Metabolic syndrome among obese Qataris attending primary health care centers in Doha, 2010

Mansoura Fawaz Salem Ismail

Weill Cornell Medical College, Qatar E-mail: mansoura70@hotmail.com

Abstract

Objectives: To determine the prevalence of metabolic syndrome among obese patients using the IDF definition and to identify factors that are associated with it. Materials and Methods: A cross-sectional randomized study was conducted at four primary care centers inside Doha, Qatar. One hundred and thirty-six Adults, ≥18 Qatari obese patients, were chosen by systematic random sampling. They were interviewed and screened for the presence of metabolic syndrome, which was diagnosed according to the International Diabetes Federation criteria: An abdominal circumference \geq 94 cm in males or \geq 80 cm in females, plus any two of the following: HDL cholesterol <1.03 mmol/mL (<40 mg/dL) [males] or <1.3 mmol/mL (<50 mg/dL) [females], Triglycerides \geq 1.7 mmol/mL (\geq 150 mg/dL), Blood pressure ≥130/85 mmHg or the patient receiving antihypertensive treatment and baseline glycemia >5.6 mmol/mL (>100 mg/dL), or previouslydiagnosed type 2 diabetes mellitus.

Results: The overall prevalence of the metabolic syndrome among obese patients was 46.3%. The prevalence was higher in females (50%) than in males (42.4%). It was seen to increase with increasing body mass index class, from class 1 to class 2. The prevalence of metabolic comorbidities of abnormal waist circumference, raised blood pressure, raised fasting blood glucose, high triglycerides, and reduced high density lipoprotein was 88.2, 42.6, 32.4, 31.6, and 27.9%, respectively. Based on the logistic regression multivariable analysis, increasing age and being diabetic were the only significant associated factors that influenced the risk of having the metabolic syndrome. Conclusion: The prevalence of the metabolic syndrome was high, and the highest comorbidities were abnormal waist circumference and high blood pressure. Diabetes and increasing age were the only significant risk factors of having this syndrome.

This work is partly presented at 3rd International Conference and Exhibition on Obesity & Weight Management December 01-03, 2014