

# SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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## Babies get better faster after laparoscopic surgery for pyloric stenosis

It is never easy to design head to head trials comparing laparoscopic and open surgery, not least because the different scars make blinding such a challenge. Surgeons comparing laparoscopic and open surgery for infantile pyloric stenosis got over this by designing three dressings that went on all babies and stayed on until discharge, so parents, nurses, and researchers were unaware of the assigned technique. Overall, the results favoured laparoscopy, which was associated with a significantly shorter recovery (median time to full feed 18.5 v 23.9 h;  $P=0.002$ ) and earlier discharge from hospital (33.6 v 43.8 h;  $P=0.027$ ) than open surgery. Because of these conclusive results, the trial was stopped a little early, with 20 babies short of the planned 200. Does this spell the end for open pyloromyotomy?

Not yet, says a linked comment (doi:10.1016/S0140-6736(09)60007-6). Trainees did more of the open operations than the laparoscopies (74% (69/93) of open operations v 37% (32/87) of laparoscopies), despite the authors' best efforts. The superior experience of the surgeons doing the laparoscopies could have affected the results, although the authors found no evidence of this in various analyses. Inexperienced sur-

geons should probably stick to open surgery, says the comment. Both techniques looked equally safe, except for the possibility of more incomplete pyloromyotomies in the laparoscopy group (3.5% (3/87) v 0% (0/93)). *Lancet* 2009 doi:10.1016/S0140-6736(09)60006-4

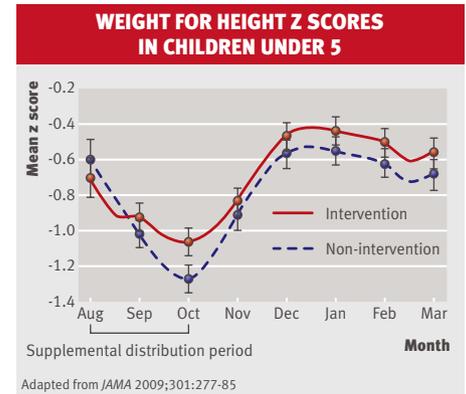
## Genotyping adds little to traditional cardiovascular risk prediction in women

The common genetic polymorphism rs10757274 is associated with an increased risk of cardiovascular disease. Finding it may not be that useful, however. Genotyping made no difference to the accuracy of more traditional risk prediction models in an established cohort of 22 129 female health professionals who were followed up for 10 years. Adding the test results to a model that included family history and serum concentration of C reactive protein reclassified just 2.6% of the women, and many of those were reclassified incorrectly. Knowing a patient's genotype would not help doctors make better therapeutic decisions to prevent future cardiovascular disease, says an editorial (p 139). We were probably naive to think that it might. The interplay between genes and disease remains complex and subtle, and it typically accounts for a very small proportion of the variance in populations. Panels of gene variants might prove more useful ultimately. But we still have a long way to go before genotyping becomes clinically useful for individuals.

*Ann Intern Med* 2009;150:65-72

## High calorie supplement prevents wasting in vulnerable children

Food is scarce during the three months before the harvest in Niger, and children are at risk of malnutrition and the morbidity and mortality that goes with it. Food supplements can help tide them over, according to a trial in one of the poorest and most vulnerable areas. A measure of weight for height fell more slowly among children in six villages who received the supplement for three months, compared



with children in six control villages. The difference was significant and clinically relevant—the supplement cut the risk of wasting by 36% (95% CI 17% to 50%; 140 events/841 child years (0.17 events per child year) v 233/895 (0.26)). The high calorie paste containing peanuts, oil, sugar, milk powder, and essential micronutrients was also associated with a 58% (43% to 68%) fall in the incidence of severe wasting.

The supplement is already used to treat malnourished children in Niger, and these findings show it can also be a useful preventive measure during seasonal food insecurity, say the researchers. None of the children in this trial was malnourished at recruitment.

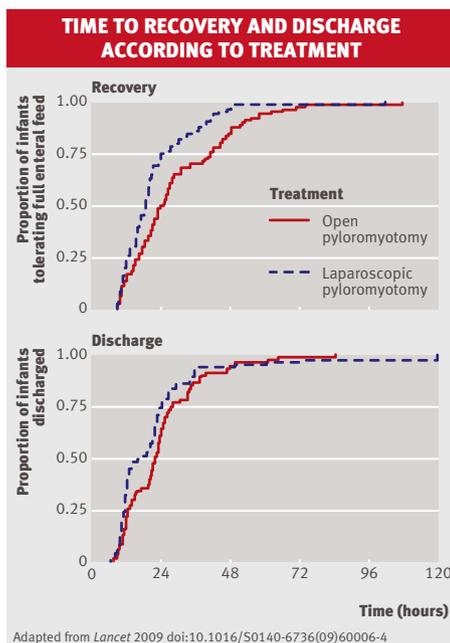
Twenty five children died during the eight months of follow-up, and death rates were lower in the villages given the supplement (7/986 v 18/1099 child years; hazard ratio 0.51, 0.25 to 1.05). The difference wasn't significant, but the trial wasn't powerful (big) enough to be conclusive.

*JAMA* 2009;301:277-85

## Corticosteroids are a poor choice for children with virus induced wheeze

Two trials of corticosteroids for preschool children with episodic wheeze have concluded that steroids, oral or inhaled, are a poor choice of treatment for most children. An editorial says doctors should seriously consider changing standard practice (p 409).

In the first trial, a short course of oral prednisolone worked no better than a placebo for



700 preschool children presenting to hospital with wheeze linked to a viral upper respiratory tract infection. Prednisolone made no difference to half a dozen outcomes, including duration of hospital stay, symptoms, use of bronchodilators, and readmissions. The second trial tested a high dose of inhaled fluticasone (750 µg twice daily) given to episodic wheezers by parents at the first sign of a viral cold, cough, or earache. Children given the pre-emptive fluticasone were less likely than placebo controls to need rescuing with bursts of oral prednisolone (39% (24/62) v 64% (43/67); odds ratio 0.35, 95% CI 0.17 to 0.72); they also got better slightly faster than controls. But high dose fluticasone caused a discernible slowdown in growth, which the editorial and the trial's authors agree is an unacceptable price to pay for such modest benefits.

Doctors treating preschool children who wheeze when they get a cold should reserve oral prednisolone for severely ill inpatients, says the editorial. They should not prescribe intermittent high doses of inhaled steroids at all.

*N Engl J Med* 2009;360:329-38

*N Engl J Med* 2009;360:339-53

## Genetic tests to guide warfarin prescribing are not cost effective

Testing people for the presence or absence of genetic alleles known to affect (usually slow down) the metabolism of warfarin is now possible. In 2007, the US Food and Drug Administration even added a note to the package insert suggesting that doctors consider genetic testing to guide dosing during the difficult early days of treatment. The ultimate aim is to prevent serious bleeding. The tests are expensive, however, and a recent analysis suggests that guiding warfarin induction with the aid of genetic testing is unlikely to be affordable in the near future. Using Markov modelling techniques, the authors estimate that it would cost \$170 000 (£120 000; €130 000) for every extra quality adjusted life year gained by genetically guided induction, more than three times the accepted threshold for cost effectiveness.

Cheaper and quicker tests would reduce the cost of the guided strategy, say the authors. But the tests would have to be very cheap to offset doubts about whether they prevent bleeds and prolong lives. So far, three randomised trials have reported unconvincing results. A model using their pooled data suggested that genetic testing would prolong the life of a 69 year old man with atrial fibrillation by no more than a day.

*Ann Intern Med* 2009;150:73-83

## African women in abusive relationships have more miscarriages and stillbirths

When researchers asked a sample of 2562 women from Cameroon whether they had ever experienced violence from their spouse more than half (51%; 1307/2562) said they had. Physical violence was the most common form (39% of women), followed by emotional (31%) then sexual violence (15%). The same women also answered questions about spontaneous abortions and stillbirths. Fetal loss was significantly associated with any kind of spousal violence—women who reported violence were 50% more likely also to report early or late fetal loss (odds ratio 1.5, 95% CI 1.3 to 1.8). The authors also found cross sectional associations between violence and recurrent fetal loss, although this was less common. Emotional abuse was most closely linked to recurrent fetal loss (1.7, 1.2 to 2.3).

If the associations are causal, effective interventions to reduce domestic violence in Cameroon could prevent up to a third of isolated or recurrent fetal loss, say the authors, who think a causal association is likely but hard to prove.

Effective interventions are notable by their absence, comments one observer (p 278). This and other studies show that domestic violence is culturally embedded in the lives of many women, and that it adversely affects their physical, mental, and reproductive health. It is time to stop asking women about it and start developing strategies to protect them.

*Lancet* 2009;373:318-24

## Escitalopram may help older people with generalised anxiety disorder

In one of the first clinical trials in older people, escitalopram improved symptoms of generalised anxiety disorder in two of the

three main analyses. People aged at least 60 who took the drug were more likely to get better or much better over 12 weeks than controls who took an identical looking placebo (response rates 69% (95% CI 58% to 80%) v 51% (40% to 62%);  $P=0.03$ ); they also had fewer symptoms and greater improvements in overall functioning. Escitalopram looked less effective, however, in the one analysis that included everyone for the full 12 weeks, not just those who took their treatment (57% (46% to 67%) v 45% (35% to 55%);  $P=0.11$ ). Because real patients don't always stick with antidepressant treatments, this "intention to treat" analysis is probably the best reflection of what would happen outside the confines of clinical trials, say the authors. The benefits of escitalopram are modest and are further reduced by poor adherence. Just under a fifth of the patients in each group failed to complete the trial, even though it was brief. Tiredness or somnolence was reported by 38 of the 85 (41%) patients who took escitalopram.

*JAMA* 2009;301:295-303

## Cleaner air, longer life

Evidence that particulate air pollution is bad for human health is mounting. The latest comes from a study of trends in small particle pollution across the US, which finds a weak but clearly discernible link between pollution and life expectancy. Air pollution fell in all 51 metropolitan areas studied between 1980 and 2000. Bigger reductions in air pollution were associated with bigger increases in life expectancy, even after adjustments for the obvious socioeconomic and social variables that affect mortality, including smoking. The link was statistically significant, survived a variety of sensitivity analyses, and corroborates other smaller observational studies in the US and elsewhere.

In this study, life expectancy across the US increased by an average 2.72 years between 1980 and 2000, and these authors estimate that cleaner air accounted for around 15% of the improvement. They also estimate that life expectancy increased by 0.6 years for every 10 µg/m<sup>3</sup> reduction in the concentration of fine particle pollution. Fine particles measure no more than 2.5 µm in diameter. The average reduction was 6.52 µg/m<sup>3</sup>, but in some places it fell by as much as 14 µg/m<sup>3</sup>, which would contribute up to 0.82 extra years of life for the population.

*N Engl J Med* 2009;360:376-86

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