Abstract

Background: Insulin resistance (IR) is associated with a higher risk of multiple diseases and its early detection would allow to minimize the associated risk; the presence of acanthosis nigricans (AN) it’s associated to the presence of IR. Objective: To evaluate the sensibility and specificity of AN to diagnose IR in a group of Chilean patients. Methods: We designed a cross-sectional study and it was included subjects that were attended at the Center for the Attention of Metabolic Diseases at the Faculty of Medicine, University of Chile. Sixty subjects (18-60 years age) were included. It was determined BMI and diagnosed AN and skin phototype; blood samples were taken and calculated the HOMA-IR. The normality of the variables where analyzed by Kolmogorov-Smirnov test. There were used 2 and the diagnostic concordance between AN and IR was determined using the Kappa index and Pearson’s correlation. Sensibility, specificity, positive and negative predictive value were calculated and accepted p < 0.05. Results: The IR diagnose was 67% and AN was 43%. The major proportion of subjects diagnosed as positive for IR were also positive for AN (84.6%). The sensibility of AN to find IR was an 84% and specificity was 100%. Positive and negative predictive values were 100% and 89% respectively. It was observed a positive association between BMI and HOMA-IR (r = 0.674; r² = 0.454; p < 0.001). Conclusion: To detect acanthosis nigricans in Chilean population may be effective for the early diagnose of insulin resistance and, therefore, reduce the associated cost of the late treatment of glucose metabolic disturbances.

Keywords

Acanthosis nigricans, Insulin resistance, Sensibility, Specificity, Chilean adults.