

ABSTRACTS

FRACTURES AND HORMONE REPLACEMENT THERAPY

According to the authors there is limited evidence of the effects of different patterns of use of postmenopausal hormone therapy on fracture incidence and particularly on the effects of stopping hormone replacement therapy (HRT). Investigators looked at the effect of different patterns on hormone therapy use on fracture incidence, using a prospective study of 138 737 postmenopausal women aged 50 - 69 years, recruited from the UK general population in 1996 - 1998 (the Million Women Study). These women were followed up for 1.9 - 3.9 years for fracture incidence.

A total of 5 197 women reported 1 or more fractures, 79% of which resulted from falls. Current users of HRT at baseline had a significantly reduced incidence of fracture, and this protection was evident soon after hormone therapy began and the adjusted relative risk decreased with increasing duration of use. There was no difference in adjusted relative risk according to whether or not the HRT contained oestrogen-only, oestrogen-progestin or other types of HRT, or according to dose of oestrogen or progestin constituents.

The authors concluded that all types of hormone therapy studied confer substantial protection against fracture while they are used. This protection appears rapidly after starting HRT and wears off rapidly after use ceases. The older women are, the greater their absolute reduction in fracture incidence while using hormone therapy.

Banks E, *et al.* *JAMA* 2004; **291**: 2212-2220.

HEART DISEASE, RENAL DYSFUNCTION AND HYPERTENSION

There is a relatively high prevalence of reduced glomerular filtration rate (GFR) in older hypertensive patients and the relationship between level of GFR and cardiovascular disease (CD) and its risk factors is not well known. In this study, investigators evaluated baseline renal function in 40 514 hypertensive patients, aged 55 or more who were enrolled in the Antihypertensive and Lipid-lowering Treatment to Prevent Heart Attack Trial (ALLHAT). They examined the prevalence of CVD in patients with different levels of GFR.

They found that 57% of patients had mild, 17.2% moderate and 0.6% severe reductions in GFR. Compared with patients with normal or mildly reduced GFR, patients with moderate or severe reductions in GFR were more likely to have had a prior myocardial infarction or stroke, have ischaemic changes on ECG and have left ventricular hypertrophy. A decrease in GFR of 10 ml/min per 1.73 m² was independently associated with a 6% higher risk for CVD and 14% higher risk of left ventricular hypertrophy.

The authors concluded that the prevalence of reduced GFR is high in older hypertensive patients. Patients with moderate or severe reduction in GFR are more likely to have a history of CVD and left ventricular hypertrophy and that even modest reductions in GFR are independently associated with a higher risk of both these conditions.

Rahman M, *et al.* *Arch Intern Med* 2004; **164**: 969-976.

Bridget Farham

SINGLE SUTURE

PRIONS IN SHEEP MUSCLE

Researchers publishing in *Nature Medicine* say that prion proteins can accumulate in the muscles of infected sheep and may be present many months before symptoms are seen. This is the first indication of muscle infectivity in animals that are eaten by humans and may have the potential to lead to variant Creutzfeldt-Jakob disease.

Lancet 2004; **363**: 1781.