News and Reviews

Pipe and cigar smoking and lung function

It is common knowledge that pipe and cigar smoking does not affect lung function. This was tested on 3,528 subjects, 9% of whom were pipe smokers, 11% cigar smokers and 52% cigarette smokers (Ann Intern Med 2010; 152: 201–10). Pipe and cigar smokers had elevated urine cotinine levels, establishing that contrary to popular belief many such individuals do inhale smoke. Pipe smoking resulted in a reduced forced expiratory volume while both pipe and cigar smokers were more likely to have some degree of respiratory obstruction. Clearly pipe and cigar smoking has an adverse effect on lung function. Common knowledge is not always accurate knowledge.

Does olive oil ingestion affect ventricular function?

I beg the indulgence of the reader by mentioning again the television advert in which men and women of advanced years chase each other around their Mediterranean farms. Is this just a ploy to sell olive oil or does this really happen? A recent survey looked at 651 people from the Mediterranean who had had a previous acute coronary syndrome (Ann Nutr Metab 2010; 56: 9–15). Seventy percent of those with left ventricular systolic dysfunction (LSVD) were consuming olive oil, compared with 76% of the subjects without LSVD. The difference seems marginal but it was also found that those on olive oil had a 65% lower risk of developing LSVD. Olive oil may also be good for old people in this country, but it would surprise me to find many cavorting around the beach at Largs in the earlier months of the year.

Obesity and recovery from back pain

Like most groups in the population, more and more older people are developing obesity. Many also have bouts of back pain and the question is whether the one influences rehabilitation of the other (Ann R Coll Surg Engl 2010; 92:23–6). A group of patients was divided into three groups based on their body mass index (BMI). All received physiotherapy focused on back function for 6–12 weeks. There was a significant improvement in all groups in the physical impairment index and range of movement in the lumbar spine. There also was a reduction in pain measured by a visual analogue scale. Despite all these positive changes, recovery was unrelated to BMI. Apart from this result, however, there are lots of other reasons why we shouldn’t get fat.

A cutaneous lesion in cancer of the prostate

Some clinicians distinguish themselves by diagnosing extremely rare conditions. My own view is that there is greater merit in providing a competent diagnosis and treatment for more common disorders. One of the rarities recently defined was the development of multiple cutaneous nodules associated with carcinoma of the prostate (Arch Dermatol 2010; 146: 206–7). In this report, skin biopsies identified sheets of epithelial cells, abnormal cell nuclei, areas of necrosis and foci of poor cellular differentiation. The rarity of the condition is attested by the observation that there are only 80 reports in the world literature.

Cognitive recovery and treatment with escitalopram after a stroke

There has been a gradual increase in the use of drugs in the treatment of stroke. A recent report describes an attempt to augment recovery of cognitive function after a stroke using escitalopram, a serotonin reuptake inhibitor (Arch Gen Psychiatry 2010; 67: 187–96). One hundred and twenty-nine patients were treated within 3 months of a stroke. Three treatment groups consisted of those treated blind with the antidepressant, those treated blind with a placebo and those treated openly with problem solving therapy. All were assessed with a battery of neuropsychological tests. Escitalopram produced a significant improvement in function compared with the other two approaches. How it achieved this requires further investigation.

Glaucoma, medication and mortality

A concern about the intraocular administration of drugs is that they sometimes have major systemic effects. This has now been evaluated in patients with glaucoma treated locally with drugs (Arch Ophthal 2010; 128: 235–40). A longitudinal assessment was conducted on 21,506 patients aged ≥40 years suffering and treated for glaucoma between 2003 and 2007; 1.1% died during this period representing a mortality of 74% of that of the general population. This is a reverse of the usual pattern of morbidity with intraocular drugs. Why this should be is far from clear.

Peripheral artery disease and ischaemic stroke

There is a strong relationship between cerebral ischaemia and cardiovascular disease. The specific relationship be-
between ischaemic stroke and peripheral vascular disease also deserves careful consideration (Cerebrovasc Dis 2010; 29: 248–54). Seven hundred and thirty-nine patients with ischaemic stroke or transient ischaemic were selected. Only 6.2% gave a history of peripheral arterial disease, but 44.9% had an abnormal ankle–brachial artery index (ABI). An ABI of ≤0.9 increased the risk of carotid artery stenosis and potentially the incidence of stroke by ≥4% per year. It remains to be seen whether modification of treatment in the light of early findings would improve the prognosis.

**Clostridium difficile**

One of the ‘superbugs’ familiar to both politicians and followers of the tabloid press is *Clostridium difficile*. A paper encouragingly free of hype has defined situations in which the organism causes a particularly high mortality (Clin Infect Dis 2010; 50: 194–201). Review of 1,008 patients revealed that those with the NAP1 strain had a mortality of 12.5% compared with 5.9% in the others. An increase in mortality was also associated with an increased age.

**Inflammatory proteins and depression in old age**

Since a number of biochemical factors increase the risk of depression, it seemed reasonable to look at the possibility of a relationship of inflammatory markers and the condition (Dement Geriatr Cogn Disord 2010; 29: 11–20). Samples of blood were taken from 968 individuals each of whom was tested on a Geriatric Depression Scale. Blood levels of C-reactive protein, interleukin-6, α1-antichymotrypsin, intercellular adhesion molecule 1 and tumour necrosis factor had no relationship to Geriatric Depression Scores. Ah well, back to the drawing board!

**How did that get here?**

All sorts of things crop up in the chests of old people. This is particularly true of loops that herniate through the rear of the diaphragm. A particularly dramatic example was reported in a man of only 44 years (Dig Surg 2009; 26: 453–4). He presented with a long history of chest symptoms. A chest X-ray showed a ‘bubble’ on the left side of his thorax. Computerised tomography established that there was herniation through the diaphragm and that his spleen was included in this. After surgical treatment the man made a good recovery.

**Testosterone supplementation and sarcopenia in old age**

A feature of both mice and men is that ageing is associated with a loss of muscle mass. Factors involved in the process were investigated in groups of young (2 months) and old (22 months) mice (Endocrinology, 2010; 151: 628–38). Old mice treated with a GnRH antagonist to suppress endogenous testosterone production received an implant of testosterone or a placebo implant. A comparison was made between 22-month controls, 2-month controls and 22-month mice on testosterone. Treatment with a GnRH antagonist increased muscle apoptosis and decreased muscle mass and muscle fibre cross-sectional area of fast and slow muscle fibres, which was reversed by testosterone replacement. Testosterone treatment was also associated with reduced oxidative stress, myostatin levels, activation of c-Jun NH2-terminal kinase and cyclin-dependent kinase inhibitor p21. It also reversed age-related reductions in glucose-6-phosphate dehydrogenase levels and phospho-Akt and Notch signaling. All the evidence is that testosterone improved the functioning of skeletal muscle and that a wide range of biochemical processes were involved. Difficulty in following the theory of this should warn us that clinicians may experience increasing problems in communicating with scientists. We need a few more Leonardo de Vincis who could both paint Mona Lisas and design helicopters.

**Awareness of Herpes zoster**

One of the most painful and disabling disorders in old age is Herpes zoster. Prompt diagnosis and treatment is dependent on patients being aware of the characteristics of the disease. This has recently been tested on a global scale (Gerontology 2010; 56: 20–31). In a large telephone survey, 8,688 individuals aged ≥50 years from 22 countries were asked about their knowledge of the symptoms of Herpes zoster. In New Zealand, Brazil and Malaysia, between 97 and 100% had a detailed knowledge of the condition, whereas <20% in Turkey, India and Chile knew anything about it. Clearly there is the need for educational programmes in such countries. However, given a poor knowledge of many other disorders and low levels of health care, this might be difficult to organise.

**DIOGENES**

*Contributions to this column should be sent to Professor BILL MACLENNAN*

21 Crawford Road, Burnside, 153 Glassow G73 4DL, UK

*Email: profmaclennan@sky.com*