

# SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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**“Accelerated recovery from ankle sprain is the one subject I have contemplated the most in the last month. I hobbled home after I had done it and observed the increasing swelling with bemusement”**

Read Richard Lehman's journal blog on [doc2doc](#)

## Researchers inch towards safer management for very premature babies

Doctors choosing the best oxygen therapy for very premature babies must balance the risk of retinopathy associated with too much and the risk of death associated with too little. In the latest trial, a low target for oxygen saturation cut the risk of severe retinopathy by half compared with a high target (8.6% v 17.9%; relative risk 0.52, 95% CI 0.37 to 0.73) but increased the risk of death before discharge by a significant 27% (19.9% v 16.2%; 1.27, 1.01 to 1.6). A completely safe oxygen strategy remains elusive, says an accompanying editorial (doi:10.1056/NEJMe1004342).

The researchers planned a high oxygen saturation target of between 91% and 95% and a low target of between 85% and 89% for babies born between 24 and 28 weeks' gestation. In reality, the difference in oxygen saturation between the two groups was much smaller. The authors describe the extra deaths among babies managed with the lower target as “a major concern.”

The same trial also compared two different management strategies in the delivery room: immediate intubation and treatment with surfactant versus continuous positive airway pressure through the nose (nasal CPAP). About half of the babies in each group either died or developed bronchopulmonary dysplasia—the combined primary outcome (relative risk with nasal CPAP 0.95, 0.85 to 1.05). In secondary analyses, nasal CPAP was associated with a shorter period of ventilation, a reduced requirement for postnatal corticosteroids, and a lower chance of intubation. One third of the babies assigned nasal CPAP were intubated in the delivery room, usually for resuscitation. Two thirds received surfactant at some point during the trial. The editorial concludes that aiming for nasal CPAP as an initial strategy is associated with important benefits and few side effects.

*N Engl J Med* 2010, doi: 10.1056/NEJMoa0911781 and 10.1056/NEJMoa0911783

## New dads get depressed too

Having a baby has mental health implications for both men and women. Although we know a fair bit about prenatal and postnatal depression in women, we know precious little about depression in their partners. So researchers trawled through 489 studies to look for prevalence data in men. A

pooled analysis of the 43 studies that met their inclusion criteria suggested that 10.4% (95% CI 8.5% to 12.7%) of men are depressed during a partner's pregnancy or during the year after the birth. Prevalence peaked three to six months after delivery (25.6%, 17.3% to 36.1%) and seemed to be higher in the United States than elsewhere (14.1%, 10.9% to 18.0%).

The headline estimates may not be reliable because of wide variations in both methods and results among different studies, say the authors. But prenatal and postnatal depression in men does seem to be a public health problem that deserves more attention. Parental depression can have serious effects on children.

Most studies in the review used self reported scores to measure symptoms of depression. The three studies with more rigorous interview based methods reported lower rates of male depression before and after the birth of a baby than did studies that used self reporting (4.9%, 3.6% to 6.7%). The researchers found a significant, but modest, correlation between maternal and paternal depression.

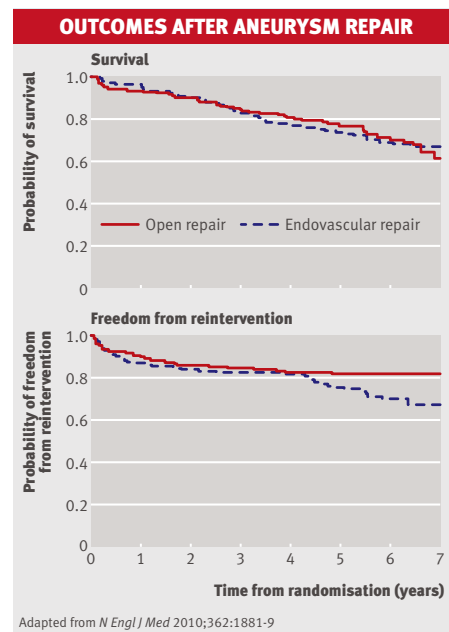
*JAMA* 2010;303:1961-9

## Open and endovascular repair of aortic aneurysms have matching survival rates long term

Endovascular repair of abdominal aortic aneurysms is safer than open repair in the short term, although the survival advantage generally lasts less than two years. Researchers from the Netherlands have now managed to track their trial participants for more than six years after an endovascular or open repair. Overall survival was almost identical for the two techniques (69.9% for open repair v 68.9% for endovascular repair;  $P=0.97$ ). Extra deaths early after open repair were matched by extra deaths after discharge for endovascular repair.

Most of the participants were older men. All 351 patients had aneurysms measuring at least 5 cm in diameter and were suitable for either procedure.

As expected, endovascular repair seemed significantly less durable than open repair. The researchers found a cluster of problems around five years after the less invasive procedure, including graft leaks, migrations, and thromboses. Overall, 70.4% of participants who had endovascular repair avoided any kind of reintervention in the



six years after surgery, compared with 81.9% of those who had open repair (absolute difference 11.5 percentage points, 95% CI 2 to 21).

The extra complications didn't seem to reduce survival, but this trial may have been too small to rule it out. The researchers suggest pooling data from the four published trials of aortic aneurysm repair to boost power and provide a more conclusive answer.

In the end, patients must decide which intervention to use, says an editorial (p 1930-1). Some will be happier than others to shoulder the early risks associated with open repair in return for a lower risk of further surgery later on.

*N Engl J Med* 2010;362:1881-9

## Alendronate can be cost effective for men on antiandrogen therapy

Bisphosphonates such as alendronate help prevent the bone loss that often accompanies androgen deprivation therapy for prostate cancer. Oral alendronate can be cost effective if appropriately targeted, according to a modelling study from the US.

Compared with doing nothing, a screening test for bone mineral density for men on antiandrogen therapy followed by oral alendronate for those with osteoporosis would cost an estimated \$66 800 (£46 400; €53 400) for each quality adjusted life year (QALY) gained. Alendronate

for all men aged 70 on antiandrogen therapy for prostate cancer would cost \$178 700 per QALY gained—more than most US authorities would be prepared to pay.

Universal treatment seemed most cost effective for men aged more than 75 years, and for men over 65 years with a previous fracture. Both treatment strategies (targeted and universal) were sensitive to the price of alendronate, which has been falling since the loss of patent protection in February 2008.

All cost effectiveness models use unproven assumptions and informed guesswork to predict what will happen to people managed in different ways. The authors of this study had to assume that men would take all their tablets, that alendronate halted bone loss completely, and that maintenance of bone mineral density would prevent hip fractures. If true, their figures support recent recommendations for targeted treatment from the American College of Physicians.

*Ann Intern Med* 2010;152:621-9

## Renal function is an important predictor of cardiovascular and all cause death

Renal function is a powerful predictor of mortality, according to a meta-analysis of published cohorts. The independent link between worsening renal function and earlier death was clear for two completely different measures of renal function and was significant for both cardiovascular death and all cause death.

Among adults in the general population, risk of death rose steadily with increasing albumin to creatinine ratio (ACR). Even people with microalbuminuria or a trace of protein on a urine dip-

stick were significantly more likely to die during around eight years of follow-up than people with normal ratios or a clear dipstick (hazard ratio for all cause mortality for ACR 1.1 mg/mmol v ACR 0.6 mg/mmol 1.20, 95% CI 1.15 to 1.26). Estimated glomerular filtration rate was associated with rising mortality below a threshold of 60 ml/min/1.73 m<sup>2</sup>.

The two measures of renal function seemed to be independent of each other—a rising ACR predicted death across all categories of estimated glomerular filtration rate, for example. This means that the two tests provide complementary prognostic information for adults in the general population, says a linked comment (doi:10.1016/S0140-6736(10)60748-9). Both could be incorporated into existing risk calculators and algorithms.

The 21 cohorts in this analysis included more than a million people from 14 countries. The findings should help bring renal health to the attention of policy makers and the medical community in general, says the comment. Both groups have ignored the implications of underperforming kidneys for too long.

*Lancet* 2010, doi:10.1016/S0140-6736(10)60674-5

## Parental training fails to improve core symptoms of autism in children

Training parents to communicate with their autistic children improved the quality of parent-child interactions, but had no effect on the core symptoms of autism in a trial from the UK. The intensive programme, which included up to 18 training sessions with both parent and child, had about the same impact on children's social and communication skills as usual care. Children in

both intervention and control groups improved slightly. But the difference between them was clinically and statistically insignificant after 13 months of therapy.

At the end of the trial, parents given the communication training rated their children's language and social communication skills more highly than parents given usual care. Teachers did not.

Autism is a complex and heterogeneous disorder with an unknown aetiology, says a linked comment (doi:10.1016/S0140-6736(10)60593-4). Reliable trials are hard to design and execute. These researchers recruited enough children to be confident of their results (n=152), used assessors who were unaware of children's treatment assignment, and used a primary outcome that looked for changes in core symptoms. They wanted to make children better, not just help them interact better with their parents. It didn't work, but at least we now know what a good clinical trial of a treatment for autism looks like, says the comment.

*Lancet* 2010, doi:10.1016/S0140-6736(10)60587-9

## A wish list for colorectal cancer screening in the US

A close look at screening for colorectal cancer in the US reveals a chaotic picture. Half of all eligible adults miss out on screening altogether, whereas others are screened too often, inappropriately, or with inadequate tests and follow-up protocols. Attempts to implement effective population programmes are hamstrung by perverse financial incentives, poor access, poor information (for both patients and policy makers), poor organisation, and a research community more interested in developing new screening tests than improving the use of old ones.

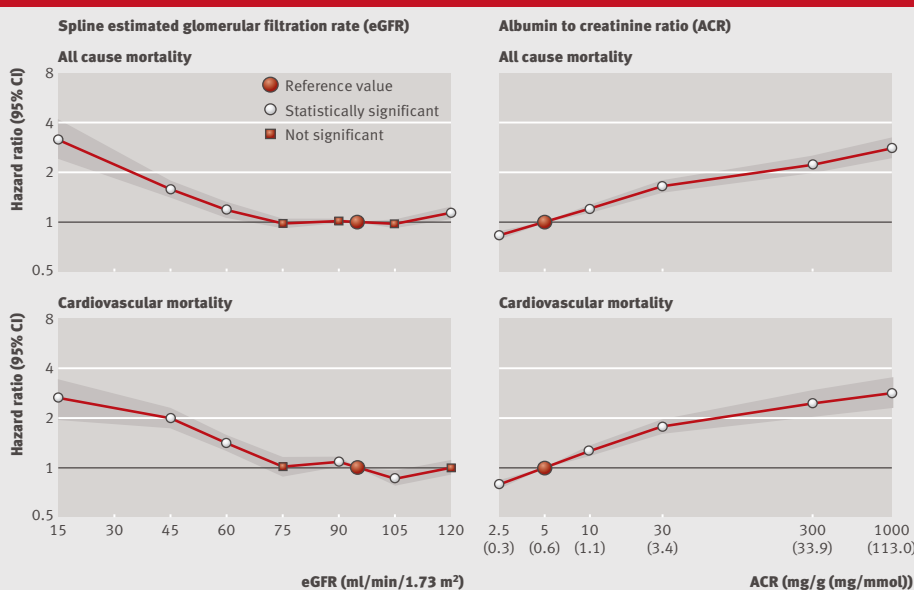
Undeterred, a group of reviewers examined 21 studies of strategies to encourage appropriate screening for colorectal cancer. One to one interactions between patients and healthcare providers, patient reminders, and measures to eliminate structural barriers to screening (for example, by posting test kits to eligible adults) all worked well. So did some system level changes such as improving referrals for screening, although the reviewers felt any system changes would be hard to implement and sustain on a large scale.

The National Institutes of Health conference statement on colorectal cancer screening, which was based on the review, ends with a long wish list for leaders, legislators, doctors, and researchers (p 663-7). The list includes major policy changes (to overturn financial barriers to screening), new infrastructure (to track screening uptake and monitor quality), new systems (to improve follow-up of positive results), and more, better research.

*Ann Intern Med* 2010;152:668-76

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### CARDIOVASCULAR MORTALITY AND ALL CAUSE MORTALITY ACCORDING TO RENAL FUNCTION



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