LETTERS

Thrombolytic treatment of acute myocardial infarction in general practice: need for evaluation

Hampton and McWilliam discussed prehospital management of patients with acute myocardial infarction.¹ Comprehensive clinically controlled trials have shown that thrombolytic treatment can reduce death from acute myocardial infarction.²⁻⁷

To obtain maximum effect thrombolytic treatment should be started as soon as possible after coronary thrombosis, but there are often considerable prehospital and in hospital delays before treatment. Prehospital thrombolysis has been introduced to shorten this treatment delay. It is now generally accepted that early diagnosis of acute myocardial infarction must be based on electrocardiographic evidence because only half of the patients with clinically suspected acute myocardial infarction will in fact have an infarct.⁸

All Danish general practitioners (GPs) have a contractual agreement with the national health service, and they are paid for electrocardiograms (ECGs). It is thus possible to obtain exact information of ECG activities in Danish general practice. More than 96% of the population is registered with an individual GP for medical care.

We analysed Danish health service to determine the rate of electrocardiography in 150 Danish general practices in the county of North Jutland. ECGs were taken in 79% (95% confidence interval 72% to 85%) of practices, significantly more in partnership practices than in single practices (89% *v* 72%; *p* = 0.02, Fisher's exact test).

In addition, all GPs who obtained ECGs were interviewed by telephone: 76% (67% to 84%) had a transportable electrocardiograph and 63% (54% to 72%) had a positive attitude towards possible prehospital thrombolytic treatment of acute myocardial infarction administered by GPs.

The proportion of Danish GPs who perform electrocardiography in general practice seems to be rather higher than in England.⁹ As GPs use many ECGs in their daily routine one essential prerequisite for prehospital treatment of acute myocardial infarction is fulfilled. Therefore thrombolytic treatment started by GPs might be an alternative to the specialised cardiac ambulances, especially in rural or isolated areas which are far away from the nearest hospital.

Prehospital thrombolysis may become routine in the near future, and an organisation to provide it will be required. Controlled clinical trials with evaluation of the benefits and safety of such treatment for acute myocardial infarction (provided by GPs or specialised cardiac ambulances, or both) are needed before prehospital thrombolysis becomes

accepted good practice unsupported by published evidence.

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Population screening for osteoporosis

In the reformed NHS, health authorities are responsible for purchasing effective health care for their populations and thus ensuring health gains. Little information on the effectiveness of health care interventions, however, is readily available, and the task of obtaining such information, given the vast array of diagnostic and therapeutic procedures and resource and methodological considerations, is beyond the scope of most district health authorities and provider units. The Department of Health's project, commissioning *Effective Health Care* bulletins for advising purchasers and providers was therefore welcome news and the reports were

eagerly awaited. The first bulletin produced in January 1992¹ addressed a major public health problem – osteoporosis – and focused on screening to prevent fractures. Though agreeing with its conclusion that routine population based bone screening programme for menopausal women with the aim of preventing fractures was inadvisable, we and others (National Osteoporosis Society press release, 17 January 1992) disagree with many other conclusions in the bulletin. The limited examination of the evidence for many issues – highlighted on the first page of the report, usually the part read by many busy health care professionals and managers – and little consultation with the prominent workers in the field made for an incomplete report and seriously jeopardised our efforts to examine bone density measurements for identifying high risk women.

Population screening has not been advocated by any of the centres carrying out bone densitometry. The current work in Aberdeen and Humberside is addressing its potentials and is in the research stage. The bulletin therefore addresses a proposal that has not yet been promoted. The potential for beneficial effects of alternative antiresorptive therapy that is, bisphosphonates – was ignored; similarly the potential for beneficial effects of hormone replacement therapy (HRT) on fractures in the bulletin was confined to prevention of hip fractures and ignored fractures at other sites.

The bulletin hinted at the possibility of selected screening of patients with high risk factors, as advocated by the scientific advisory board of the National Osteoporosis Foundation of America.² This fact, however, did not feature in the summary recommendations of the bulletin.

The conclusion of the report that there are no scientific trials that assess the effectiveness of population bone screening programmes in preventing fractures in the elderly is true. However, there is in the words of the report of the National Osteoporosis Foundation's scientific advisory board "compelling evidence that long term oestrogen therapy prevents bone loss and fractures." Plainly the long term randomised controls and trials mentioned in the bulletin are not feasible. However, case-control studies consistently show a reduction in hip and Colles' fractures associated with long term HRT – for example, the study of Hutchinson *et al.*³ The contention that "bone density measurements are poor at identifying which women will go on to have a fracture in later life" ignores the fact that bone densitometry is at present the only method of providing an index of risk for bone fracture. The argument that the effectiveness of HRT or any other antiresorptive therapy would be compromised by low compliance is an important, but secondary, issue.

We welcome the choice of osteoporosis as a subject for a bulletin but question the value of a scientifically incomplete report. We suggest collaboration with