Abstract

Aim: We aim was to compare the sagittal abdominal diameter (SAD) with waist circumference (WC) as a predictor of central obesity among adults and to identify the sensitivity and specificity of the best cut-off point for SAD. Methods: A cross-sectional study of 266 Brazilians adults (euthrophic and overweight), aged 31-84 years old, of which 89 men and 177 women, was carried out. Anthropometric measurements such as SAD, weight, height, waist and hip circumferences, waist and hip ratio, body mass index, body fat percentage were performed. Receiver Operating Characteristics (ROC) curve was used to identify the sensitivity and specificity of the best cut-off point for SAD as a predictor of central obesity. Statistical analysis were considered significant with a value of p < 0.05. Results: The SAD measurement was positively correlated with WC for both genders, although stronger among overweight and obesity women (r = 0.71; p < 0.001 and r = 0.79; p < 0.001, respectively) than men. ROC curves identified the best cut-off points for SAD of 23.1 cm and 20.1 cm for men and women (96% and 85% sensitivity, 86% and 84% specificity, respectively). Conclusion: SAD measurement may be used as an anthropometric tool to identify central obesity among women for presenting adequate sensitivity and specificity.

Keywords

Visceral fat, Obesity, Sagital abdominal diameter, Waist circumference, Anthropometry.