

Masala

The obsession with lipid lowering gets a setback. Ezetimibe, the new kid on the block, is a cholesterol-absorption inhibitor. However, this widely used anti-cholesterol drug improved low-density lipoprotein (LDL) cholesterol but not other disease markers in the manufacturer-sponsored ENHANCE study (*N Engl J Med* 2008;**358**:1431–43). More than 700 patients with familial hypercholesterolaemia were randomized to simvastatin and either ezetimibe or placebo. At 2 years, patients who received ezetimibe had significantly greater reductions in LDL cholesterol, triglycerides and C-reactive protein than those who received placebo. However, there were no significant differences between the groups in high-density lipoprotein (HDL) cholesterol levels, cardiovascular events, adverse events or the primary endpoint—change in carotid artery intima-media thickness. An editor of a journal opined that this study also raised questions about drug approval, drug marketing, the ethical behaviour of study sponsors and the idea ‘that what matters in risk reduction is that you lower cholesterol, regardless of how’.

A topical cream for early cancer? In a double-blind, randomized trial patients with vulvar intraepithelial neoplasia were given 16 weeks’ treatment with the immune-response modulator imiquimod or a placebo cream (*N Engl J Med* 2008;**358**:1465–73). By 20 weeks, the size of the lesion had reduced by >25% in over three-quarters of those on imiquimod but there was no change in those on placebo. Likewise, human papilloma virus had cleared from lesions significantly more often among those receiving the drug.

Now a new test for measuring a woman’s fertility level. The hormone called anti-Mullerian hormone (AMH) or Mullerian-inhibiting substance (MIS) provides a rough measure of the number of viable oocytes a woman carries. Unlike follicle-stimulating hormone, AMH levels are not affected by a woman’s menstrual cycle and can be measured at any time during the cycle. A report quotes fertility experts stating the AMH assay will become a standard test of fertility (*Wall Street Journal*, 22 April 2008, p. D1). A review of published studies also supports the role of AMH as a marker of ovarian reserve (*Fertil Steril* 2007;**88**:539–46).

The results of 2 recent publications show that self-monitoring of glucose levels in people with type 2 diabetes fails on two counts: it has no effect on clinical outcomes and it lowers the quality of life. In the Efficacy of Self Monitoring of blood glucose in patients with Newly diagnosed type 2 diabetes (ESMON) study, subjects were randomized to either glucose monitoring or no monitoring. After a year, the groups showed no differences in glycated haemoglobin levels or self-reported hypoglycaemic episodes. On the contrary, depression scores were higher among the monitored group (*BMJ* 2008;**336**:1174–7). The second study evaluated data on resource use from another study—the Diabetes Glycemic Education and Monitoring (DiGEM) trial. The subjects had been randomized to standard care, to ‘less intensive’ self-monitoring or to ‘more intensive’ monitoring. After a year, costs were significantly higher in the monitored groups, quality-of-life scores were lower and the clinical outcomes did not differ among the groups (*BMJ* 2008;**336**:1177–80).

Is this rediscovering lost science? Interestingly, a ketogenic diet had been widely and successfully used to treat children with drug-resistant epilepsy since the 1920s. This has now been examined in a randomized trial (*Lancet Neurol* 2008;**7**:500–6). Just over 100 children, 2–16 years of age, who had at least daily seizures and failed to respond to a 2-drug regimen were randomized to receive a ketogenic diet, either immediately or after a 3-month delay (control group). Compared with the control group, the ketogenic group experienced a 75% reduction in baseline seizure activity after 3 months.

The development of a blood substitute—an infusible liquid that eliminates the need for refrigeration and cross-matching, has a long shelf-life and reduces the risk of iatrogenic infection—would provide a potentially life-saving option for surgical and trauma patients with haemorrhagic shock, especially in rural areas and in military settings. Haemoglobin-based blood substitutes (HBBSs) are infusible oxygen-carrying fluids wherein appropriately modified haemoglobin molecules are not contained by a red cell membrane. However, a recent meta-analysis of 16 trials involving 5 different products and more than 3000 patients has shown that use of HBBSs is associated with a significantly increased risk of death and myocardial infarction (*JAMA* 2008;**299**:2304–12).

The internet is an increasingly popular source of information, especially for people confronting embarrassing issues such as mental illness, and concerns have been raised about the existence of sites that promote suicide. Cases of cyber suicide—attempted or completed suicide influenced by the internet—have been published. In a recent study, researchers used popular internet search engines to look up 12 relevant terms including ‘suicide’ and ‘how to kill yourself’. The findings are almost alarming. Although 13% of hits were for sites dedicated to suicide prevention, 9% promoted suicide. The 3 most frequently retrieved sites were pro-suicide; these sites, as well as Wikipedia (the fourth most frequent), provided detailed information about methods, including speed, certainty and the amount of pain (*BMJ* 2008;**336**:800–2).

This is public health; the way it should be. On 2 January 2008, the Nevada State Health Division (NSHD) contacted the Centers for Disease Control (CDC) concerning surveillance reports received by the Southern Nevada Health District (SNHD) regarding 2 persons recently diagnosed with acute hepatitis C. A third person with acute hepatitis C was reported the following day. This was enough to raise concerns about an outbreak because SNHD typically confirms 4 or less cases of acute hepatitis C per year. The authorities tracked down and notified more than 40 000 patients to get tested for hepatitis and viral genotype studies. It was estimated that nearly 80 patients were potentially infected with hepatitis C at a Nevada Clinic that is an endoscopy centre. The investigations suggested that re-use of syringes despite changing needles and using single vials for many patients caused this epidemic (*MMWR Morb Mortal Wkly Rep* 2008;**57**:513–17).

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