Abstract

Introduction: obesity is a worldwide epidemic, and the high prevalence of diabetes type II (DM2) and cardiovascular disease (CVD) is in great part a consequence of that epidemic. Metabolic syndrome is a useful tool to estimate the risk of a young population to evolve to DM2 and CVD. Objective: to estimate the MetS prevalence in young Mexicans, and to evaluate each parameter as an independent indicator through a sensitivity analysis. Methods: the prevalence of MetS was estimated in 6,063 young of the México City metropolitan area. A sensitivity analysis was conducted to estimate the performance of each one of the components of MetS, as an indicator of the presence of MetS itself. Five statistical of the sensitivity analysis were calculated for each MetS component and the other parameters included: sensitivity, specificity, positive predictive value or precision, negative predictive value, and accuracy. Results: the prevalence of MetS in Mexican young population was estimated to be 13.4%. Waist circumference presented the highest sensitivity (96.8% women; 90.0% men), blood pressure presented the highest specificity for women (97.7%) and glucose for men (91.0%). When all the five statistical are considered triglycerides is the component with the highest values, showing a value of 75% or more in four of them. Differences by sex are detected for averages of all components of MetS in young without alterations. Conclusions: Mexican young are highly prone to acquire MetS: 71% have at least one and up to five MetS parameters altered, and 13.4% of them have MetS. From all the five components of MetS, waist circumference presented the highest sensitivity as a predictor of MetS, and triglycerides is the best parameter if a single factor is to be taken as sole predictor of MetS in Mexican young population, triglycerides is also the parameter with the highest accuracy.

Keywords

Young Mexicans, Insulin resistance, Diabetes mellitus risk factors, Metabolic syndrome.