Triglyceride concentration and coronary heart disease

High concentrations need treatment

EDITOR,—Alan M Garber and Andrew L Avins state that use of the triglyceride concentration to guide lipid lowering treatment “must still be seen as experimental.”¹ I suggest that measurement of fasting plasma triglyceride concentrations should be mandatory in any patient with hypercholesterolaemia, particularly if lipid lowering treatment (either diet or drugs) is contemplated. The type of diet or drug to which a patient responds best depends on the relative amounts of circulating cholesterol and triglyceride. Moreover, patients with very high triglyceride concentrations (almost all of whom will have hypercholesterolaemia) should be identified and treated appropriately. They are at risk of pancreatitis, and neither the hypercholesterolaemia nor the hypertriglyceridaemia is likely to respond to conventional cholesterol lowering dietary or drug treatment.

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1 Garber AM, Avins AL. Triglyceride concentration and coronary heart disease. *BMJ* 1994;309:2-3. (2 July.)

Routine measurement is justified

EDITOR,—In their editorial on triglyceride concentrations and coronary heart disease Alan M Garber and Andrew L Avins focus on an insurmountable difficulty encountered when limited epidemiological tools are used in an attempt to disentangle biochemical variables.¹ They conclude that measurement of triglyceride concentrations for screening and to guide treatment on the basis of the cardiovascular risk is experimental and less convenient than measurement of high density lipoprotein cholesterol concentrations. Serum cholesterol, triglycerides, and high density lipoprotein cholesterol are, however, related components of a complex system of lipoprotein transport, and a purist mathematical approach that takes little account of current clinical and laboratory practice is inappropriate. Although not central to my concern with the views of Garber and Avins, there is good evidence for an independent association between triglyceride concentrations and coronary heart disease which corrects for high density lipoprotein cholesterol concentration.² This is particularly notable in diabetes mellitus.^{3,4}

The concern that the benefits of treatment of hypertriglyceridaemia on coronary heart disease may not be independent of the high density lipoprotein cholesterol concentration falls foul of the same difficulty in separating out their predictive value: it is the combination of hypercholesterolaemia, hypertriglyceridaemia, and low high density lipoprotein cholesterol concentration that marks out people as more likely to benefit from treatment. Failure to measure the serum triglyceride concentration could result in an underestimation of risk, particularly in women with modest hypercholesterolaemia (6.5-8.0 mmol/l). High density lipoprotein cholesterol concentrations may be lower than 0.9 mmol/l in 0.5% of such cases,⁵ and the presence of hypertension and diabetes increases the relevance of hypertriglyceridaemia, whose prevalence may be 10-20 times higher.⁶

The suggestion by Garber and Avins that measurement of high density lipoprotein cholesterol concentration is more convenient than measurement of triglyceride concentration takes no account of current laboratory practice. Measurement of high density lipoprotein cholesterol may not be routinely available in up to

30% of biochemistry laboratories in Britain.⁷ Serum triglycerides can be measured simultaneously with serum cholesterol, with the same analyser. The additional costs of staff and reagents for measurement of serum triglyceride is 10p, compared with £1.50 for measurement of high density lipoprotein cholesterol. Furthermore, national quality control schemes exist for estimation of triglyceride but not high density lipoprotein cholesterol, which is isolated by different techniques. Measurement of both triglyceride and high density lipoprotein cholesterol concentrations also allows estimation of low density lipoprotein cholesterol concentrations without preparative ultracentrifugation.

I suggest that routine measurement of (fasting) serum cholesterol and triglyceride concentrations is appropriate in the screening of patients at risk of coronary heart disease, with subsequent confirmation of hyperlipidaemia at least once. Measurement of high density lipoprotein cholesterol concentration is more appropriate on a single occasion before drug treatment is considered.

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Community geriatricians

EDITOR,—As one of the few consultant community physicians in geriatric medicine, I wish to comment on correspondents' criticisms of Jackie Morris's suggestion that posts for consultant geriatricians with a community orientation should be created.^{1,2} Morris's suggestion was not at odds with the recommendation by the British Geriatrics Society that one or more consultants in a hospital department should take a lead role in developing community initiatives. Geriatrics is a broad based specialty. Many geriatricians have commitments to acute medicine or an interest in a subspecialty such as neurological or orthopaedic rehabilitation, which may prevent them spending much time on community activities. Surely it is legitimate for some geriatricians to concentrate on developing community initiatives as a special interest. I agree that such specialists should be full members of the department of geriatrics, undertaking all aspects of hospital based work as well as community activities.

I understand David Black's concern that posts for community geriatricians may be created with the underlying aim of restricting acute hospital care for frail elderly people.¹ This is unlikely to happen if posts are created as described above. Indeed, in Newcastle our experience is just

the opposite. In our work with social services, providing specialist input into community care assessments, we see people who would not normally present to the geriatric service (for various reasons), and our involvement ensures that more, not fewer, frail old people gain access to specialist acute or rehabilitation facilities. With the current emphasis on community care and the shift to primary care services I am sure that this aspect of our work will be increasingly important.

I do not share Black's fear that it will be difficult to find applicants of suitable calibre to fill these posts. As with any new development, there will be a lag phase while sufficient interested people receive appropriate training, but the framework for training is already available,³ and it should not be difficult to ensure that trainees receive the requisite experience. Increasingly, trainees express an interest in my post, which they see as a natural development in the context of today's health service.

Of course, community geriatricians should not duplicate or supplant primary care services but should complement and enhance them. General practitioners seem to welcome the extra support I provide. I believe that we are working in partnership to ensure the highest quality service for all elderly people under our care. It would be unfortunate if unnecessary division was created between professionals because of misunderstandings or suspicion about the post of community geriatrician.

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Vitamin K for neonates

EDITOR,—Jim Slattery commits a serious error in suggesting that breastfeeding mothers who experience major difficulties during the early weeks should give their babies supplementary formula milk.¹ This is bad advice and contrary to the results of research on establishing breast feeding. Breastfeeding mothers who experience difficulties need individualised help from their midwife or health visitor without delay. Breastfeeding counsellors are also available to give support and information of a non-medical nature. All health care workers should remember that formula milk is bad for breast feeding. We were heartened by Gerald Draper and Andrew McNinch's statement that “while we continue to debate vitamin K regimens we should be unanimous in promoting breast feeding.”²

The National Childbirth Trust recently asked members to send details of policies and practices on administration of vitamin K. We found that when written material is available for parents there is a danger that it may be taken to imply that formula feeds are preferable to breast milk since they contain more vitamin K. The many benefits of breast feeding, such as a reduction in the number of infections, are not generally mentioned. This can be a deciding factor for mothers who are not fully committed to breast feeding. The Health Visitors Association notes that “the confusion is causing a reduction in those wishing to or continuing to breast feed.”

The concentration of vitamin K in colostrum is higher than that in mature milk, and the concentration in hindmilk is 1.9 times that in foremilk.³ Unrestricted breast feeding, with the baby well positioned at the breast, will maximise the baby's