Letters to the Editors

Metabolic syndrome in postmenopausal women: higher prevalence in the Northeastern Region of Brazil than in other Latin American countries and the influence of obesity and socioeconomic factors

We read with great interest the recent manuscript, by the Collaborative Group for Research of the Climacteric in Latin America, on the prevalence of metabolic syndrome (METS) and its components in postmenopausal Latin American women. The authors analyzed the prevalence of METS according to the National Cholesterol Education Program Adult Treatment Panel III (NCEP) in a total of 3965 postmenopausal women, aged 45–64 years, and observed a high prevalence of METS, ranging from 28.1% in women aged 40–44 years to 42.9% in those aged 60–64 years.

This is an extremely relevant topic in the current clinical management of climacteric, since coronary heart disease (CHD) is the leading cause of morbidity and mortality in postmenopausal women throughout the world and it has been estimated that a woman dies from heart disease every minute. After menopause, the risk of developing CHD increases significantly and METS emerges as a constellation of risk factors including hypertension, increase in abdominal fat (adiposity), abnormal lipoprotein levels, and insulin resistance, all of which appear to occur with estrogen deficiency.

In the cited article, only Latin American women of Hispanic origin were assessed and no data on the Brazilian population were included. Brazil, a country of continental dimensions, has about 15 million postmenopausal women and widely diverse regions in terms of dietary habits and human development indicators. In Brazil, the prevalence of obesity, hypertension, diabetes and other cardiovascular risk factors has increased in all regions, regardless of socioeconomic level and cultural context.

Given that no information is available on the prevalence of METS in Brazilian postmenopausal women, we would like to report data from a study aimed at assessing the prevalence of metabolic syndrome in very low-income postmenopausal women living in Rio Grande do Norte, a tropical state with a human development index of 0.668 located in the Northeastern region of Brazil.

Our study consisted of 127 postmenopausal women (mean age 53.9 ± 4.6 years), of which 53.5% were illiterate and 70.1% were living below the poverty line (per capita income < US $70.00). The prevalence of METS in the entire sample was 48.0% and we observed an ascending rate when the 45–49-year-old group was compared to the older age groups (Table 1). We also found that a considerable proportion (29.9%) of these women had two criteria and 20.5% had one criterion for METS. Only two women had no METS factor. A very interesting association was observed between METS and family income, since METS was more frequent in women with income <120 dollars per month when compared to the higher income group (62.5 and 50.5%, respectively).

The most prevalent isolated METS abnormality was high density lipoprotein cholesterol below 50 mg/dl, present in 96.1%, followed by hypertension in 51.2%, increased waist circumference in 46.5%, increased serum triglycerides in 40.9%, and high fasting glucose concentrations (>110 mg/dl) in 18.1%. We also found that the occurrence of hypertension and increased waist circumference was significantly associated with the presence of obesity. The prevalence of other METS components was independent of body mass index, hormone therapy, physical activity level, family income and schooling.

When fasting plasma glucose (FPG) levels were analyzed according to recent recommendations of the Expert Committee of the American Diabetes Association, we found that 38 (29.9%) women had impaired fasting glucose (FPG 100–125 mg/dl), and 10 (7.9%) were classified as diabetic (FPG ≥ 126 mg/dl). Considering the criteria for METS recommended by the International Diabetes Federation (waist circumference ≥ 80 cm and FPG ≥ 100 mg/dl), the prevalence of METS in Brazilian postmenopausal women was 61.4%. All these rates are higher than results reported for women from other Latin America countries by the Collaborative Group for Research of the Climacteric in Latin America. Thus, Brazilian postmenopausal women constitute a population with increased risk for cardiovascular disease.

Our results corroborate the cited study in that the analysis of cardiovascular risk in...
postmenopausal women must take into account data from studies conducted in different populations. In this context, it is possible to consider the potential influence of obesity and other important aspects such as genetic background, dietary habits and lifestyle characteristics affecting the prevalence of METS in climacteric women.

It is relevant to point out that the high prevalence of METS in Brazilian postmenopausal women represents enormous cardiovascular risk, with serious implications for the public health system. Thus, clinicians and family doctors should screen for parameters that define METS as part of their management of climacteric women.

In conclusion, the prevalence of METS in very low-income postmenopausal women from the Northeastern Region of Brazil is higher than that reported for Latin America as a whole. This could be due to the increased prevalence of obesity, genetic factors, inadequate lifestyle and dietary habits, and environmental factors such as stress related to the precarious conditions of life and of health. The results emphasize the need for optimizing preventive, diagnostic and care strategies for cardiovascular disease in the postmenopausal years.

References