

SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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Previous colonoscopy linked to lower risk of cancer

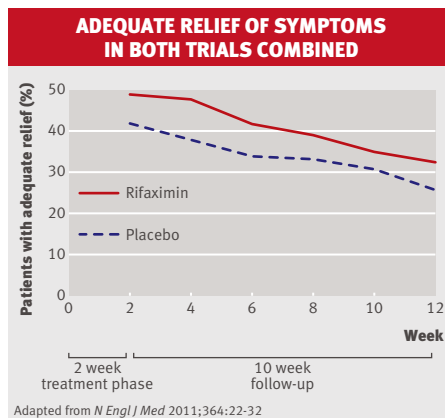
Colonoscopy is a popular screening tool for colorectal cancer, although experts are still debating how good it is at preventing cancers and deaths. No trials exist. There are, however, some reassuring observational analyses, including most recently a large case-control study from one area of Germany. The authors report that any colonoscopy in the previous 10 years was associated with 77% lower risk of colorectal cancer in adults over 50 (adjusted odds ratio 0.23, 95% CI 0.19 to 0.27). Colonoscopy was associated with a lower risk of all colorectal cancers, left sided cancers (0.16, 0.12 to 0.20), and right sided cancers (0.44, 0.35 to 0.55). Overall, 41% (793/1932) of community controls and 13.6% (230/1688) of people with cancer in this study had previously undergone colonoscopy. Colonoscopy screening has been available in Germany since 2002, from the age of 55.

Case control studies are always limited by residual confounding and various biases including recall bias, says a linked editorial (p 68). But this study provides further circumstantial evidence that a colonoscopy and polypectomy may protect older adults from cancer. As expected, it worked best for cancers in the distal colon. The right side of the colon is harder to reach and polyps here are easier to miss. The 56% protection against right sided cancers reported by these authors is impressive, says the editorial, and possibly linked to the rigorous training given to German endoscopists in the screening programme.

Ann Intern Med 2011;154:22-30

Antibiotics for irritable bowel syndrome?

Rifaximin is a poorly absorbed antibiotic that targets a wide range of gut flora. The manufacturers are currently evaluating rifaximin as a treatment for irritable bowel syndrome, and twin placebo controlled trials in patients without constipation suggest it can work. Adults who took rifaximin for two weeks were more likely to report adequate relief of symptoms than controls (40.7% (254/624) v 31.7% (201/634); $P < 0.001$, both studies combined). They were also more likely to report relief from bloating (40.2% (251/624) v 30.3% (192/634); $P < 0.001$). The benefits were modest but persisted for 10 weeks after the end of treatment. Symptoms were beginning to return in both groups after three months.



An editorial cautiously welcomes these results (p 81). Irritable bowel syndrome is common and few effective therapeutic options exist. Rifaximin looked safe in these trials, and the drug already has a good track record in the prevention and treatment of traveller's diarrhoea. It is possible, even probable, that an antibiotic such as rifaximin can help some people with irritable bowel syndrome, but we need to find out exactly who would benefit. Treating everyone would be a mistake at this stage, because widespread use of a poorly absorbed antibiotic could have unintended consequences on bacterial resistance, particularly if patients need serial treatments to maintain the response.

N Engl J Med 2011;364:22-32

Circumcising men reduces HPV infections in women

Circumcising men helps reduce the prevalence and incidence of human papillomavirus (HPV) infections in their female partners, according to secondary analyses from two African trials. Two years after randomisation (circumcision or a two year waiting list for participating men), women in stable relationships with circumcised men had a significantly lower incidence of high risk HPV infections than controls (20.7 infections v 26.9 infections per 100 person years; incidence rate ratio 0.77, 0.63 to 0.93), and a significantly lower prevalence (27.8% (151/544) v 38.7% (189/488); prevalence risk ratio 0.72, 95% CI 0.60 to 0.85). Partners of circumcised men were also slightly but significantly more likely to clear existing high risk infections than controls (risk ratio 1.12, 1.02 to 1.22). We should now accept that circumcision protects women from important sexually trans-

mitted infections including HPV, says an editorial (doi:10.1016/S0140-6736(10)62273-8). We already know that surgery protects men.

These latest analyses include a selected sample of men from the original trials and their partners. All the men were HIV negative and in stable relationships with women willing and able to provide vaginal swabs for analysis. The benefits of circumcision looked convincing statistically, but relatively weak clinically. Reducing the risk of infection by no more than 25% won't be enough for women in Africa and other high risk areas. Safe sex and HPV vaccines must remain in the frame, says the editorial. Vaccines offer powerful protection against a limited number of high risk subtypes. Circumcision gives weaker protection against a wider range of subtypes. The two measures are likely to be synergistic.

Lancet 2011; doi:10.1016/S0140-6736(10)61967-8

18th century giant has contemporary relatives and an ancient ancestor

The skeleton of one of the best known giants in medical literature is housed in the Hunterian Museum in London. He was born in Northern Ireland in 1761 and died just 22 years later from the complications of his gigantism. He was 231 cm tall—about 7 feet and 7 inches. After genotyping material from two of his teeth, researchers now believe this celebrated giant was related to a cluster of contemporary Northern Irish families with a predisposition to pituitary adenomas. They all share a specific

GIGANTISM IN THE 18TH CENTURY



Adapted from *N Engl J Med* 2011;364:43-50



“Old people slow down before they die. Before they shuffle off this mortal coil, they just shuffle. In case you hadn’t noticed, here is a 19-author study of 9 cohorts of elderly people showing that reduced gait speed predicts shorter survival. Why do things like this get published?”

Richard Lehman’s journal blog at www.bmj.com/blogs

mutation in the *AIP* gene (encoding the aryl hydrocarbon interacting protein), along with five microsatellite alleles either side of the mutation.

The *AIP* mutation probably arose in a single common ancestor, say the researchers. He or she probably lived between 1425 and 1669 years ago and between 57 and 66 generations removed from the contemporary families. The resulting faulty protein has 26 amino acids missing at one end and causes a predisposition to pituitary adenomas that can secrete growth hormone or prolactin. Adenomas secreting growth hormone cause gigantism in prepubertal children and acromegaly in adults. The skeleton in the Hunterian museum still has unfused epiphyses at the wrist and a bone age of around 17 years. His enlarged pituitary fossa was first described in 1909.

“The Irish Giant” may also have been related to a pair of twins with gigantism, who were born in a neighbouring village in Northern Ireland, say the researchers. All three men spent time in London making a living at exhibitions. They were captured together in an etching.

N Engl J Med 2011;364:43-50

H1N1 vaccines broadly effective in Europe

In 2009, medical authorities in Europe approved a variety of vaccines targeting pandemic influenza H1N1, and many countries had launched their vaccination programmes by the end of that year. Pooled data from surveillance sites across the continent suggest that in general these monovalent vaccines were effective at preventing pandemic flu. Using a case control design, researchers computed effectiveness estimates that ranged from 66.0% (95% CI 23.9% to 84.8%) overall to 100% for children under 15.

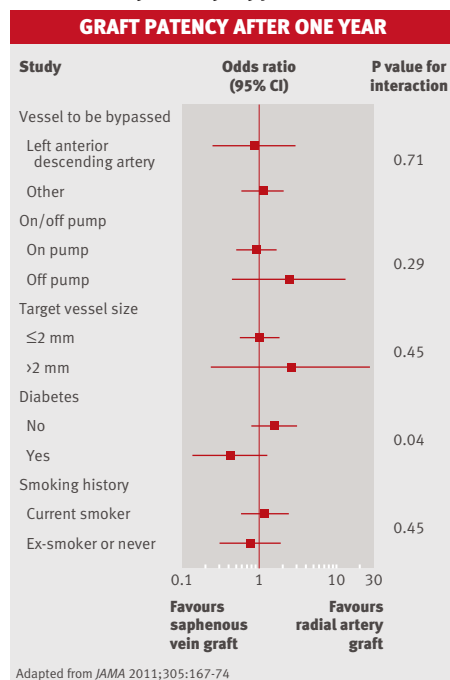
Close to 700 primary care practitioners in seven countries contributed data on 2926 patients presenting with symptoms suggestive of flu. The 918 patients with laboratory confirmed H1N1 acted as cases, and the 1984 with no evidence of flu on throat or nasal swabs acted as controls. Cases were significantly less likely to have received any H1N1 vaccine than controls (1.3% (12/895) v 9.5% (185/1940); $P < 0.001$). The main analyses were extensively adjusted in an attempt to control confounding, and the results give a broad indication of how well monovalent vaccines protected

people against H1N1. Very few people were vaccinated, however, so the researchers had limited data to work with, and estimates are imprecise. Vaccination lagged well behind the pandemic in most countries.

Health authorities and researchers will be better prepared this year and effectiveness data for the new trivalent vaccine including both seasonal and pandemic elements should be more reliable. The monovalent vaccines in this study did not protect people from seasonal flu.

PLoS Med 2011;8:e1000388

Radial artery grafts look disappointing for coronary artery bypass



Radial artery grafts worked no better than saphenous vein grafts in a recent trial of men having their first elective coronary artery bypass grafts. The arterial grafts were no more likely to be patent after one year (89% (238/266) v 89% (239/269); adjusted odds ratio, 0.99; 95% CI 0.56 to 1.74), and the authors report almost identical rates of heart attack, stroke, repeat revascularisation, and death in the two groups. Around 11% of both groups had a surgical complication.

Wherever possible, surgeons used the left internal mammary artery to bypass the left anterior descending coronary artery. They chose the next most suitable coronary artery for randomisation.

The trial was powerful enough to detect any clinically important differences between the two graft types, and the results surprised the authors. Radial artery grafts worked better than saphenous vein grafts in at least one previous trial, and surgeons in the US are already using them for about 6% of patients.

The two graft types were equally likely to occlude completely in the new trial, but radial artery grafts were more likely to be severely stenosed after one year (24% v 16%; $P = 0.03$). The authors also found a significant interaction between radial artery grafting and occlusion in the large subgroup with diabetes—another unexpected result. Longer term follow-up is already under way.

JAMA 2011;305:167-74

Behavioural therapy helps control incontinence after radical prostatectomy

Urinary incontinence is common after a radical prostatectomy, and few men want further invasive surgery to try and fix it. Behavioural therapy may be more acceptable, and the first trial suggests it can help reduce even longstanding symptoms. Four training sessions over eight weeks reduced the frequency of incontinence from 28 to 13 episodes per week (55% reduction, 95% CI 44% to 66%). Controls on a waiting list also improved, but by significantly less (24% reduction, 10% to 39%). A third group of men had behavioural training with extra biofeedback and electrical stimulation of the pelvic floor muscles. They did about as well as the group receiving behavioural therapy alone.

Pelvic floor exercises, bladder control strategies, fluid management, and self monitoring with bladder diaries clearly work better than nothing, says an editorial (p 197). But 117 of the 140 actively treated men were still incontinent when treatment ended, and more than half were bothered at least “somewhat” by their enduring symptoms. We need to do better and should probably start with prevention, says the editorial. Overtreatment of indolent prostate cancers is a well documented problem that leads to a substantial burden of complications including incontinence. It is time to think much more seriously about active surveillance for men with low risk disease.

JAMA 2011;305:151-9

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