Founded 1823

THE LANCET

Published weekly

Vol 336 Saturday 25 August 1990 No 8713

LETTERS to the EDITOR

CORRECTIONS

Information for authors is published monthly (eg, page 493). Information about subscriptions and advertising is on page viii.

Bone density screening for osteoporosis

SIR,—There is a rational case for bone density screening for osteoporosis in contrast to the negative approach that Dr Raffle and Dr Cooper advise (July 28, p 242). We first offered open-access dual photon bone density screening in 1987, so we have some experience in the matter. Rehearsing the old arguments over whether a disease process is continuously or bimodally distributed in the population is not relevant to this aspect of screening. Osteoporosis is of epidemic proportions in the UK; it is ten times commoner in women than men. 1 in 3 women will have a fracture related to their low bone mineral density, at enormous financial and social cost.[1]

The Wilson and Jungner principles, as far as they are relevant to non-communicable diseases, are met by bone density screening for osteoporosis. Osteoporosis is an important health problem; there is an acceptable treatment; facilities for diagnosis and treatment are available; the disease is recognisable early by bone density scanning, which is a non-invasive test acceptable to the population; and there is a clear understanding of the natural history. A treatment policy based on the finding of greater than 10% bone loss compared with young, normal people (which results in an increased fracture risk[2]) is reasonable and consensus has emerged on how and whom to treat.[3] Start-up costs for diagnosis and treatment may be high but important expenditure savings in medical care will be made as hip, spinal, and other fractures decline[4] and active working life is extended. The fact that the government has decided not to support a national programme[5] is an excellent reason for the private sector to offer this choice to the concerned individual, with savings to the NHS. Therefore there are good medical, social, and commercial reasons for such a service to continue.

The assertion that since hormone replacement therapy (HRT) should be considered for any menopausal woman and can be beneficial in the treatment of osteoporosis is not grounds for omitting bone density screening. Not every menopausal woman has osteoporosis and some premenopausal women do. Not every woman will accept HRT. Certain women require additional treatment if bone density does not improve on re-scanning. Diagnosis before treatment is important. For some women only the realisation that they have osteoporosis will lead them to seek HRT. Despite this, in our experience almost half the patients who have a diagnosis of osteoporosis made on bone density screening and who return to their medical advisers will not be offered any form of treatment and in most of the remaining patients it will be inadequate. Anxiety will be generated in patients in whom a diagnosis is made but where there are poor or no facilities for evaluation and treatment. This is likely to be exacerbated by the approach advised by Raffle and Cooper. It will further deter the 9·6 million women over 45 years in the UK who already have a very difficult task finding clear guidelines from doctors about their risk of and treatments for osteoporosis, while those who have fractured will have the condition in its most advanced form. In our view women should be offered bone density screening from the age of 30 (coinciding with peak bone mass) and counselling on lifestyle, preventive measures, and HRT or other treatments where appropriate. There is little point in hiding technology away when it can identify a silent disease early and promote the effective delivery of health care to a traditionally neglected population.

Endocrine and Dermatology Centre,
140 Harley Street,
London W1N 1AH, UK

MONIQUE I. ANDERSSON
C. H. MORTIMER
W. PERRY

1. Office of Health Economics. Osteoporosis and the risk of fracture. London: OHE, 1990.
2. Melton LJ, Wahner HW, Richelson LS, O'Fallon WM, Riggs BL. Osteoporosis and the risk of hip fracture. *Am J Epidemiol* 1986; **124**: 254–61.
3. International Consensus Development Conference. Prophylaxis and treatment of osteoporosis. *Br Med J* 1987; **295**: 914–15.
4. Phillips S, Fox N, Jacobs J, Wright WE. The direct medical costs of osteoporosis for American women aged 45 and older, 1988. *Bone* 1988; **9**: 271–79.
5. Written reply from the Secretary of State for Health, Jan 24, 1989. *Hansard* 1989; **145**: col 548.