Masala

Kidney transplantation seems to be in the limelight for one reason or another. The long term renal consequences of kidney donation by a living donor have been a matter of concern. Here is some good news for living kidney donors and recipients. A detailed follow up on about 3700 kidney donors whose nephrectomies were done at the University of Minnesota between 1963 and 2007 reveals that the donors' mortality rates matched those of the general population and their rate of end-stage renal disease was in fact lower. Moreover, the donors had quality-of-life scores that were better than population norms and the prevalence of coexisting conditions was similar to that among controls (*N Engl J Med* 2009;**360:**459–69).

Another new drug—telcagepant. Migraine headache is commonly treated with triptans (serotonin-receptor agonists), but these agents are associated with side-effects and are contraindicated in patients with cardiovascular disease. Telcagepant is a new calcitonin gene-related peptide antagonist that lacks the vasoconstrictor effects of triptans (*Lancet* 2008;**372:**2115–23). In a randomized trial at 81 sites in Europe and the USA, telcagepant was effective in acute treatment of migraine with an efficacy comparable to that of zolmitriptan but with fewer associated adverse effects. An editorial commented that this 'marks a new era in migraine therapy'.

The good old Vicks may not be so good for the very young children. It is often used to relieve symptoms of chest congestion. Following a case of an 18-month-old child, who was brought to an emergency room in severe respiratory distress after a grandparent applied Vicks directly under her nose, clinicians investigated whether the ointment—a mixture of camphor, menthol and eucalyptus oil—was at fault. Their studies in healthy ferrets, which have an airway anatomy similar to humans, showed that mucus secretion increased and ciliary activity decreased in the presence of the ointment. They concluded that the effect 'may be of little physiologic consequence in older children and adults, but in infants and small children this potentially can lead to respiratory distress'. The product is not recommended for application to the nostril or for children under 2 years of age. (*Chest* 2009; **135:**143–8).

Drug-induced liver injury is a major cause of morbidity and mortality. Of course, in India, antitubercular drugs would contribute to a major chunk and it would be instructive to look at the results from the USA. In 2003, the National Institutes of Health established the Drug-induced Liver Injury Network, a consortium of 5 academic medical centres that identifies and follows patients who develop idiosyncratic drug hepatotoxicity. Of the first 300 cases, single prescription medication was implicated in 73% of subjects and a dietary supplement in 9%. Antibiotics were the commonest offenders accounting for almost half the cases. The most commonly implicated single agent was amoxicillin/clavulanate (23 cases); nitrofurantoin, isoniazid and trimethoprim/sulphamethoxazole were implicated in 13 cases each. In fact, 8% of patients died within 6 months (*Gastroenterology* 2008;**135:**1924).

This one proves it again—smoke-free policies are an important component of interventions to prevent morbidity and mortality from heart disease. It is well known that exposure to second-hand smoke has immediate adverse cardiovascular effects, and prolonged exposure can cause coronary heart disease. A report from the Centers for Disease Control (CDC) states that heart attack rates continued to fall even 3 years after indoor smoking bans were enforced in the studied area in the USA. After a smoke-free ordinance took effect the rates dropped by 27% in the first 18 months and an additional 19% in the next 18 months (*MMWR* 2009:**57:**1373–5).

Psychiatry practice has witnessed an explosion in the pharmacological repertoire. It is known that typical antipsychotic drugs lead to an increased risk of serious ventricular arrhythmias and sudden cardiac death. What about the atypical or newer antipsychotic drugs, which have largely replaced the older agents? Using 16 years of Tennessee Medicaid data, researchers retrospectively examined rates of sudden cardiac death in about 80 000 users of these drugs and 160 000 controls. The results revealed that current users of both typical and atypical antipsychotics showed a doubling in risk for sudden death relative to controls. However, the former users showed no increased risk (*N Engl J Med* 2009;**360:**225–35).

Interferon is the mainstay for treatment of chronic hepatitis C. Patients not responding to the antiviral treatment may progress to cirrhosis, liver failure, hepatocellular carcinoma and death. Would a longer treatment help? This question was addressed in a randomized trial of peginterferon alpha-2a given for 3.5 years in about 500 patients with chronic hepatitis C and advanced fibrosis who had not had a response to previous therapy with peginterferon and ribavirin. Even though the treatment group showed decreases in liver enzyme levels, in viral RNA levels, and in histological necro-inflammatory scores, the disease progression, defined by such events as death, ascites or hepatocellular carcinoma, did not differ between the groups (*N Engl J Med* 2008;**359:**2429–41).

One of the ways to make healthcare cheaper is to use generic drugs that are bioequivalent to brand-name drugs. The feeling that brand-name drugs may be clinically superior to generic drugs does complicate the issue. A systematic review summarized the clinical evidence from 50 studies comparing generic and brand-name drugs used in cardiovascular disease (*JAMA* 2008;**300:**2514–26). Most of the studies dealt with beta-blockers, calcium channel blockers, diuretics and warfarin. There was no evidence of superiority of brand-name cardiovascular drugs over their generic versions. As a note of caution, these generics passed the US Food and Drugs Administration (FDA) bioequivalence rating as a proxy for clinical equivalence.

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