	Correlation coefficient (r)	
	Nanji and Reddy (n = 122)	Authors' results (n = 46)
Alb v HDL-C	0·32	0·19
TC:Alb v TC:HDL-C	0·89	0·57
TC:HDL-C v TC	0·52	0·55
TC:Alb vTC		0·93

Alb = albumin.
TC = total cholesterol.
HDL-C = high density lipoprotein cholesterol.

the statement of Nanji and Reddy that TC:Alb predicts TC:HDL-C better than total cholesterol alone is questionable. For the sake of clarity, we showed that the correlation coefficient between TC:Alb and total cholesterol was 0·93; as could be expected, dividing total cholesterol by albumin had little effect, because of the relatively small range of reference values of albumin.

2 The high correlation between TC:Alb and TC:HDL-C found by Nanji and Reddy could be the result of a statistical artefact. When screening several correlations, or the same correlation in several groups and taking the highest, it is probable that this high correlation is too high by chance. The difference between the correlation found by Nanji and Reddy and that found by us indicates that such an artefact might be present.

3 Nanji and Reddy also express the relation between TC:Alb and TC:HDL-C in terms of sensitivity and specificity, using TC:HDL-C = 5 as the discrimination value between "not diseased" and "diseased" and TC:Alb = 50 as the discrimination value between a negative and a positive test. For our material we find, using the same discrimination values, a sensitivity of 23/31 = 0·74 and a specificity of 9/15 = 0·60, as compared with 0·91 and 0·87, respectively, found by Nanji and Reddy. This reflects the difference in correlations (see 1) and again points to possibly too favourable results of Nanji and Reddy (see 2).

4 Because of the importance of the serum cholesterol concentration in health screening there has been a tremendous effort to standardise the cholesterol assay. This has led to a determination with reduced bias and improved precision. That is why the TC:HDL-C ratio is precise and accurate. Albumin concentration is still dependent on the chosen method and the coefficient of variation (CV) is larger than the CV of the cholesterol assay. Thus merely from the view point of determina-

tion, the TC:HDL-C ratio is preferable to the TC:Alb ratio.

5 The ratio TC:HDL-C is an important predictor for the risk of coronary heart disease. Replacing TC:HDL-C by TC:Alb is likely to weaken the relation with coronary heart disease. The strength of the relation between TC:Alb and coronary heart disease should, however, be studied directly, without the "intermediate" variable TC:HDL-C. Nanji and Reddy themselves suggest such a study in the last sentence of their paper. The search for an indicator for the development of coronary heart disease by relating possible indicators with another indicator should be avoided.

Of course, it is attractive to use the results that are routinely available on multichannel analysers as a less expensive substitute for high density lipoprotein cholesterol measurements. In our opinion, however, albumin is not an alternative for measurement of high density lipoprotein cholesterol.

The economic and social impact of cardiovascular diseases is obvious, but the way Nanji and Reddy[1] suggest savings (see also Nanji[2] and Philippi and Barrett-Connor[3]) may diminish the usefulness of screening subjects at risk for coronary heart disease.

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References

[1] Nanji AA, Reddy S. Use of total cholesterol/

albumin ratio as an alternative to high density cholesterol measurements. *J Clin Pathol* 1983;**36**:716–8.
[2] Nanji AA. Use of multichannel analysis profiles for the assessment of the risk of developing coronary heart disease. *Am J Clin Pathol* 1982;**78**:761–3.
[3] Phillippi T, Barrett-Connor E. Fasting plasma glucose, uric acid and triglycerides as predictors of the ratio of total cholesterol to HDL-C. *Am J Clin Pathol* 1984;**82**:329–32.

Book Reviews

Orthopaedic Diagnosis. Clinical, Radiological and Pathological Coordinates. HA Sissons, RO Murray, and HBS Kemp. (Pp 403; 534 figs; £56.) Springer. 1984.

This fascinating and instructive book covers a wide field and can be used both to learn and to test the reader's diagnostic acumen. It consists of a series of 94 individual cases, each with a brief clinical history, prints and descriptions of the radiographs, and a couple of coloured photomicrographs. With this information the reader can make a diagnosis before turning to the answer on the following page. An authoritative short account of each condition is then given along with a radiological mini-atlas illustrating the range of changes and a list of key references. The illustrations are well chosen and most are of excellent quality though a few radiographs are too small to be helpful. The book, as might be expected from the authors, each distinguished in their own field of orthopaedic practice, emphasises the coordination of clinical, radiological, and pathological information in reaching a diagnosis and is aimed at practitioners in all three fields. The pathologist will find this book not just a slightly ego bruising exercise but a source of much helpful, clearly set out, and up to date information which is readily accessible through the excellent index. I warmly recommend this to pathology departments as a useful addition to the standard orthopaedic pathology texts.

MARY E CATTO

Microbial Toxins and Diarrhoeal Disease. Ciba Foundation Symposium 112. (Pp 286; £27·95.) Pitman. 1985.

One may say "yet another book on microbial toxins and diarrhoea", but having read it, I must admit it has a great deal to offer.