

SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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Resuscitated babies are more likely to have low intelligence at 8 years

Neonates who needed resuscitation at birth were more likely than normal neonates to have a low IQ at the age of 8 in a cohort study from the UK. As expected, the risk was highest for neonates with signs of encephalopathy (23.1% *v* 6.5%; adjusted odds ratio 6.22, 95% CI 1.57 to 24.65). The new finding was that of a link between an IQ of less than 80 and resuscitation in neonates without signs of cerebral injury (9.8% *v* 6.5%; 1.65, 1.13 to 2.43).

The authors analysed data from a long standing cohort of more than 11 000 children born in 1991 and 1992. They adjusted for most confounders and defined resuscitation at birth as the need for chest compressions or assisted respiration via a mask or an endotracheal tube.

Only 5953 children completed the Weschler intelligence scale at 8 years, but sensitivity analyses accounting for the missing data made little difference to the results. The smaller numbers may have decreased the study's power, however. The overall IQ of children who were resuscitated at birth without encephalopathy was lower, but not significantly lower than the IQ of normal controls (mean difference, -0.99, -2.58 to 0.60). One further caveat is that the authors had no data on maternal smoking or alcohol consumption, both of which might have an effect on resuscitation requirements, and on later intelligence.

Lancet 2009 doi:10.1016/S0140-6736(09)60244-0

Electrophysiologists look best at placing implantable cardioverter defibrillators

US doctors who are certified electrophysiologists may be better than other specialists at implanting cardioverter defibrillators. They had the lowest complication rates in an analysis that included more than 100 000 procedures, and they were more likely to select the technically more demanding cardiac resynchronisation devices for eligible patients.

Certified electrophysiologists carried out 71% (78 857/111 293) of the implantations recorded in a national register that began in 2006. Cardiologists who were not certified in electrophysiology (24 399, 21.9%), thoracic surgeons (1862, 1.7%), and other specialists (6175,

5.5%) did the rest. The risk of complications was highest in patients treated by thoracic surgeons (relative risk 1.44, 95% CI 1.15 to 1.79), but even cardiologists had higher complication rates than certified electrophysiologists (1.11, 1.01 to 1.21). A linked editorial (p 1713) says that implantation of these devices should be left to the experts whenever possible. Electrophysiologists do most of the procedures already and could presumably do more. In this study, two thirds of the patients treated by non-experts were treated in hospitals with an electrophysiologist on the staff.

The final analyses were fully adjusted for a wide range of clinical and hospital factors that could affect complication rates in patients needing an implantable device. And they included 88% of all procedures done in 1448 US hospitals up to June 2008.

JAMA 2009;301:1661-70

Maternal height linked to child mortality in India

A national survey of Indian children has found a clear link between mortality in under 5s and maternal height. The absolute risk of death for children with mothers measuring at least 160 cm was 0.05 (95% CI 0.04 to 0.07) compared with 0.09 (0.07 to 0.12) for children born to mothers measuring less than 145 cm, a significant increase of 70% (relative risk 1.71, 1.37 to 2.14).

The authors also found a significant association between shorter stature in women and stunting, wasting, and underweight in their children. All three indicators of poor health were common. Nearly a half (17 428/40 089) of surviving children were stunted, 42.2%

(14 791) were underweight, and nearly a fifth (7236) had wasting. The survey was nationally representative, and included between 40 000 and 50 000 children under 5 from all 29 states in India. The analysis was fully adjusted for demographic and social factors that influence childhood mortality.

The relative risks associated with each 1 cm decrease in maternal height were small but discernible, and the large numbers allowed the authors to calculate risks with some precision. They are fairly certain the link is real, and it shows how poor health in childhood, which determines growth, is passed from generation to generation.

JAMA 2009;301:1691-701

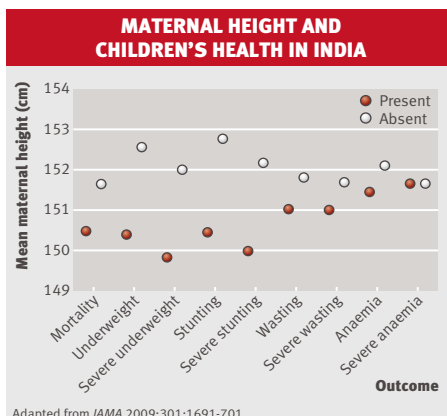
Intense antiplatelet therapy is associated with postoperative infections

A retrospective look at 1677 patients who had coronary artery bypass surgery at one US hospital found a significant association between dual antiplatelet therapy before surgery and an increased risk of infections after surgery. People taking both aspirin and clopidogrel had significantly more postoperative infections than those taking just aspirin (23.1% *v* 16.1%; adjusted hazard ratio 1.42, 95% CI 1.01 to 2.00). The difference was not explained by any social, demographic, or clinical differences between the two groups.

People taking both drugs also needed more transfusions in the perioperative period (68% *v* 60.4%, *P*=0.04) than people taking just aspirin. But mortality was no different at 30 days.

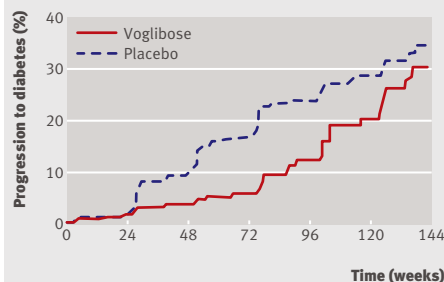
Dual antiplatelet therapy is now the standard of care for many people with heart disease—and for anyone with a drug eluting stent. It is still unclear how best to manage these drugs before, during, and after major surgery, say the authors. This retrospective observational study hints at infectious complications with dual therapy and exposes a gap in our knowledge of the risks and benefits associated with continuing or interrupting clopidogrel treatment in the perioperative period. Platelets have a supporting role in the immune system, they write. A link between infections and intense inhibition of platelet activity is biologically plausible and deserves further study.

Arch Intern Med 2009;169:788-96



Voglibose helps prevent diabetes in high risk Japanese adults

VOGLIBOSE AND PROBABILITY OF DEVELOPING TYPE 2 DIABETES



Adapted from *Lancet* 2009; doi:10.1016/S0140-6736(09)60222-1

A combination of diet and exercise is the best way to help prevent type 2 diabetes in people with impaired glucose tolerance, although drugs such as metformin, acarbose, and the glitazones also have a prophylactic effect. Voglibose is the latest addition to this list after a placebo controlled trial found that it almost halved the risk of developing type 2 diabetes in Japanese adults with impaired glucose tolerance (50 of 897 *v* 106 of 881; hazard ratio 0.595, 95% CI 0.433 to 0.818).

The trial, which was paid for by Takeda, ended after just 48 weeks, so the long term effects on glucose tolerance are unknown. Most prevention trials last longer than this, says a linked editorial (doi:10.1016/S0140-6736(09)60575-4), and it is a pity that the authors missed the opportunity to find out more. The original protocol planned for a three year follow-up. An independent monitoring committee stopped the trial early when the benefits became obvious. Flatulence (156/897, 17%), bloating (120/897, 13%), and diarrhoea (110/897, 12%) were the most common side effects.

Voglibose inhibits α glucosidase enzymes in the gut, blunts postprandial hyperglycaemia, and may reduce stress on overworked pancreatic β cells, says the editorial. But we still have a lot to learn about how voglibose and other α glucosidase inhibitors, such as acarbose, prevent diabetes in adults at risk.

Lancet doi: 10.1016/S0140-6736(09)60222-1

Cardiac scans reveal many unsuspected, undetected heart attacks

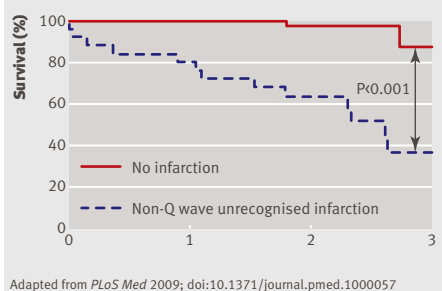
Magnetic resonance imaging of the heart looking for late gadolinium enhancement is a relatively new way to find previously unsuspected myocardial infarction. When US researchers did the test in 185 patients with recently sus-

pected coronary artery disease, a third had myocardial damage consistent with previous infarction (65/185). Most of these patients had no Q waves on their electrocardiogram. Their infarctions had caused no symptoms and had been undetectable by conventional methods.

The 50 silent infarctions that caused no Q waves tended to be small, but they were associated with extensive coronary artery disease and a high mortality. Thirteen of the 50 patients with these lesions died during 2.2 years of follow-up (adjusted hazard ratio 11.4, 95% CI 2.5 to 51.1 relative to patients with no evidence of infarction). The high mortality was independent of left ventricular function, which was largely preserved. Patients with non-Q wave infarction had a mean left ventricular ejection fraction of 52%.

The authors and a linked comment (doi:10.1371/journal.pmed.1000060) agree that this is a small cohort and it is too early to recommend expensive scans for everyone with suspected coronary artery disease. First we need to know if the scans alter management and ultimately improve outcome. The patients in this study had their scans immediately before scheduled coronary angiography.

SURVIVAL WITH AND WITHOUT UNRECOGNISED INFARCTION



Adapted from *PLoS Med* 2009; doi:10.1371/journal.pmed.1000057

PLoS Med 2009 doi:10.1371/journal.pmed.1000057

Whole body CT may reduce mortality after serious blunt trauma

Whole body computed tomography (CT) is now fast enough to be potentially useful for seriously injured trauma patients. An early scan may even save lives, according to an analysis of data from a German trauma registry. Patients with serious blunt trauma who had a whole body scan during resuscitation had significantly better survival than those who had no scan, or a targeted scan of a one body area. The authors used two established trauma scores (TRISS and RISC) to compare outcomes in patients with a similar predicted

mortality. In both analyses, a whole body CT scan was associated with lower than expected mortality—25% (95% CI 14% to 37%) lower for TRISS and 13% (4% to 23%) lower for RISC.

These are necessarily best guesses because patients were not assigned randomly to treatment with or without a whole body scan. The registry was incomplete, so the authors could calculate TRISS scores for only half the 4621 eligible patients, and the authors were unable to assess radiation exposure or costs. Even so, the findings look convincing, says a linked comment (doi:10.1016/S0140-6736(09)60354-8). Liberal use of whole body CT may well save the lives of trauma patients, and it is time for a trial to find out.

Lancet 2009 doi:10.1016/S0140-6736(09)60232-4

US citizens are overwhelmed by the wrong kind of drug information

American citizens are inundated with \$5bn (£3.4bn; €3.8bn) of direct to consumer advertising each year. Most of it is top heavy with spin and light on essential facts, such as the risks and benefits of treatment. Summary information is required by law, but at least two experts describe it as a “user hostile welter of tiny print” that is verbose, dull, confusing, and inadequate.

Many US health professionals would like to see direct to consumer advertising banned, just as it is in virtually all other industrialised nations. Failing that, the new administration should introduce reforms to ensure that patients and their doctors have access to clear, unbiased, and timely information about prescription drugs, they write. The current fragmented system—multiple sources of information led by the market—is in no one’s best interests, and it is a legacy of the light touch regulation favoured by successive governments since Ronald Reagan.

Facts about drugs can be complicated, but two new trials show that people can interpret data that are clearly presented and use the data to make the right treatment decisions. In both, the authors replaced the small print in drug advertisements with tables of likely effects and side effects. Patients given the tables were significantly more likely than controls to choose the best drug for symptoms of gastro-oesophageal reflux, and they were much less likely to overestimate the protective effects of statins and clopidogrel against heart attack.

Ann Intern Med 2009;150:563-4, 516-27

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