News and Reviews

Prediction of lower respiratory tract infections in very old people

Lower respiratory tract infection is a common cause of hospital treatment and death in old age. Important causes of it were reviewed in a group of 857 patients aged 85–90 years and living at home (Thorax 2007; 63: 817–22). Its incidence was 94 per 1,000 patient years and conditions associated with it were chronic obstructive airways disease, smoking, treatment with glucocorticoids, severe cognitive impairment, a history of stroke and a decline in physical function. Of all these factors the most prominent one was smoking.

Urodynamic studies in patients with a small prostate and urinary tract symptoms

A poorly publicised cause of urinary symptoms is a small rather than a large prostate. The condition was evaluated in 84 patients with an average age of 67 years and a small prostate (Urologia 2008; 81: 125–8). A total of 50% had a high International Prostate Symptom Score while 48.9% had detrusor underactivity and 33.3% had detrusor overactivity. A puzzling observation was that patients with features of chronic bladder obstruction were younger than those without the problem (60.1 ± 6.9 years and 64.0 ± 8.8 years). The relevance of these observations is open to debate but one thought is that not all urinary symptoms in old men are due to prostatic hypertrophy or cancer.

Physical activity and the metabolic syndrome in old age

A condition that I was unfamiliar with until recently was the metabolic syndrome. This is characterised by abdominal obesity, high triglyceride levels, a high blood glucose level and a high low-density lipoprotein concentration (Q J Med 2008; 101: 713–21). The association of the metabolic syndrome with physical activity has recently been evaluated. In 1,144 subjects from the community and aged 65–91 years there was an inverse relationship between waist circumference, triglyceride levels and insulin resistance and leisure and the Activity Scale for the Elderly (ASL). The simple message from this message is that old people should be encouraged to take more exercise, though as I look at the wet dull weather, I do not think that I shall be bagging many Munros today.

Sleep duration and mortality

There has been considerable debate as to whether extremes of sleep periods are good or bad for people. This has been evaluated in 9,789 people living at home and aged 32–86 years (Sleep 2008; 31: 1087). Sleep periods of 5 h or less or 9 h or more had no effect on the mortality of younger subjects, but mortality for older people formed a U-shaped curve with maximum mortality being associated with minimum or maximum hours of sleep. It may be that the observation is an epiphenomenon in which sleep patterns are most likely to be abnormal in patients in chronic ill health or on polypharmacy.

Bone mass and resorption in post-menopausal women with diabetes

Does type 2 diabetes effect bone mass? A group has recently looked at the association between bone mass and bone resorption and a number of biochemical and clinical variables (Metabolism 2008; 57: 940–5). Bone mass was measured with quantitative ultrasound and bone resorption was assessed from urinary levels of C-telopeptide a derivative of type-1 collagen. There was no relationship between measurements of bone mass or resorption and the duration of diabetes or the serum cortisol level. From this study it would appear that diabetes did not affect bone metabolism. There has been so much controversy about the issue however that further study seems appropriate.

Rare diseases occur in old age

There is the temptation to assume that older people always have common diseases and the chances of them have having a rare condition are remote. A review of case reports in journals gives the lie to this. In Canada, a 65-year-old man presented with congestive cardiac failure (McGill J Med 2008; 11: 19–21). Investigation revealed that he had segmental motions within his left ventricle, mitral valve calcification, severe aortic stenosis, a dilated right ventricle and pulmonary hypertension. His condition was labelled as Shene’s disease. Features include mitral valve disease, a bicuspid aortic valve and coarctation of the thoracic aorta. There is the issue of course whether putting a label on this man’s problems improved his management. This probably varies with the particular syndrome.

A falls risk screening tool

Interest continues as to the causes of falls in older people. A development in Australia has been to construct a new assessment tool and apply it to 2,005 subjects aged 65–104 years (Med J Aus 2008; 189: 183–6). Scoring was related to an ability to stand unaided and unsteadiness. To the initial score up to two extra points were added for taking one or
more medications or a history of falls. There now is a large series of tests evaluating the risk of falls. It may be that particular tools will be used locally or further attempts will be made to establish which of them is the most effective.

Endarterectomy: high medical and surgical risks

There has been considerable confusion as to whether a high medical risk increases a surgical risk. This is particularly relevant when considering the suitability of patients with carotid artery stenosis for surgery. The issue was highlighted in a review of 128 operations for carotid surgery performed on 120 patients (J Am College Surg 2008; 207: 219–26). A total of 83% of the subjects had hypertension, 64% coronary artery disease, 37% diabetes and 22% pulmonary oedema. The incidence of complications from surgery over 1 month was 1.6% for stroke and 0.8% for myocardial infarction. This established that surgery on patients with severe medical problems had a relatively low complication rate.

Risk factors for progression of mild cognitive impairment to dementia

Work continues on defining which subjects with mild cognitive impairment go on to develop dementia. Further light on the issue has emerged in a study of 6,812 individuals over the age of 65 years in three French cities (J Neurol Neurosurg Psych 2008; 78: 979–84). Forty-two percent of the group had mild cognitive impairment. Both men and women in the subgroup were more likely to be depressed but none were more likely to have an increased body mass, diabetes or a stroke. Women had less good subjective health and were more often physically disabled.

Risk factors in men for progression to dementia in order of importance were having an ApoE4 allele, a previous stroke, a low level of education, less capacity for instrumental activities of daily living and age. In women the factors were a decline in instrumental activities of daily living, having an Apo4E allele, having a stroke, a low level of education, subclinical depression, treatment with anti-cholinergic drugs and age.

It remains to be seen how this information can be turned to practical use in the management of individual patients.

Health and the modification of heating systems

It is well recognised that a low ambient temperature can have a serious effect on the health of older people. Would an improved domestic heating system improve this? An experiment was conducted in Glasgow in which two blocks of flats were provided with improved insulation and central heating and another two left unchanged (J Epid Community Health 2008; 82: 790–2). While those in unmodified houses showed little change, those in flats with changes in heat and insulation developed lower diastolic blood pressures and experienced less functional impairment and an improvement in general health. They were also less admitted to hospital less often and took less medication. It also was noted that modification to the heating system actually decreased costs.

Diabetes

One of the least recognised complications of type 2 diabetes is oesophageal dysfunction. A Japanese study has investigated this in considerable detail (J Gastroenterol 2008; 43: 38–44). Sixty-one diabetics were divided into three groups. Group A had suffered from diabetes for 1–4 years, group B for 5–9 years and group C for 10 years or more. Oesophageal function was assessed by measuring its 24-h changes in pH, its motility and the amount of reflux. The pH fell with the duration of diabetes, as did the amount of peristalsis in the organ. It is clear that diabetes has an effect on oesophageal function. Whether this manifests itself in symptoms or deterioration in health remains to be seen.

Blood lead levels and non-spinal bone loss in older women

Lead poisoning has become rare with the elimination of the metal in plumbing and in cosmetics. Rather unexpectedly it has emerged as a cause of bone loss (J Bone Mineral Res 2008; 23: 1409–16). The problem emerged in a group of women aged 65–87 years. Bone mass in the hip and neck of femur was measured. It emerged that the mass was lowest in women with the highest blood lead levels. Any link with environmental factors would be difficult to establish since people retain high levels for many years after its ingestion.

DIOGENES

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