



Women and diabetes: disparity in treatment

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We have read with great interest the article ‘Metabolic syndrome during female midlife: what are the risks’ by Chedraui and Pérez-López¹, and we found their conclusion of importance with a view to clinical prevention.

The article reviews the various risks that arise as a consequence of the metabolic syndrome during female midlife. With reference to the findings reported in the article, we would like to make the following contribution to the discussion.

The most important component of metabolic syndrome is abdominal obesity that produces cytokines and adipokines, favors insulin resistance and a proinflammatory and prothrombotic status, and increases the risk of developing diabetes, hypertension, and cardiovascular disease.

Despite modern guidelines for cardiovascular prevention suggesting a holistic approach in which a proper lifestyle has a pivotal role, for women a ‘proper lifestyle’ is rarely observed and is strongly influenced by their income level, social role, education, and culture². The so-called ‘proper lifestyle’-based adequate diet, regular physical activity, and weight management are costly and time consuming; in brief, a tough challenge³. Similarly, there is a well-known disparity in cardiovascular treatment; postmenopausal women have a lower chance to be treated with statins and aspirin compared with a man at similar cardiovascular risk^{4,5}. Even when drugs are prescribed, the treatment often is less aggressive and, in many cases, does not achieve the optimal targets; that is, diabetic women have high levels of glycated hemoglobin⁵. The suboptimal treatment leads to higher mortality and poorer cardiovascular disease outcomes compared with men.


The influence of sex and gender is particularly relevant in cardiovascular disease^{3,4} as well as in several aspects of drug pharmacodynamics and pharmacokinetics⁵. There are, in fact, numerous anatomical and physiological differences between the sexes (body dimension and composition, gastric and intestinal differences, metabolism, renal function) that may influence the activity of many drugs, including the possibility of their interaction with other drugs, bioactive compounds, foods, and beverages⁶.

Taking into account all these specific aspects related to treatment for women, we suggest that dedicated studies are needed in order to better evaluate the effects of new drugs on cardiovascular endpoints in menopausal women.

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