From the journals

Angiotensin receptor blockers may increase myocardial infarction

Evidence from several clinical trials using angiotensin receptor blockers shows that they are either neutral with regard to cardiovascular risk, or increase the risk of myocardial infarction, despite a reduction in blood pressure. In contrast, ACE inhibitors are consistently associated with 20% or more reduction in the incidence of myocardial infarction in patients with diabetes, hypertension, renal impairment and atherosclerosis. It is important to note that angiotensin receptor blockers are not just "ACE inhibitors without cough". *Reactions* 2004; **1030**: 3

Aggression is not a learned behaviour

Aggression is an unlearned behaviour. The ability to generate an aggressive response is a defensive mechanism. In human society the ability to suppress aggressive impulses is required for a peaceful and intellectually productive existence. This ability grows with healthy growth and development of the human brain. Although the impulsive aggressive tendencies diminish with the maturation of the brain, these tendencies do not go away.

Based on recent studies, aggression is known to be associated with impairment in cognitive skills such as the abilities to resist impulses, to modulate behaviour and to understand the consequences of behaviour. A high level of cognitive skills is needed to live in a world full of stressors and distractions. The neural basis for these cognitive skills resides in the prefrontal cortex. In healthy individuals the prefrontal cortex serves to modulate behaviour. Imaging studies, both structural (magnetic resonance imaging) and functional (positron emission tomography) have shown abnormality (reduced volume and metabolism) in the prefrontal cortex in aggressive people. *Lancet* 2004; **364**:12–3

Health benefits of deworming

About 300 million people worldwide have severe and permanent ill health as a result of soil transmitted helminth infections (roundworms, whipworms or hookworms) and schistosomiasis, transmitted by contact with water, carrying infected snails. Those at most risk of severe morbidity are the pre-school children, school-age children, adolescent girls, and women of child-bearing age. Anaemia, vitamin A deficiency, stunted growth, poor intellectual development, impaired cognitive function, and damage to the liver, intestine and the urinary tract are sequelae of chronic worm infection. Albendazole or mebendazole are cheap and effective drugs for soil transmitted worm infections. A substantial reduction of the disease burden associated with worm infections can be achieved by regular (once or twice a year) treatment of high risk populations.

Helminth control also contributes in achieving many 'millennium development goals'. Deworming in children leads to improvements in intellectual development that are related to income in adulthood. School enrolment by girls increases with deworming programmes; they have low dropout rates and improved retention rates. There is some evidence that the frequency of malaria attacks is increased in those with worm infection. Deworming contributes to the improved survival and development of children with malaria. Sri Lankan women given mebendazole during pregnancy, had fewer stillbirths and perinatal deaths and fewer low birth weight babies, than those not given worm treatment. With the overwhelming evidence of public health benefits of deworming, the challenge is to get the treatment to those who need them. Maximising the potential links between worm control programmes and other mass treatment programmes is one way to build a sustainable development strategy for the poor. *Lancet* 2004; **364**:1993–4

Nobel Prize 2004 in physiology or medicine

Richard Axel and Linda Buck were awarded the 2004 Nobel Prize in physiology or medicine " for their discoveries of odorant receptors and the organization of the olfactory system"

Buck and Axel described the expression patterns of odorant receptor genes in the olfactory epithelium. They showed that axons of neurons expressing the same odorant receptor converge in the olfactory bulb on the same loci termed glomeruli. The receptor is involved in the process of axonal convergence. An odorant can activate multiple receptors and a receptor can be activated by multiple odorants. *New England Journal of Medicine* 2004; **352**: 2579–80

Arresting stress at the workplace

The human body is built to cope with stress. Some people thrive or work better under stress. Excessive, frequent or prolonged stress, specially on a particular human organ, makes stress harmful. One must guard against these "distressors"

or harmful stress. Unpredictability of situations is a leading distressor. To lessen the unpredictability of situations, managers must make the jobs of subordinates into workable routines and alert them of impending changes.

Experts have recommended several ways to combat stress. Transcendental meditation (TM) improves not only work habits of people but also their personal habits. Yoga has been shown to be effective in arresting stress, though it is time consuming. Simple breathing and stretching exercises can be done in one's cubicle to arrest stress. Regular jogs, workouts and swimming are also helpful. Some companies compel employees to take vacations so that they can relax and regenerate, and return to work with greater effectiveness. Facilities and programmes for arresting stress must be considered as investments. Every employee must be responsible for resisting stress to enter into their life. *Asian-Pacific Newsletter on Occupational Health and Safety* 2003; **10**:33–5

Prognostic factors in adults with acute bacterial meningitis

In a nationwide prospective study done in the Netherlands from October 1998 to April 2002 on all patients with community acquired acute bacterial meningitis, 696 episodes were evaluated. The results of the evaluation revealed that the most common pathogens were *Streptococcus pneumoniae* (in 51%) and *Neisseria meningitides* (in 37%). The overall mortality rate was 21%. The mortality rate was higher among patients with pneumococcal meningitis than those with meningococcal meningitis (30% versus 7%).

The outcome was unfavourable in 34% of the episodes. Risk factors for an unfavourable outcome were, advanced age, presence of otitis or sinusitis, absence of a rash, a low score on the Glasgow Coma Scale on admission, tachycardia, a positive blood culture, an elevated ESR, thrombocytopenia and a low cerebrospinal fluid white cell count. *New England Journal of Medicine* 2004; **351**:1849–59

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Oral hygiene for patients with diabetes

People with diabetes need to practise high standards of daily oral hygiene, including brushing and flossing. The use of interdental brushes (which are like small bottle brushes) is indicated where there has been some recession of the gingivae. Adjunctive use of a chlorhexidine mouthwash (0.12%) or chlorhexidine gel (0.2%) twice daily (used independently of toothpaste so that the chlorhexidine is not inactivated) may be useful in controlling the more severe forms of gingivitis. Patients should consult with their dentist or periodontist regarding the recommended duration of use of chlorhexidine Dental care, which is specifically aimed at monitoring the health of the periodontal tissues and providing the necessary treatment, is needed at six-month intervals.

R *Hirsch.* Diabetes and periodontitis. *Australian Prescriber* 2004; **27**: 36–8.