## MINERVA

Patients and their surgeons don't always agree on the results of surgery. In a study of assessments after total knee arthroplasty, patients' self reported American Knee Society pain and function scores were worse than those reported by their clinicians (*Journal of Bone and Joint Surgery (Am)* 2011;93:e117, doi:10. 2106/JBJS.J.00850). The Oxford Knee Scores, however, were similar for both groups. The authors say that range of knee motion may reasonably be self assessed by comparison with photographs and that long term follow-up is possible with patient reported measures, alleviating the burden of repeat clinic visits.

Guidelines recommend radioactive iodine therapy in patients with well differentiated thyroid cancer at high risk of recurrence, but the treatment tends to be given to all but the very lowest risk patients with thyroid cancer. There's a problem with this: in patients who've received this therapy, the incidence of second cancers (particularly salivary gland malignancies and leukaemia) is increasing. In view of this increased risk, and the lack of data showing improved survival outcomes in low risk patients receiving radioactive iodine therapy, researchers urge clinicians to stick to the guidelines (*Cancer* 2011;117:4439-45, doi:10. 1002/cncr.26070).

Many people with aneurysmal subarachnoid bleeding and vasospasm are active smokers. Nicotine replacement therapy is thought by some to worsen vasospasm, but analysis of data collated by a neurointensive care unit over 14 years contradicts this idea. Of 258 active smokers included in the study, 87 were given transdermal nicotine replacement therapy to counter acute nicotine withdrawal. The treatment was not significantly associated with increased angiographic vasospasm, but was associated with less clinical vasospasm and a better Glasgow Outcome Score on discharge (*Stroke* 2011;42:3080-6, doi:10. 1161/strokeaha.111.620955).

Crohn's disease raises plasma concentrations of verapamil but reduces the response to the drug, in proportion to disease activity (*British Journal of Clinical Pharmacology* 2011;72:787-97, doi:10.1111/j.1365-2125.2011.04019.x). Similar rises in drug concentration are seen in relation to rheumatoid arthritis, but without any change in response. The response to verapamil was measured using the PR interval on electrocardiograph, and by blood pressure. In patients with Crohn's disease, the greater the disease severity, the lower was the drug's potency to prolong the interval. Reducing disease severity increased the dose response to verapamil, despite reducing its concentration.

The use of fancy imaging and minimal access surgery has increased substantially over the past 10 years, but to what end? A retrospective cohort study of patients who underwent appendicectomy in either 1999 or 2009 at a large teaching hospital showed that increased use of preoperative imaging and laparoscopy in patients with suspected acute appendicitis had failed to affect clinical outcome. The rates of negative appendicectomy, perforation, and complications did not differ between the two groups (*Annals of the Royal College of Surgeons of England* 2011;93:620-3, doi:10.1308/003588411X13165261994076).

Could *Helicobacter pylori* play a part in the pathogenesis of tympanosclerosis? The human stomach is not the only reservoir for *Helicobacter*— the bacteria have also been discovered in dental plaque, oral lesions, saliva, and faeces. Of 40 patients undergoing tympanoplasty, radical mastoidectomy, and myringoplasty for hearing loss and ear discharge, *H pylori* was detected in middle ear mucosal biopsies of all 14 of those with typanosclerosis, but in only 27% of those with other types of chronic otitis media (p<0.001) (*Journal of Laryngology and Otology* 2011;125:1121-4, doi:10.1017/S0022215111002301).

Use of a stool colour chart to screen for biliary atresia has been trialled in Taiwan, where the incidence of the condition is higher than it is outside east Asia. The earlier biliary atresia is detected, the better the outcome, and the aim is to educate parents as well as healthcare professionals. After implementation of screening, the average age of babies at first admission for suspected biliary atresia dropped from 47 days to 43, and the rate of very late referrals dropped from 9.5% to 4.9%. These changes were not statistically significant, owing to the low numbers involved, but they do suggest that screening could be effective in areas where the proportion of late referrals is especially high (*Pediatrics* 2011;128:e1209-15, doi:10.1542/peds.2010-3495).

Creativity is commonly believed to be linked to mental illness. A large Swedish study investigated whether people who had been admitted for treatment of schizophrenia, bipolar disorder, and depression (and their relatives without such diagnoses) were more likely to hold creative occupations. They found that people with bipolar disorder and the healthy siblings of people with schizophrenia or bipolar disorder were over-represented in creative professions. But compared with controls, people with schizophrenia had no increased rate of being involved with the creative professions themselves (*British Journal of Psychiatry* 2011;199:373-9, doi:10.1192/bjp.bp.110.085316).

Patients who sustain massive trauma or need major surgery are typically transfused with fresh frozen plasma to aid haemostasis. Purified human fibrinogen concentrate may offer another approach. A systematic review of 91 eligible studies with outcomes of interest (including blood loss, transfusion requirements, survival) found few of high quality. However, the weight of evidence seems not to support the clinical effectiveness of fresh frozen plasma for these patients and even suggests the treatment might be detrimental. Fibrinogen concentrate was generally associated with improved outcomes (*Critical Care* 2011;15:R239, doi:10.1186/cc10488).

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