoma of the head and neck (about 70% of such cancers - J Clin Oncol 2015; 33: 3305-3313) have a median survival of only 6 months. 'No therapeutic options prolong survival among these patients.' Nivolumab, a fully human monoclonal antibody, blocks signals that prevent activated T cells from attacking the cancer thereby facilitating the immune system to clear the tumour. In this randomised, open-label, phase 3 trial, nivolumab resulted in longer overall survival than treatment with standard, singleagent therapy (hazard ratio for death, 0.70). In addition, side-effects were considerably less in those patients who received nivolumab. Also, patient-reported quality-of-life measures receiving nivolumab appeared to show a marginal improvement. Those who received conventional therapy, experienced a worsening of physical and social functioning (QLQ-C30) as well as pain and sensory problems (QLQ-H&N35). In the nivolumab group there were two treatment-related deaths ascribed to pneumonitis and hypercalcemia.

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