Dyslipidaemia

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Modern clinical practice commonly deals with the complications of atherosclerosis both in acute and potentially life-threatening and severely debilitating manifestations,and in chronic manifestations that may result in marked impairment of exercise and working capacity. Epidemiological information and intervention with drugs clearly indicate that atherosclerosis can be limited. Plasma lipids have been implicated in the pathogenesis of atherosclerosis,with variable strength of association: severe metabolic errors increasing risk profoundly while 'moderate' hypercholesterolaemia and low concentrations of high-density lipoprotein in concert with other risk factors can also signify a high risk. Other clinical problems linked with errors in lipid and lipoprotein metabolism include pancreatitis, malabsorption and many other rarer syndromes.

The developments in biochemistry and, more recently, in genetics have made it possible to understand better the normal metabolism and the mechanisms of disease.While insights into cell biology have also made the pathology easier to understand,complications of these disorders are still not fully predictable. Information has become widely available to the lay person, who expects the medical practitioner to have a broad knowledge and to make an exact diagnosis. This issue of *CME* will update the practitioner on recent developments.

In the first article there is a description of normal metabolism followed by a systematic classification of the different metabolic errors that are known to date.The monogenic disorders described vary from common (about 1% of the population) to rare but all have phenotypes that should be recognisable through understanding of metabolism and a good clinical approach. The clinical approach described by Blom and Firth revisits essential features in the history and examination of the patient. In keeping with modern trends, these authors demonstrate the importance of evaluating the risk of a myocardial infarction as the basis for initiating treatment. As indicated by Maritz, secondary dyslipidaemia should always be considered and specifically excluded before ascribing the dyslipidaemia to environmental and genetic interactions. The importance of the metabolic syndrome seen as part of overnutrition and unfavourable lifestyle cannot be over-emphasised.The chapter on laboratory tests for dyslipidaemia by Vermaak gives practical information about investigations but still emphasises the need for a global risk assessment.

Raal deals with therapeutic strategies that in conjunction with lifestyle changes will best reduce cardiovascular risk.The section on genetics indicates the state-of-the-art investigation that is available in South Africa, a country known for its high prevalence of genetic disorders. The rich heritage of immigrant communities has resulted in several founder effects. Other genes are known to influence the risk of atherosclerosis in the monogenic and polygenic and even mild dyslipidaemias. The dietetic advice given by Fuller may seem strict to many medical practitioners and patients. It assumes that there is significant risk for the patient and that there is a sincere attempt to lower the risk dramatically. It describes food composition as this is the foundation on which the recommendations are built. Recipes remain to be adapted and implemented by the patient, who may benefit from further assistance from dietitians so that appropriate foodstuffs may be selected and prepared for enjoyment and health.

One of the most active figures in the dyslipidaemias of South Africa,Harry Seftel, relates how insight into dyslipidaemia and atherosclerosis developed in this country

over the past half century. Seftel indeed contributed to and experienced the results of dedicated medical and scientific colleagues who received meaningful support for research. Sadly, the support for clinical and laboratory expertise has dwindled at a time that the rest of the world has seen a rise in preventive practice with the modern era of successful, expensive but cost-effective pharmaceutical and technological intervention. While the interventional strategies are simple and can be delegated to a wide range of medical practitioners, the monogenic disorders of lipid metabolism abound in this country and require the expertise that is now available (and under threat) at a few lipid clinics in teaching hospitals.

Cardiovascular disease is the most important cause of mortality and morbidity in developed countries and is predicted to assume the same prominence in developing countries by 2020.Where does the responsibility for preventing cardiovascular disease lie? The responsibility is divided between the individual, the medical practitioner and the organisation that interfaces between the providers of health care and individuals. Each individual can significantly reduce the risk of atherosclerosis by adopting a healthy lifestyle: refraining from smoking, exercising regularly, following a low-fat diet rich in plant and marine foods, and not becoming obese. Education will also help to recognise risk factors for atherosclerosis, including a family history of complications of atherosclerosis, severe dyslipidaemia, hypertension and diabetes. Most importantly, in modern society the individual should prepare for future medical expenses and be compliant with management. The medical practitioner should detect risk early and evaluate each patient for the global risk of atherosclerosis. The medical practitioner should also ensure that the patient has adopted an appropriate diet and lifestyle;drugs should be prescribed judiciously but in keeping with recommendations based on developments in research.Organisations, whether as part of government or private health service, have a responsibility to emphasise and support preventive measures against atherosclerosis. Already these organisations are beginning to introduce incentives and perform surveillance for compliance.The appropriateness of prescription medicine and controlling its cost is not the only way for these organisations to ensure the best management for their dependants — there is room for accountability and efficiency in their management as well.

There is still a great need for research before atherosclerosis can be conquered. Improvements in the prediction of cardiovascular events may come with better collation of data pertaining to risk and from surveillance of changes in markers for risk such as inflammatory markers,and imaging of vessels. Intervention with modern lipid-modifying drugs offers the most appropriate interception for severe dyslipidaemias but is partially successful for reducing risk of atherosclerosis in general.Future research may identify treatable forms of predisposition to the complications of atherosclerosis that fall in the realms of haemostasis, inflammation, tissue properties and repair, as well as other processes or genes that may be modulated.It is also hoped that treatment and technology will become more affordable.

SINGLE SUTURE

Tobacco companies' workaround on film advertising

There is a minor revolution taking place in film advertising.Instead of companies spending pots of money on producing, distributing and paying for their ads to be shown on cinema screens, advertising moguls have cottoned on to the fact that they could quite easily let the movie industry do it for them. So if you keep your eyes open when next you go to a movie, you will see only certain brands of cars,fizzy drinks,liquors and clothes being shown on screen. But it goes against the spirit (but maybe not the letter) of the law, when this applies to tobacco advertising.The *BMJ* News Roundup (2002; **324:** 190) reports that a San Francisco group calling themselves Smoke Free Movies, is complaining about the fact that actress Sissy Spacek not only chain smokes but also 'broods over a Marlboro pack' and specifically asks for 'Marlboro Lights' in the movie *In the Bedroom*. Insidiously, slowly and almost without being noticed, smoking in movies is making a comeback despite assurances from the industry to the US Congress. The lead character in *Training Day* played by Denzel Washington is also seldom to be seen without a cigarette in his mouth, but at least the brand is not that obvious.