

patients with myocardial damage could be identified.

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Percentage body fat as a predictor of raised cholesterol level

Sir,
Disenchantment with the concept of population screening for cholesterol levels and general acceptance of targeting only people with other known risk factors may leave those who, by implication are not at risk, with a sense of false security as well as a reduced chance of ascertaining their cholesterol status. This is demonstrated in the study by Mann and colleagues¹ which shows that in those patients with a cholesterol level of over 6.5 mM, only 44% could be predicted on the basis of a family history of coronary heart disease and only 55% from a body mass greater than 25, thus leaving about half of the population for whom raised cholesterol level cannot be predicted.

The percentage of the body which is fat can now be determined simply, non-invasively and inexpensively. The reading from the well validated² Futrex[®] device (Futrex Corporation), which employs an infrared light wand applied to an individual's biceps, is used together with height, weight, age and sex factors to compute this parameter. Does a knowledge of percentage body fat facilitate the prediction of hypercholesterolaemia, and if so to what extent?

A Futrex device was recently used at our health centre on 184 non-diabetic but otherwise unselected men aged 16-69 years, who concurrently had their venous cholesterol level estimated. A total of 64 patients had a cholesterol level of 6.0 mM or more, the designated 'raised' level, and 80% of these patients had a percentage body fat of 21% or more (standard cut-off point). By contrast, only 39% had a positive family history of coronary heart disease and only 60% were 10% or more over the desirable body weight for their height. Among the 120 patients with a cholesterol level of less than 6.0 mM, 67

(56%) had a percentage body fat of 21% or more.

Use of the single parameter of percentage body fat would have predicted four out of five patients with a 'raised' cholesterol level in our group and would have made 66 blood tests unnecessary, that is in those patients with percentage body fat of less than 21%. From this it would appear that percentage body fat is currently the most effective single predictor of raised cholesterol level, and it surely merits further evaluation in clinical practice.

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Increased demands on services as a result of screening elderly people

Sir,

In the two years before screening elderly people became mandatory, a controlled trial of screening of over 65 year olds was carried out in a urban group practice with four partners and one trainee.

Patients were matched for age and sex and divided into cases and controls on the throw of a die. The mean age of all the patients was 77.4 years. Patients in the screening group were sent a letter offering a home visit by the practice nurse. This offer was accepted by 147 of the 175 patients and the nurse visited and completed a questionnaire incorporating a mental health questionnaire. The questionnaires were reviewed by the nurse and one practice partner, and patients with identified problems were seen by a doctor either at home or in the surgery. The 175 patients in the control group received normal care.

All 350 patients' records were examined one year after the screening visit for evidence of contacts with their general practitioner and with other services. The results are summarized in Table 1. In addition, the screened group spent a total of 676 days in hospital as inpatients, compared with 403 days for the control group.

The screened group showed an increased use of almost all services although this was statistically significant only for referral to the chiropodist and for tetanus vac-

Table 1. Use of general practitioner, hospital and community services by the 175 patients in each group.

Service	No. of times service used	
	Control group	Screened group
Radiological investigation	42	41
Pathology test	131	191
Drug prescription	287	346
Tetanus vaccination	8	21 ^a
New outpatient referral	33	45
Follow-up outpatient attendance	82	134
Accident and emergency department attendance	14	14
Referral to chiropodist	3	14 ^a
Referral to optician	5	10

^aChi square test, $P < 0.05$.

ination. In the year following the screening visit there was a significantly greater number of contacts between the screened group and their general practitioner — a mean of 3.04 contacts compared with 2.22 for the control group (Mann Whitney U test $P < 0.01$). This trend towards increased use of health services has been found in other studies.^{1,2}

The time spent by nurses on screening visits was approximately 98 hours and each partner had a mean of 29 extra consultations with elderly people in the year following screening. The increased demands on hospital services, as a result of screening, are likely to produce longer waiting lists for outpatient appointments and non-urgent admissions. In addition, the increase in the number of drugs prescribed may have implications on indicative prescribing budgets.

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Sodium valproate, carbamazepine and spina bifida

Sir,

In 1983 it was shown that pregnant women taking sodium valproate during the first trimester have a 1-2% risk of