

ABSTRACTS

ARE TOPICAL CREAMS CONTAINING SALICYLATES EFFECTIVE IN TREATING ACUTE AND CHRONIC PAIN?

Lornal Mason and colleagues looked at the efficacy and safety of topical rubefacients containing salicylates in acute and chronic pain. They examined randomised double-blind trials comparing topical rubefacients with placebo or other active treatments in adults with acute and chronic pain. They found 3 double-blind placebo-controlled trials that had information on 182 patients with acute conditions. These trials showed that topical salicylate was significantly better than placebo. Six double-blind placebo-controlled trials had information on 429 patients and showed the same result. However, larger studies did not show the same effect.

The authors concluded that, based on this limited information, topical creams containing salicylates may be useful in acute pain. However, trials in musculoskeletal and arthritic pain suggested moderate to poor efficacy, although there were few adverse effects reported.

Mason L, *et al. BMJ* 2004; **328**: 995.

CHILDHOOD VACCINATION AND TYPE 1 DIABETES

There is a proposed link between childhood vaccinations and the development of type 1 diabetes. Anders Hviid and colleagues set out to look at whether or not this link is reasonable. They evaluated a cohort consisting of all children born in Denmark from 1 January 1990 to 31 December 2000, for whom detailed information on vaccinations and type 1 diabetes was available. Because of recent claims of clustering of diabetes cases 2 - 4 years after vaccination, they also examined the period after vaccination.

They found that type 1 diabetes was diagnosed in 681 children during 4 720 517 person-years follow-up. They found no relationship between type 1 diabetes and having received at least one dose of vaccine for all the usual vaccinations given to children in Denmark over this period. This included Hib, inactivated poliovirus, pertussis, measles, mumps and rubella and oral poliovirus vaccines. The development of type 1 diabetes in children who were defined as genetically predisposed to develop it by having a sibling with the disease, was not significantly associated with vaccination. There was also no evidence of clustering of cases 2 - 4 years after vaccination with any vaccine.

The authors concluded that their results do not support a causal relationship between childhood vaccination and type 1 diabetes.

Hviid A, *et al. N Engl J Med* 2004; **350**: 1398-1401.

META-ANALYSIS OF CORTICOSTEROID INJECTIONS FOR OSTEOARTHRITIS OF THE KNEE

The authors of this paper in the *British Medical Journal* point out that we already know that intra-articular injections provide relief of symptoms of osteoarthritis of the knee for about 2 weeks, but that there are concerns that multiple injections may damage articular cartilage. They set out to look at the efficacy of intra-articular corticosteroid injections for osteoarthritis of the knee. They used the Cochrane controlled trials register, Medline, Embase, hand searches and contact with authors and included any randomised controlled trial in which the efficacy of intra-articular corticosteroid injections for osteoarthritis of the knee could be ascertained.

What they found was that the evidence supports short-term (up to 2 weeks) improvement in symptoms after intra-articular corticosteroid injection, and some evidence that there may be a longer-term response of 16 - 24 weeks. However, a dose of 50 mg of prednisone may be needed to show benefit over this period of time.

Arrol B and Goodyear-Smith F. *BMJ* 2004; **328**: 869.

USING CT IN SCREENING FOR COLORECTAL CANCER

Colonoscopy is commonly used in screening for colorectal cancer, but this unpleasant and invasive procedure puts many people off potentially life-saving screening. Pickhart and colleagues looked at computed tomography (CT) scanning as an alternative. As they point out, most colorectal cancers arise from benign adenomatous polyps. The goal of colorectal cancer screening in asymptomatic people is to detect cancers and to remove adenomatous polyps. Virtual colonoscopy, or CT colonography, is a new method for colorectal cancer screening involving colonic preparation but not conscious sedation or recovery time for the patient.

The team looked at 1 233 asymptomatic adults who had same-day virtual and optical colonoscopy at 3 medical centres in the USA. The patients underwent standard colonic

preparation and then consumed barium and gastrographin. CT scanning was performed by multidetectors using a 3-dimensional protocol and the scans were interpreted by experienced radiologists. Optical colonoscopy was performed by experienced endoscopists who did not know the results of the virtual colonoscopy. All polyps were removed and sent for pathological examination.

The results of the study indicated that the likelihood of missing a clinically significant adenoma using virtual colonoscopy is very low, suggesting that optical colonoscopy could be avoided by many asymptomatic patients who undergo colorectal cancer screening. However, Pickhart *et al.* point out that costs need to be evaluated, including those incurred by the diagnostic work-up and treatment of incidental extracolonic findings such as renal lesions and abdominal aortic aneurysms.

Pickhart PJ, *et al.* *N Engl J Med* 2003; **349**: 2191-2200.

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