Plasma tocopherols and cognitive impairment

There is an ongoing interest on the relationship between vitamin intake and mental function. An Italian team has reported the relationship between plasma tocopherol and the development of cognitive impairment (Am J Clin Nutr 2008; 87: 1306–13). This was done by performing a longitudinal survey of plasma tocopherol levels in 761 older individuals between 1999 and 2003. It was found that the risk of developing dementia was greatest in those within the highest tertile of plasma d-tocopherol divided by cholesterol levels [odds ratio (OR) 3.87, confidence intervals 1.46–10.27]. There was no relationship between cognitive function and vitamin E metabolites. The conclusion was that there was no direct relationship between plasma tocopherol levels and cognitive impairment, but that their ratio to plasma cholesterol levels may be important. Such an association is so tortuous that, at the very least further work is required to sort out what all this means.

Problems elderly women have in preparing food

An important determinant of being able to live alone is the ability to prepare meals. Barriers to this were analysed in 18 older women (Adv Nurs Sci 2007; 30: 159–74). There were difficulties in deciding what to prepare, in handling ingredients, in preparing a recipe, problems in cooking and difficulty in standing and moving. Such a list of barriers would be useful in defining the needs of an individual. I suspect that a similar study in men would define barriers to preparing food as laziness, chauvinism, ignorance and incompetence. There are also those who pretend to be incompetent so that a woman takes over from them.

Nutrition and prognosis in very mild Alzheimer’s disease

Also on the theme of nutrition is diet and cognitive impairment; there was a recent study of the effect of nutritional status and cognitive function over 1 year in 160 patients with mild Alzheimer’s disease (Alzheimer Disease 2008; 22: 66–71). Mental function remained the same in 52.5%, but deteriorated in the remainder. The latter had lower scores on a Mini Nutritional Assessment. There is a conundrum of course as to which of the two conditions was responsible for the other.

Intraocular pressure variation and glaucoma

When being assessed by an optician, I am usually alarmed by my eyeballs being assaulted by short puffs of air. This exercise is a manifestation of the concern about the association between ocular tension and glaucoma. There is a report on the follow-up of 151 individuals to quantify the effects of intraocular tension on glaucoma (Am J Ophthalmol 2007; 144: 901–7). Each unit of increased pressure was associated with a 4.2–5.5 times increased risk of glaucoma. It seems that I shall just have to continue to suffer puffs in my eyes.

Compliance of older people in treatment for gout

The prevention of recurrent attacks of gout depends upon tight control of long-term treatment. Compliance was reviewed in 9,823 patients aged 65 and older (Am J Rheum Dis 2008; 67: 609–13). It emerged that medication was only taken in 36% of days. Rather surprisingly, compliance was better in patients aged 85 and older than in those aged 65–74. It was also found that Afro-Americans were more compliant than Caucasians. If this was a school report, it would read, ‘Could do better’.

Gastrointestinal bleeding in patients on thromboprophylaxis for hip and knee replacements

The high risk of deep leg vein thrombosis after a hip or knee replacement is often treated with aspirin. This, however, increases the risk of gastrointestinal haemorrhage. The complexities of the problem were reviewed by a retrospective study of two groups of 1,149 and 886 patients with hip and knee replacements (Ann R Coll Surg Engl 2008; 90: 332–5). The first group was given 150 mg daily of aspirin for 6 weeks and the other given the same dose of aspirin along with 300 mg of ranitidine daily for 3 days. There was a statistically higher incidence of gastrointestinal haemorrhage in the first group suggesting that the addition of ranitidine to aspirin might be a sensible strategy for reducing the risk of bleeding.

Family history and herpes zoster

Herpes zoster is a particularly painful and disabling condition in older people. A relative attempted to relieve post-herpetic neuralgia of his right arm by driving with his arm stuck out the window. All following drivers were bemused by the
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Impression that he was continually intending to turn right. His apparent eccentricity disappeared when the neuralgia settled. A recent case-control study investigated the relevance of a family history in the condition by interviewing 504 patients and 523 controls (Arch Dermatol 2008; 144: 603–8). Of the infected individuals, 39% reported that several members of their family had had the condition compared with only 11% of controls, giving an OR of 5.85. The OR for patients as against control whose family had had only one individual with the condition was 4.5. It remains to be seen whether the interesting association is due to genetic or environmental factors.

Low 25-hydroxyvitamin D (25-OHD) levels and high parathyroid hormone (PTH) levels associated with depression in elderly patients

Given the gloomy winter months in the United Kingdom, it would not be surprising if older people had both brittle bones and an increased prevalence of depression. The link between bone biochemistry and depression was investigated in 1,282 subjects aged 65–95 (Arch Gen Psychiatry 2008; 65: 508–12). 25-Hydroxyvitamin D (25-OHD) levels were 14% below average in 169 patients with depression. Levels were reduced by 14% in those with mild depression and 26% below average in those with severe depression. Parathyroid hormone (PTH) levels were 5% higher in those with mild depression and 33% higher in those with a severe disorder. It is not yet clear whether it is the biochemical abnormalities that cause depression or environmental factors that lead to both.

Weather and mortality in congestive cardiac failure

Many years ago, it was established that there was a high mortality among older people during a heat wave in Manchester. My view is that it was seeing the sun for the first time that gave them heart attacks. In Canada, a group has followed the same theme by investigating the effect of changes in temperature in the mortality of patients with cardiac failure (Arch Environ Occ Health 2007; 63: 169–76). This was done by recording daily mortality rates for Montreal between 1984 and 1993. They found a non-linear mortality curve for congestive cardiac failure in which there was a particularly high rate where the temperature had been over 25°C 2 days previously. Mortality was also associated with a high barometric pressure on the previous day. Perhaps there is something to be said for living in a less wet country where nothing much happens and where extremes of climate are rare.

Endometrial cancer and overweight and obese women

A review of the literature sometimes states that obesity is responsible for just about everything. Another threat to be added to the list is endometrial cancer. In a recent review of 193 women, those of reproductive age had a 1% incidence of the condition compared with one of 3% in those who were post-menopausal (Aust N Z J Obstet Gynaecol 2008; 48: 207–13). The OR for the latter developing the cancer over the other group was 1.19. The OR for those who were severely obese was 1.58 and for those who were morbidly obese 2.72. There was no increase in the risk of cancer in obese pre-menopausal women.

Benefit of endarterectomy in patients with asymptomatic carotid artery disease

Is endarterectomy worthwhile in a patient with carotid artery stenosis even if there are no symptoms? Data from a Swedish national data bank have been used to explore this (BJS 2008; 95: 714–20). Using the measurement of quality-of-life years (QALYs), the cost for each of these was kroner 34,557 and kroner 311,133 for men and women aged 65–74 and kroner 58,930 for men and kroner 777,779,776 for women aged 75 and older. The data suggest that surgery is only effective in men up to the age of 73 and ineffective in any women over the age of 65.

The effect of calcium intake and physical activity on bone mass in postmenopausal women

There are continuing attempts to provide a more accurate definition of the efficacy of treatment of bone rarefaction. The study in question reviewed the relative merits of calcium intake and physical activity in 138 pre-menopausal and 134 postmenopausal women (Calcif Tissue Int 2008;82: 171–81). Detailed information on their calcium intake and the amount and type of physical exercise they took was recorded. Bone density using dual energy absorptiometry was measured for the neck of femur and greater trochanter. Most were re-evaluated 10 years later. Premenopausal women in the high-exercise group had a higher bone mass of 3.8% at the neck of femur and 6.7% at the greater trochanter compared with those who took less exercise, but a high intake of calcium had no effect. In postmenopausal individuals in the high-exercise group, bone mass was 4.2% higher at the neck of femur and 2.7% at the greater trochanter. A high intake of calcium was associated with an increased bone density of 2.7% at the neck of femur and 5.5% at the greater trochanter. In less complex terms, it would appear that a high intake of calcium and plenty of exercise are good for women, and that this is often achieved by following habits of a lifetime rather than adapting to therapy late in life.

DIOGENES

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