SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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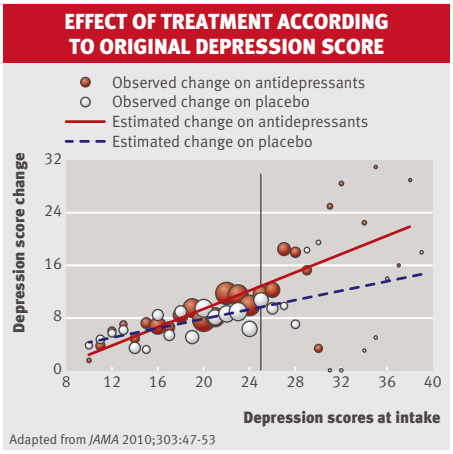
Antidepressants look effective against severe depression only



A new meta-analysis confirms that patients with severe depression get more benefit from antidepressant drugs than those with milder forms of the disease. Drug treatment worked little better than placebo for adults with mild or moderate depression in a reanalysis of patient level data from six selected placebo controlled trials.

The trials included adults with baseline scores from 10 to 39 on the Hamilton depression rating scale, the most commonly used measure of symptom severity. Drugs became more effective as baseline scores increased, and the benefits were clinically relevant only for adults with baseline scores of 25 or more. Scores of that size indicate very severe depression, say the authors. Most adults taking antidepressants in clinical practice score well below 25 at presentation.

The authors found many more trials in their original search but had to exclude most of them because patient level data were unavailable. They also excluded trials that mentioned a placebo washout period, a common device to weed out patients susceptible to placebo effects. After other exclusions, the authors were left with just six trials of two drugs—paroxetine and imipramine. This limited analysis is broadly in line with results from at least two bigger meta-analyses, however. All three show greatest benefits for the most severely depressed adults, say the authors.

JAMA 2010;303:47-53

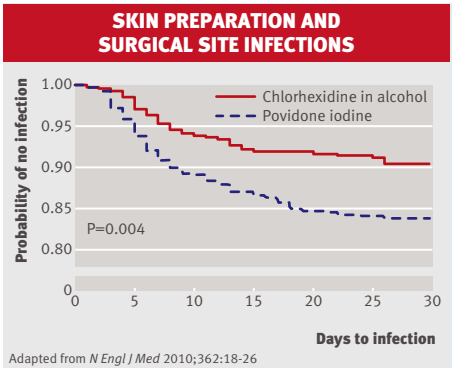
Doctors shouldn't fear online review by patients

Doctors are nervous about being judged by their patients in public. Being rated online invokes the same kind of stomach churning anxiety as fighting your way through a desperate crowd of peers to search for your name on a "pass" list for final exams posted on a notice board, writes one doctor from the US.

Opportunities to rate doctors online are multiplying, however, and their popularity means that they are unlikely to go away. Type your name into Google and you could find scores rating personal attributes such as helpfulness, as well as scores for how much you know (or seem to know). The writer scored a disappointing 2.5 out of 5 on one site but ploughed on undeterred to look at the bigger picture. Alongside the stark numbers and not so smiley faces she found a rich narrative, "a sea of patient voices telling me how it really is." Online, people are free to express themselves in a way they simply can't do when they are sick or scared and faced with a professional who holds the lion's share of the power. Doctors could and should learn from these stories, she writes. Taken together, they are a powerful collective view of what patients want, which is much like what good doctors are trying to provide.

N Engl J Med 2010;362:6-7

A good week for chlorhexidine antiseptics



All modern hospitals take active steps to protect patients from hospital acquired infections. Two strategies, one specific to *Staphylococcus aureus* and one more general, have received support from recent randomised trials. In the first, nasal mupirocin and bathing with chlorhexidine soap helped prevent *S aureus* infections in nasal carriers of the pathogen who were admitted to internal medicine, cardiothoracic surgery, vascular surgery, orthopaedic, gastrointestinal surgery, or general surgery wards (3.4% (17/504) *v* 7.7% (32/413) in the placebo group; relative risk of *S aureus* infection 0.42, 95% CI 0.23 to 0.75). Carriers were identified with a rapid real time polymerase chain reaction (PCR) assay. Around one in five of the patients screened was a carrier.

In the second trial, skin preparation with chlorhexidine in alcohol prevented more surgical site infections than skin preparation with 10% povidone iodine in patients having mostly abdominal surgery (9.5% (39/409) *v* 16.1% (71/440); relative risk 0.59, 0.41 to 0.85). Patients whose skin was prepared with chlorhexidine in alcohol had fewer superficial infections (0.48, 0.28 to 0.84) and deep incisional infections (0.33, 0.11 to 1.01).

Chlorhexidine skin preparation is already recommended for preventing infections associated with intravascular catheters, says an editorial (p 75). Mounting evidence suggests it should replace povidone iodine as the antiseptic of choice before surgery too, particularly abdominal surgery.

N Engl J Med 2010;362:9-17, 18-26

Adherence to antiretroviral therapy reduces healthcare costs

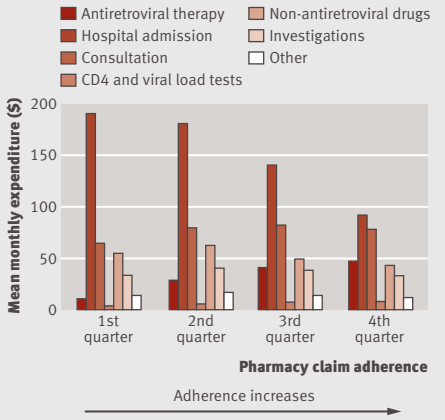
Careful adherence to antiretroviral therapy saves lives. It also saves money, according to a study from South Africa. In a cohort of nearly 7000 adults with HIV, the quarter of patients who were most adherent were also the cheapest to treat. Their drugs cost more, but they had lower hospital costs each month. The net effect was a total saving in the most adherent quarter of the cohort of $85 (£53; €59) (interquartile range $41-116) per patient per month, relative to the least adherent quarter. The authors and an editorial (p 54) say this is good news for resource poor nations, where most adults with HIV live.

These patients belonged to a private disease management programme called Aid for AIDS, which covers the cost of HIV and both related

"There is a bomb calorimeter in the heads of most health professionals, particularly those who are thin. Burning inside it is a chocolate chip cookie which yields 60 Kcal."

See Richard Lehman's journal blog on doc2doc.bmj.com

COST ACCORDING TO ADHERENCE



Adapted from *Ann Intern Med* 2010;152:18-25

and unrelated comorbidities. The authors estimated adherence from pharmacy claims data and estimated costs from claims made by doctors, hospitals, and laboratories for treatments, tests, and other care. They did not measure indirect costs.

The findings suggest that we should invest in improving adherence in South Africa and elsewhere, says the editorial. Better access to free drugs, eradication of stigma, and individual encouragement with education, counselling, reminders, visits, or treatment partners have all been shown to work.

Ann Intern Med 2010;152:18-25

Misoprostol is an effective alternative to oxytocin for postpartum haemorrhage

Postpartum haemorrhage is a leading cause of maternal death in childbirth, particularly in developing countries, where intravenous oxytocin may not be available. Sublingual misoprostol is logistically easier to use—it can be stored for years at room temperature and administered by unskilled birth attendants. Twin head to head trials show sublingual misoprostol can be an effective alternative to intravenous oxytocin.

One trial recruited women from hospitals in Burkina Faso, Egypt, Turkey, and Vietnam, where women routinely receive prophylactic oxytocin in the third stage of labour. Sublingual misoprostol (800 µg) and intravenous oxytocin (40 IU) were equally good at controlling postpartum haemorrhage—bleeding stopped within 20 minutes for 89% (363/407) of women given misoprostol and 90% (360/402) given oxytocin (relative risk 0.99, 95% CI 0.95 to 1.04).

Results were less clear cut among women managed in hospitals that did not give oxytocin prophylaxis in the third stage. In this trial, misoprostol controlled significantly fewer postpartum haemorrhages within 20 minutes than intravenous oxytocin (90% (440/488) *v* 96% (468/490); 0.94, 0.91 to 0.98). Secondary outcomes also favoured oxytocin, and the authors were unable to say with confidence that the two treatments were clinically equivalent. They still think sublingual misoprostol could be useful where oxytocin is unavailable. Shivering and fever were more common in women given misoprostol in both trials.

Lancet 2010; doi:10.1016/S0140-6736(09)61923-1, 61924-3

Umbilical vein oxytocin fails to work for women with retained placenta

Retained placenta has a case fatality approaching 10% in some resource poor settings. A low cost alternative to manual removal is urgently needed, and researchers have been exploring the possibility of injecting oxytocin down the umbilical vein to encourage expulsion. The latest trial was disappointing.

Women from the UK, Uganda, and Pakistan who had the active solution (50 IU of oxytocin in 30 ml of saline) were no less likely to need manual removal of the placenta than women who had the placebo (61.3% (179/292) *v* 62.1% (177/285); relative risk 0.98, 95% CI 0.87 to 1.12). Just over a third of the women in each group lost at least 500 ml of blood, and just over a quarter delivered the placenta after controlled traction on the cord. One woman in the oxytocin group had a placenta accreta and bled to death after a failed hysterotomy. Staff at the centre did not have the skill to perform a hysterectomy.

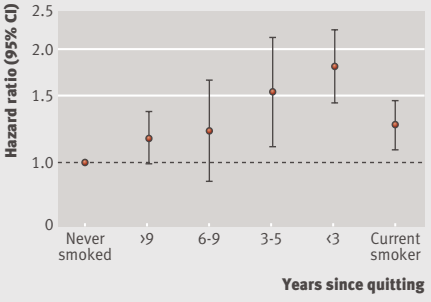
After pooling their results with those from smaller trials previously included in a Cochrane review, these authors are fairly convinced that umbilical vein oxytocin does not help unselected women with a retained placenta. Two commentators from Nigeria agree (doi:10.1016/S0140-6736(09)62095-X), reluctantly.

Lancet 2010; doi:10.1016/S0140-6736(09)61752-9

Smoking cessation is linked to short term risk of diabetes

Smokers have a higher risk of type 2 diabetes than non-smokers. Quitting may increase their risk even further, according to a large cohort study of middle aged adults. During the first three years of follow-up, recent quitters were 73% more likely to develop diabetes than participants who had never smoked (adjusted hazard ratio 1.73, 95% CI 1.19 to 2.53). The hazard ratio for people who continued to smoke was 1.31 (1.04 to 1.65). The excess risk of diabetes was highest in the first few years after quitting, fell slowly, and disappeared around 12 years later.

DIABETES RISK BY YEARS SINCE QUITTING BEFORE BASELINE



Adapted from *Ann Intern Med* 2010;152:10-7

Exploration of the link between quitting smoking and diabetes suggested that weight gain was at least partly responsible. People who stopped smoking were thinner at baseline than non-smokers but put on more weight during follow-up. They also had greater increases in fasting glucose concentrations. Adjustments for change in weight attenuated the association between quitting and diabetes (1.53, 1.04 to 2.24) but had no effect on the association between continued smoking and diabetes (1.34, 1.06 to 1.70). The study comprised 10 892 US adults, 1254 of whom developed type 2 diabetes during nine years of follow-up.

The well known benefits of giving up smoking far outweigh any short term risk of diabetes, say the authors. But it might be sensible to advise people who manage to quit about how to prevent weight gain and perhaps monitor their blood glucose concentration.

Ann Intern Med 2010;152:10-7

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