



Anti-ageing – the power of prevention

The second Australasian Anti-Ageing and Aesthetic Medicine (A5M) conference yielded robust discussion around the roles of hormones, nutrition and cosmetic interventions to reduce both internal and external ageing. Held in Sydney in September, it attracted doctors and practitioners interested in the new medical specialty due to demanded by their substantial baby-boomer patient base.

Medicolegal risk management

Anti-ageing medicine (AAM) would be considered an entrepreneurial area by medical boards and doctors practising it could 'very easily' come to their attention, a medical lawyer cautioned the conference.

Kathryn Booth, of Maurice Blackburn Lawyers, said that medical law was by nature conservative and out of step with clinical reality, particularly with innovative areas such as AAM.

However, medical boards were particularly aggressive following recent malpractice scandals and there were 'high-risk aspects' to AAM, such as bio-identical HRT and cosmetic surgery, notwithstanding its interesting approach to preventive medicine and practitioners' goodwill.

But AAM had low-risk aspects as well, such as conservative advice on diet

and exercise, and lawsuits could be avoided with good systems, high standards and ethical practice.

Communication was also key, said Ms Booth: 'Most of the complaints we hear from people are about poor communication'.

Misdiagnosis and failure to refer or recognise severity of symptoms or order correct tests were common areas of litigation.

However, looking at the overall clinical picture so to catch underlying pathologies, open communication to facilitate informed consent, referral to appropriate specialists and keeping careful records were easy risk-management strategies, advised Ms Booth.

It was important not to raise unrealistic expectations in patients and lab tests of relevant hormone levels — with honest and accurate interpretation of results — was needed prior to prescription.

Nonetheless, *bona fide* **human growth hormone** (hGH) deficiency needed to be established before prescribing it, and Ms Booth added that at least seven Australian GPs had been disciplined for its use. ■

Folic acid – beware fortification

Although folic acid is methylated to manufacture DNA, in its oxidised form in fortified foods it has low bioavailability and

blocks production of DNA, dopamine and serotonin, warned AAM Board Member Dr Michael Elstein.

In addition, although the elderly were usually deficient in vitamin B12, they had normal levels of folate and increasing them increased the risk of cognitive decline, and could impair natural killer-cell cytotoxicity and encourage tumour growth [*Am J Clin Nutr* 2008;87:517–33], said Dr Elstein.

Dr Elstein reiterated his warnings from last year [see *JCM* 2008;7(1):6–7] about bio-identical HRT, saying that all hormones except **melatonin** had the potential to harm patients; even research on **vitamin D** — which biochemist Henry Osiecki described as the most important nutrient in AAM — was still nascent.

In a spirited address, Dr Elstein said that hGH increased oxidative stress and increased prostate-specific antigens (PSA), however other delegates said this flare in PSA was expected because some PSA receptors switched on or off with changes in testosterone levels, and advised regular PSA monitoring.

Dr Elstein said hormones should be addressed last by

GPs, who should first look at nutritional factors. For instance, **zinc** activated the P53 tumour-suppressant gene and was important in immune function but could also be pro-inflammatory at high doses. He added that a 24-hour urine test was the best measurement, not red-blood cell or taste tests.

The chemoprotective properties of **folate** were noted by Dr Mark Lucock and Lyndell Boyd, of the University of Newcastle's School of Environmental Science, at the Blackmores Research Symposium in October.

However, timing of folate intervention was critical, with beneficial effects observed before neoplastic cells appeared and angiogenic effects after tumour genesis. For every year of fortification, 77–162 neural tube defects were prevented but up to 780,000 people were exposed to greater tumour risk, said Ms Boyd.

Although flour fortification — now in 42 countries and due to commence in Australia next September — was generally good, mandating it for public-health purposes raised more questions than answers, added Dr Lucock. ■