

From the Library

"Amedeo continues to divide his time between his houses in Co Meath and Rome. Until he was 86, he rode to hounds following their hair-raising chases across the Meath countryside, where every field division is a wide ditch. He still keeps two horses, and was recently given two delightful, but time-consuming, Arab fillies—a rarity in Ireland. He rides occasionally, and once in the saddle the aches and pains of age and old wounds disappear. As for the problem of his cataracts, "the horse can see perfectly well for me." (O'Kelly, Sebastian. *Amedeo*. London: Harper Collins, 2002:313.)

There is no treatment on the market today that has been proved to slow the normal human ageing process. However, one intervention has been consistently shown to retard the ageing process in experimental animals and human—calorie restriction. Regrettably, to achieve the maximum benefit people would probably have to reduce their caloric intake by roughly 30% or the equivalent of no more than 1700 calories per day. Investigators have demonstrated that the benefits of caloric restriction on the ageing process may be mimicked by the use of 2-deoxy-D-glucose (2DG). Unfortunately 2DG appears to be toxic at high levels. A new candidate drug that mimics caloric restriction is iodoacetate, which is being investigated at MIA's laboratory of neurosciences. If scientists can successfully develop non-toxic agents that mimic caloric restriction it will enable people to live a longer healthier life without severe restriction of calorie intake. (*Scientific American* 2002;**287**:36–41)

Posterior ischaemic optic neuropathy, in contrast with its more common anterior variety, is a rare event associated with infarction of the posterior portion of the optic nerve and is almost invariably bilateral. In a study from the University of Southern California in seven patients with posterior ischaemic optic neuropathy it was demonstrated that none had abnormal retinal or choroidal findings including diabetic retinopathy. Contributing factors appeared to be primarily the amount of blood loss (ranging from 2000 to 16 000 ml) with a drop in haematocrit of 9.5–19% accompanied by intraoperative systemic hypotension. In three of six patients undergoing spine surgery marked facial oedema was associated with posterior ischaemic optic neuropathy. The authors conclude that middle aged men undergoing spine surgery with prolonged intraoperative hypotension and postoperative anaemia with facial swelling are at particular risk of developing posterior ischaemic optic neuropathy.

(*Journal of the American College of Surgeons* 2002;**194**:705–10)

Botox continues to be used for a variety of ailments. The US Food and Drug Administration has approved its use to treat blepharospasm, strabismus, hemifacial spasm, cervical dystonia, and glabellar (frown) lines. Now it appears that colon and rectal surgeons are using botox as well. It is being used in the treatment of chronic anal fissures and for the postoperative treatment of patients who have just undergone haemorrhoidectomy. In the latter case botox is meant to relieve internal sphincter spasms thought to be responsible for post-haemorrhoidectomy pain. Additional new uses of botox are bound to be reported soon. (*JAMA* 2002;**288**:439–40)

Behçet's disease can be associated with significant intraocular inflammatory changes as well as ulcerative mucocutaneous lesions. In a study from Turkey the use of interferon alfa-2A appeared to be an effective alternative treatment for the cutaneous lesions associated with Behçet's disease. This was a randomised placebo controlled and double blind study. This study did not investigate whether interferon alfa-2A is effective for intraocular inflammatory changes associated with this disease. (*Archives of Dermatology* 2002;**138**:467–71)

Most of the world except the United States has long enjoyed the sport of football (soccer). Now that it is gaining acceptance in the United States it is hardly surprising that a study has investigated whether or not heading a football can cause retinal bleeding. In a study done in Seattle, Washington, male and female football players, 13–16 years of age were studied at a football camp. Twenty one players and 30 non-playing controls were investigated. No retinal haemorrhages were detected in either group. So called "soccer moms" should be relieved. (*Archives of Pediatrics and Adolescent Medicine* 2002;**156**:337–40)

Neurobiologists from California Institute of Technology have recently reported that embryonic nerves serve as a template for the growth of arteries. Investigators labelled nerves and arteries in the skin of embryonic mice. They found that arteries but not veins are aligned closely with the nerves. In mutant mice, lacking a gene important for guiding axons, peripheral nerves clump and develop fewer fine branches and the mice arteries have a similar pattern. This research could explain a number of disorders including the Möbius syndrome where there is a failure to

develop several different cranial nerves and improperly formed arteries are known to frequently accompany the neurodysphasia. (*Science* 2002;**5576**:2122)

It is difficult to keep up with the advances of human genetics. Now the National Human Genome Research Institute offers one streamlined site to obtain updates on the human genome project. A section of the site provides research news and links to clinical trials. Go to www.genome.gov (*JAMA* 2002;**288**:307)

Drinking is known to decrease the progress of atherosclerotic cardiovascular disease by affecting atherosclerotic risk factors. In heavy drinkers (more than 30 g ethanol per day) elevated blood pressure occurs and may nullify the effects of alcohol on the lipids. However, in the case of light drinkers (ethanol consumption of less than 30 g per day) blood pressure is elevated in the middle aged and elderly but not in the young. The beneficial effects on serum HDL cholesterol and atherogenic index are not changed with age. Nevertheless, alcohol effects on blood pressure appears to be age related, especially in those who drink modest amounts. (*Gerontology* 2002;**48**:151–6)

Hormone replacement therapy remains a controversial subject with regard to its use in postmenopausal women. Recently, the Woman's Health Initiative, a randomised controlled primary prevention trial, discontinued the trial of oestrogen plus progestin versus placebo because of a statistically significant increase in breast cancer associated with this hormone replacement regimen. Although all-cause mortality was not different in the two groups investigators concluded that the risk-benefit profile in this trial did not justify the use of this regimen of hormone replacement therapy. This trial did not address the short term risks and benefits of hormones given for the treatment of menopausal symptoms. (*JAMA* 2002;**288**:321–33)

Most of us have now accepted the usefulness of email. Now a study from Stanford University suggests that a closed, moderated email discussion group can positively affect the health status and possibly the overutilisation of health care in patients with chronic recurrent back pain. In a randomised controlled trial that included 580 patients from 49 states there was a significant reduction in physician visits and hospital days for patients in the email discussion group compared to the controlled non-email involved group. (*Archives of Internal Medicine* 2002;**162**:792–6)