

**DIABETES DRUG DEATHS?**

Canadian researchers have revived a decades-old concern about whether sulfonylurea drug use can cause adverse cardiac events.<sup>1,2</sup> They followed a cohort of 5795 patients with type 2 diabetes over an average of 4.6 years.<sup>1</sup> All subjects were only taking one of three types of oral anti-diabetic agent — a first generation sulfonylurea (chlorpropamide or tolbutamide), a more recently developed sulfonylurea (glibenclamide), or metformin. The researchers found that the higher the daily dose of sulfonylurea (especially a first-generation sulfonylurea), the greater the risk of death, including death caused by an acute ischaemic event. This association was not found with metformin.

An accompanying commentary suggested that sulfonylurea drugs should therefore be relegated to third-line agents in managing type 2 diabetes, after metformin and thiazolidinediones. Further, if they must be used, newer agents, such as glimepiride and glicizide, which have less effect on myocardial ATP-sensitive potassium channels, should be prescribed.

1. *CMAJ* 2006; 174: 169-174
2. *CMAJ* 2006; 174: 185-186

**H. PYLORI: OVERCOMING ANTIBIOTIC RESISTANCE**

A sequential regimen may be more effective than standard triple therapy in eradicating *Helicobacter pylori* infection.<sup>1,2</sup> In a small Italian study, researchers randomised 156 patients with *H. pylori* infection to receive either a 10-day sequential regimen (20mg rabeprazole and 1g amoxicillin for 5 days, followed by 20mg rabeprazole, 500mg clarithromycin and 500mg tinidazole for 5 days) or 7 days of standard triple therapy (20mg rabeprazole, 500mg clarithromycin and 1g amoxicillin). The sequential regimen achieved a higher cure rate than standard therapy, not only in patients infected with clarithromycin-susceptible *H. pylori* strains but also in those infected with clarithromycin-resistant strains.

1. *Ann Intern Med* 2006; 144: 94-100
2. *Ann Intern Med* 2006; 144: 140-141

**SILICONE TRAVELS**

Silicone injection for cosmetic purposes should be considered a high-risk procedure, according to a US physician who reported a case of silicone fluid embolism. A 30-year-old woman had developed severe silicone-induced pneumonitis leading to respiratory failure within days of receiving silicone injections into her buttocks. The injections had been given by an unlicensed nurse. An open-lung biopsy showed lipoid vacuoles throughout the alveolar interstitium; microscopy confirmed the presence of elemental silicon within the vacuoles. The patient was managed successfully with elective intubation and intravenous methylprednisolone.

*N Engl J Med* 2006; 354: 211-212

**MENINGOCOCCAL DISEASE: CLUES TO AN EARLIER DIAGNOSIS**

A UK study has reported newly identified, early clinical features of meningococcal disease which occur several hours before the well known classic features of haemorrhagic rash, meningism and impaired consciousness. The study examined the pre-hospital admission course of 448 confirmed and suspected cases of meningococcal disease, 103 of which were fatal, using questionnaires completed by parents and primary care records. At least one early sign of sepsis — leg pain, cold hands and feet or an abnormal skin colour — developed in most children about 8 hours after the onset of illness. The study authors called for a diagnostic paradigm shift: “Although we must avoid undermining the importance of classic symptoms, we could substantially speed up diagnosis if the emphasis was shifted to early recognition of sepsis.”

*Lancet Online*, 11 Jan 2006

**CEREBRAL PALSY'S VIRAL FACTOR**

Australian research has determined that there is an association between cerebral palsy and perinatal exposure to several viruses, especially some herpes viruses.<sup>1,2</sup> Gibson and colleagues conducted a case-control study, comparing the presence of a range of viral nucleic acids in the newborn screening cards (Guthrie tests) of more than 400 white cases with cerebral palsy with that in more than 800 white controls. For all gestational ages, the presence of varicella-zoster and human herpes viruses 6 and 7 increased the risk of developing cerebral palsy. However, about 40% of the controls tested positive for at least one virus, suggesting that other factors are needed for brain damage and subsequent cerebral palsy to occur.

1. *BMJ* 2006; 332: 76-80
2. *BMJ* 2006; 332: 63-64

*Dr Ann Gregory, MJA*