

All you need to read in the other general medical journals  
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**“The higher Calvinism of cardiology is a terrifying religious system of predestination by genomics. Someone needs to write a satirical novel about it, like James Hogg’s grim tale of Scottish Calvinism gone mad in *Private Memoirs and Confessions of a Justified Sinner* (1824)”**

Richard Lehman’s blog at [www.bmj.com/blogs](http://www.bmj.com/blogs)

## Tobacco and infections blamed for many of India’s cancer deaths

A study that mapped cancer deaths across the whole of India has, for the first time, given researchers a reasonably secure snapshot of mortality rates from specific cancers in both rural and urban areas. An estimated 556 400 Indian adults died of cancer in 2010, most of whom (71%) were 30-69 years old.

Cancers caused by tobacco dominated the picture in men, particularly oral cancers (45 800 deaths; 22.9%), whereas cancers of the cervix (33 400; 17.1%) and breast (19 900; 10.2%) were most prevalent in women. Stomach cancer was a leading cause of death from cancer in both sexes, and it was potentially linked to chronic infection with *Helicobacter pylori*, say the researchers.

Mortality looked similar in rural and urban communities, although the researchers noticed four-fold variations between different states. The north east of the country looked hardest hit by cancer deaths in this study.

This new and detailed picture of India’s cancer burden will help focus attention on the tobacco and infection related cancers that cause the biggest proportion of deaths and might also drive improvements in civil registration, says a linked comment (doi:10.1016/S0140-6736(12)60467-X). These researchers had to use verbal autopsies to determine cause of death. India’s civil register captures less than half of all deaths.

*Lancet* 2012; doi:10.1016/S0140-6736(12)60358-4

## Early infusions of glucose-insulin-potassium for acute coronary syndrome?

Infusions of glucose-insulin-potassium help protect and stabilise ischaemic myocardium in laboratory studies. Trials in humans have been less successful, and the latest once again reported mixed results. The infusions failed to prevent infarctions in adults with suspected acute coronary syndrome (48.7% (200/411) progressed to infarction v 52.6% (242/460); odds ratio 0.88, 95% CI 0.66 to 1.13) and failed to save lives (30 day mortality 4.4% (18/411) v 6.1% (28/460); hazard ratio 0.72, 0.4 to 1.29). Controls were given 5% dextrose.

There were hints that the infusions had the expected short term effect on myocardium—treated patients were less likely than controls

to have a cardiac arrest or die in hospital (4.4% (18/411) v 8.7% (40/460); 0.48, 0.27 to 0.85). Their infarcts were significantly smaller in a sub-study of 110 patients.

Participants were assessed and treated by paramedics before reaching hospital and much sooner than participants in previous trials.

*JAMA* 2012; doi:10.1001/jama.2012.426

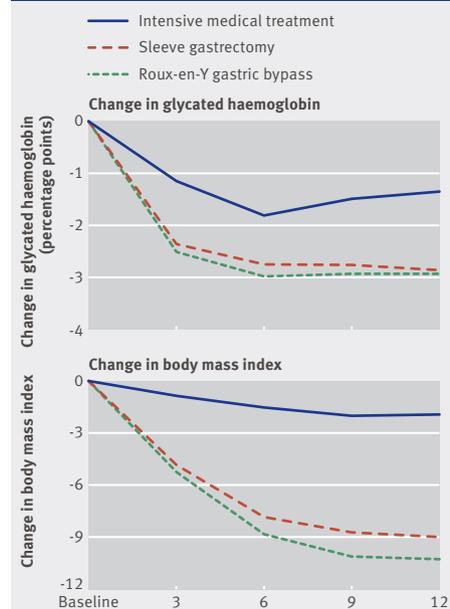
## Bariatric surgery improves control in obese adults with type 2 diabetes

Bariatric surgery is no longer a last resort for obese adults with type 2 diabetes, says an editorial (doi:10.1056/NEJMe1202443), after two trials reported that patients treated surgically have substantially better glycaemic control in the short and medium term than those treated with drugs and lifestyle changes alone.

In both trials, the surgical options led to significantly more weight loss, bigger improvements in lipid profiles, and steeper falls in glucose concentrations and glycated haemoglobin.

The first trial, which compared Roux-en-Y gastric bypass, sleeve gastrectomy, and intensive medical treatment in 150 patients with a mean body mass index of 37, found that 42% (21/50) v 37% (18/49) v 12% (5/41) had a glycated haemoglobin no more than 6% (42 mmol/mol) after one

### Outcomes during first year



Adapted from *N Engl J Med* 2012; doi:10.1056/NEJMoa1200225

year. The second trial, which compared gastric bypass, biliopancreatic diversion, and conventional medical treatment in 60 patients with a mean body mass index of 45, found that 75% (15/20) v 95% (19/20) v 0% (0/20) had complete remission of diabetes after two years.

Neither trial was big enough to establish surgical safety, although serious complications were rare and there were no surgical deaths. Long term outcomes remain unknown, and we still have a lot to learn about the comparative benefits and risks of the different bariatric procedures. But these trials might reasonably nudge doctors to offer surgery a little sooner to obese adults with hard to manage diabetes, says an editorial.

*N Engl J Med* 2012; doi:10.1056/NEJMoa1200225; 10.1056/NEJMoa/1200111

## CABG looks better than PCI for older adults with multivessel disease

Coronary artery bypass grafting (CABG) has once again inched ahead of percutaneous coronary intervention (PCI) in a study that compared the two treatments in adults who needed elective (including urgent) revascularisation. In a large observational dataset from the US, CABG was associated with significantly lower mortality than PCI, although the difference took at least two years to emerge. After four years, 20.8% of those treated with PCI and 16.4% of those treated with CABG had died (risk ratio 0.79, 95% CI 0.76 to 0.82).

The authors linked three databases to recruit and track a cohort of nearly 200 000 adults over 65 years, all with multivessel coronary artery disease and no acute myocardial infarction. They used propensity scoring in an attempt to iron out the differences between patients who opted for one or other treatment and to compare like with like. CABG still looked better.

Perhaps it is, says an editorial (doi:10.1056/NEJMe1202866). But we still need trials to confirm the advantage. No manner of adjustments can compensate for all the nuances that drive selection for one procedure or the other in cardiology clinics, including general frailty, subtle differences in pathology, patient preferences, and patients’ ability to stick to complex treatment regimens.

*N Engl J Med* 2012; doi:10.1056/NEJMoa1110717

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