Short cuts

What's new in the other general journals

High volume hospitals do most of the bariatric surgery in the US

The worsening obesity epidemic in the United States has led to a proliferation of hospitals offering bariatric surgery. By 2003, 1111 or nearly a quarter of all US hospitals did bariatric surgery, three times more than in 1997.

In response to concerns about the expertise and facilities available in these hospitals, researchers from Ann Arbor, Michigan, examined data from two national surveys to find out more about the hospitals. They found that in 2003 most patients (77%) had their bariatric surgery in high volume centres where staff performed more than 100 procedures a year. If anything, these hospitals looked bigger and better equipped than other US hospitals, with more operating theatres, more beds, bigger intensive care units, and more staff. Less than 10% of patients had their surgery in low volume centres performing fewer than 50 procedures a year.

While these findings are reassuring, they fall a long way short of guaranteeing safety for the increasing number of morbidly obese patients who want a surgical solution, write the authors. They want better data on quality, and the mechanisms to improve it, from all centres offering bariatric surgery.

JAMA 2006;295:282-4

Sex selection is the likeliest explanation for India's sex imbalance

Sex selection has been illegal in India since 1994, but it's still common. Analysis of data from a detailed and representative survey of 1.1 million Indian households found that for every 1000 boys born in 1997 there were only 899 girls. In families that already had one girl the ratio was 759 girls per 1000 boys; in families with two girls, it was

719. The sex ratio was about equal among families with one or more boys. The female to male sex ratio for second children was lowest among educated urban women with a daughter (683 girls for every 1000 boys).

The authors estimate that about half a million girls went "missing" in India in 1997. The most likely explanation (though there are others) is that they are dead, aborted as fetuses after prenatal sex determination. If so, perhaps 10 million female fetuses have been aborted over the two decades since prenatal ultrasound became widely available and affordable.

No one knows what the sex imbalance will do to the social fabric of this country and others, such as China, facing similar demographic problems, but a linked editorial (pp 185-6) warns there are no quick fixes to this "crime against humanity."

Lancet 2006;367:211-8

Authors or editors can recruit experts for peer review

Love it or hate it, peer review is a central part of medical publication. But who should choose the reviewers? Most medical journals use their own reviewers, but the easiest option is to ask for suggestions from authors. They are, after all, more familiar than journal editors with the leaders in their field.

In a recent study, both strategies generated reviews of about the same quality, but reviewers suggested by authors were more likely to recommend publication than reviewers chosen by editors (57% *v* 46%). This was particularly true for journals such as the *BMJ* that operate a policy of open, rather than anonymous peer review (odds ratio for recommendation to accept 12.4, 95% CI 1.6 to 95.8)

The study included 10 British journals, 329 submitted manuscripts, and 788 reviews—at least one pair of reviews for each manuscript. Overall, reviews from both sources were fairly mediocre, scoring only 2.6 out of a possible 5 on a validated rating instrument.

The authors conclude that journals should gratefully accept authors' suggestions for peer reviewers. They may be more generous when it comes to a final recommendation, but editors can always ignore it. They often do. In this study, the editor followed the reviewer's recommendation to publish (or not) for only about half of all manuscripts.

JAMA 2006;295:314-7

Inhaled hypertonic saline reduces pulmonary exacerbations in cystic fibrosis

In normal lungs, good mucociliary clearance depends on a thin layer of liquid lining the small airways. This layer is inadequate in children with cystic fibrosis. In theory, inhaling an osmotic agent should help to restore the liquid layer and improve mucociliary clearance. So researchers from Sydney, Australia, designed a double blind, randomised, controlled trial to evaluate nebulised hypertonic saline. The results were mixed.

Children who inhaled the hypertonic saline twice a day for nearly a year had significantly fewer pulmonary exacerbations than children who inhaled normal saline instead (relative reduction 56%, *P* = 0.02). But the effect of treatment on their overall lung function was modest and seemed confined to the first four weeks of treatment. Different ways of analysing the data produced either a non-significant trend in favour of hypertonic saline or a significant improvement of 82 ml in forced vital capacity (FVC) and 68 ml in forced expiratory volume in one second (FEV₁).

The authors are enthusiastic about their results. Hypertonic saline is cheap, seems safe, and prevents exacerbations. A linked editorial is more cautious (pp 291-3): hypertonic saline tastes nasty, makes patients cough, and adds at least 30 minutes to an already lengthy treatment schedule. It is, however, one of the first treatments to tackle the real pathology underlying cystic fibrosis—dehydrated airways.

N Engl J Med 2006;354:229-40

Antimicrobial catheters need further work

Up to a quarter of US hospital inpatients are catheterised at some point during their admission. Nearly a million of them each year develop iatrogenic bacteriuria. Catheters with antimicrobial coatings may reduce the risk, and at least 13 000 patients have participated in trials designed to find out. Unfortunately we still have no conclusive answers, according to a systematic review.

Taken together, the 12 trials included in the review suggest that coatings of silver alloy or nitrofurazone—a compound related to nitrofurantoin—have a modest effect at best on the risk of bacteriuria among patients with short term catheters. But the results were highly variable, and most were statistically non-significant in the conventional sense. The authors found no trials assessing whether these catheters prevent more important outcomes such as symptomatic urinary tract infection. None looked for antimicrobial resistance, and few looked formally at costs. All the trials had methodological flaws.

Since urinary tract infection caused by a catheter is the most common type of hospital acquired infection, there remains an urgent need for some decent and even halfway conclusive research in this area. A large and well designed randomised trial looking at clinically important infections including septicæmia, deaths, and costs would be a start, the authors conclude.

Ann Intern Med 2006;144:116-26

Simple inguinal hernias can be safely left alone

After years of struggling along in the dark, surgeons at last have some proper evidence to help them counsel men with inguinal hernias. The first large clinical trial comparing immediate surgery with “watchful waiting” concludes that if an uncomplicated inguinal hernia causes little

pain or inconvenience it can be safely left alone.

Researchers randomised 364 men to watchful waiting. Two years later, they had no more pain or functional incapacity than the 356 randomised to standard open surgical repair. Only two patients in the former group developed hernia incarceration, one with bowel obstruction, during four years of follow-up, a rate of 1.8 per 1000 patient years. This risk was considerably lower than the risk of surgical complications associated with prophylactic repair (22%).

About a quarter (85/364) of the patients assigned to watchful waiting requested surgery within two years, and nearly a third had surgery before the end of the trial at four years. They were no more likely to have a surgical complication or a recurrence than patients who had surgery earlier.

If these welcome findings are reproduced in other populations (younger poorer men, and women) it's possible that prophylactic repair of inguinal hernias could go the same way as prophylactic tonsillectomy, cholecystectomy, and appendectomy, says a linked editorial (pp 328-9).

JAMA 2006;295:285-92

Research on health inequality is fashionable but not particularly effective

Being rich is better for your health than being poor, even in countries with publicly funded health care. Poor people are more likely to get cardiovascular disease than rich people, for example; then, having got it, they are more likely to die from it. We have known this for decades. But studies on socioeconomic inequalities in health are still being published at a rate of more than 300 a month, according to one expert (pp 137-9). Most studies simply document this universal injustice, some try to find out what's behind it, but very few test interventions to make it better.

The latest study falls into the second category. In a cohort of 3407 Canadians hospitalised because of heart attack, the authors found that people on high incomes were half as likely to die within two years as people on low incomes (7% v 15%; crude hazard ratio 0.45, 95% CI 0.35 to 0.57). However, the difference between rich and poor diminished substantially when the authors adjusted their analysis for age, previous cardiovascular events, and current risk factors (hazard ratio 0.77, 0.54 to 1.10). Age accounted for 40% (22% to 65%) of the difference between rich and poor. Adverse cardiovascular risk profile accounted for a further 26% (4% to 54%). Measures of cardiovascular risk included smoking, diabetes, hypertension, family history, hyperlipidaemia, and pre-existing cardiovascular disease.

This suggests that poorer people had a worse prognosis because they were older and sicker to start with. The authors think tackling risk factors in deprived communities might help.

Ann Intern Med 2006;144:82-93

Most unexplained infant deaths occur in poor families

Researchers have warned parents not to fall asleep on the sofa with their babies after a study showed a worrying rise in the proportion of sudden infant deaths associated with this practice. Between 1984 and 1993, only about 1% of sudden and unexplained infant deaths in the English county of Avon occurred while the infant was asleep with a parent on the sofa. This proportion peaked at 18% (5/28) between 1994 and 1998, then fell slightly to 11% (4/36) between 1999 and 2003. Researchers in the county have recorded and investigated all unexpected infant deaths since 1984. Their study included all 300 deaths attributed to sudden infant death syndrome (SIDS). There are about 900 000 people in Avon and about 10 000 live births each year.

The yearly incidence fell by over 75% after the 1991 campaign to put infants to sleep on their backs, although the campaign worked better for some than for others. A look at the demographics of these families shows that SIDS is now overwhelmingly a problem for poor families and single mothers. Between 1999 and 2003, three quarters of SIDS deaths in Avon occurred in families on a low income or state benefits, 40% (14/35) of the mothers were single, 85% (31/36) of all mothers smoked during the affected pregnancy, and only 26% (9/35) made any attempt to breast feed. The proportion of affected families with these kinds of problems has increased substantially since the start of the study: nearly half now live in the most deprived 10% of postcode areas.

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