

THE METABOLIC SYNDROME

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The Metabolic Syndrome remains a “syndrome” and not a disease because the reasons for the clustering among the various diagnostic variables are in evolution.¹ Thus, it is not surprising that the diagnostic criteria differ somewhat among expert groups. For example, the World Health Organization (WHO) criteria include microalbuminuria,² whereas the Adult Treatment Panel (ATP III) criteria do not.³ Other claimed associations include the renin-angiotensin-aldosterone system, sleep-disordered breathing, and polycystic ovary syndrome.⁴⁻⁶ The Metabolic Syndrome is relatively more common among African-American (AA) women and Mexican-American men and women.⁷ Its occurrence has continued to increase since the 2002 report of the National Health and Nutrition Examination Survey (NHANES III).⁸

The various components of the syndrome differ in Caucasians and Blacks. For example, HDL cholesterol levels are typically higher in American Blacks compared to Caucasians.^{9,10} The same is true for Africans with or without diabetes. The higher prevalence of type 2 diabetes and hypertension (HBP) are thus the dominant components of the syndrome in Blacks. The lesser contribution of HDL cholesterol for the diagnosis in Africans is shown in this issue’s report by Isezuo in 254 Africans with type 2 diabetes.¹¹ The Metabolic Syndrome is especially common in patients with type 2 diabetes.¹²

The important point is that the occurrence of Metabolic Syndrome is a predictor of morbidity and mortality from coronary and cardiovascular disease.¹³⁻¹⁵ This is true for Caucasians, AAs, Africans, Asians, Native Americans and Hispanics, regardless of which components are dominant. Moreover, the Metabolic Syndrome is associated with a greater risk of cardiovascular disease than any of its individual components.

This issue’s article by Hendrix et al¹⁶ focuses on the prevalence and management of LDL cholesterol in Caucasians and AAs with hypertension. Reduction of LDL cholesterol to <130 or <100 mg/dL (depending on risk) is the original ATP-III primary target recommendation for lipid-lowering therapy.³ Since ATP III was published, however, several major clinical trials of statin therapy provide the basis for an option to further decrease the LDL target to <70 mg/dL in very high-risk pa-

tients and to <100 mg/dL in those with moderately high-risk.¹⁷ The results reported by Hendrix and colleagues for implementation of treatment and control of LDL cholesterol are horrid in all groups, especially the younger dyslipidemic hypertensives, either Caucasian or AA.

LDL cholesterol is not a component of the Metabolic Syndrome, but ATP-III recommends treatment of the Metabolic Syndrome as a secondary target of lipid-lowering therapy. The lipid goal for patients with the Metabolic Syndrome is a reduction of “non-HDL cholesterol” (ie, total cholesterol minus HDL cholesterol) to <160 or <130 mg/dL, depending on risk.^{3,18}

Therapy for hypercholesterolemia and the Metabolic Syndrome are important for the reduction of cardiovascular risk in all ethnic groups. Continuation of research on the associations noted in the Metabolic Syndrome will undoubtedly provide even more specific recommendations in the future.¹⁹

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