Guest editorial

Dyslipidaemia

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This month's *CME* journal revisits dyslipidaemia, a topic last covered in July 2003. It has been a pleasure to edit this issue of *CME* and I thank all contributors for their excellent articles. There are few dedicated lipidologists in South Africa and many authors will be familiar to readers of the 2003 issue, but I am delighted that we also have contributions from new recruits to the cause.

Dyslipidaemia is one of the major modifiable risk factors for atherosclerotic cardiovascular disease which remains the leading cause of death in the developed world, with the developing world rapidly catching up. The contribution dyslipidaemia makes to the development of atherosclerosis is variable; it may be the dominant factor (such as in a patient with extreme hypercholesterolaemia secondary to homozygous familial hypercholesterolaemia) or it may be one factor among many in an individual with multiple risk factors. Understanding dyslipidaemia and managing the lipoprotein disturbance in the clinical context of the patient is therefore a common task in general practice. Lipid clinics see patients with unusual or very severe disturbances in lipoprotein metabolism or patients who do not respond well to treatment or tolerate it poorly. South Africa is lucky to have lipid clinics in many of its major centres and one should not hesitate to make use of the expertise available.

Statins are consistently among the world's top-selling drugs and statin prescriptions account for a sizeable proportion of drug budgets, be they national or those of private medical funders. Although statins are not a 'vaccine against atherosclerosis' they are one of our most effective drug interventions in reducing atherosclerotic cardiovascular disease. The challenge is to use these powerful drugs optimally, so as to achieve the best return on investment.

David Marais introduces us to lipids, lipoproteins and some basic concepts of lipoprotein metabolism. This may sound dauntingly 'biochemical', but the article is well worth reading. Understanding the fundamentals of lipoprotein metabolism is key to a deeper understanding of lipidology. Zaheer Bayat reminds us of secondary dyslipidaemia and the importance of screening for secondary causes. Hypothyroidism is probably the most stealthy and easily overlooked cause of secondary dyslipidaemia. Requesting a TSH before commencing lipid-lowering therapy is a very worthwhile investment. Chiman Rajput reviews the lipid-lowering drugs currently available to the clinician. Statins are well known and widely prescribed, while other drugs such as ezetimibe or cholestyramine have more restricted indications. In my article I sketch a clinical approach to dyslipidaemia and also briefly touch on a few health economic points, especially regarding statin prescription and treatment goals. The last main article reviews some of the new promising (and not so promising) drug developments in the field of lipid-modifying therapy. New drugs are often greeted with a great deal of hype and marketing, but only once the large clinical endpoint study has sung do we really know the true clinical value of a drug. Most drugs are launched before studies with clinically relevant endpoints are available. This is due to the way the drug licensing and patent system works, with the clock on patent expiration starting to tick when the molecule is patented and not when the drug is finally registered for clinical use. Many new drugs do offer significant clinical advantages, but until all the data are available it is often worth

while proceeding with caution.

In the 'More About' section Karen Wolmarans introduces us to vascular imaging and some of the available imaging modalities. This is an exciting and rapidly expanding field, but some aspects such as the role and preferred modality of imaging in the assessment of cardiovascular risk in asymptomatic individuals are still controversial. Routine use of vascular imaging at a population level clearly has huge health economics implications. The physical signs of dyslipidaemia are illustrated in the next article. Xanthelasmata are relatively nonspecific, but many of the other signs are very helpful diagnostic clues. Mia le Riche reminds us of the important role of the pathologist in the evaluation of the dyslipidaemic patient and discusses the role of expanded lipid testing and biomarker assessment in cardiovascular risk assessment. Cecily Fuller demystifies the 'low-cholesterol diet' and provides a set of simple instructions that are easy to understand and remember. It is much better for the patient to understand the principles of the diet rather than clutching a 'diet sheet' and trying to restrict themselves to the sample menus provided.

Last but not least, one should never forget that atherosclerosis is a multifactorial disease that requires a multifaceted intervention. This *CME* focuses on dyslipidaemia, but we should not lose sight of the need to control blood pressure, to promote smoking cessation and exercise – and these are just some of the interventions that have shown benefit. I hope readers will find this edition useful in their daily practice.