Abstract

Introduction: Glucose metabolism may be altered in obesity and genotype for PPAR 2 can influence this variable. Objective: To evaluate the influence of body mass (BM) and visceral adiposity (VA) in glucose metabolism in morbid obese women with Pro12Pro genotype. Methods: Were selected 25 morbidly obese women. Groups were formed according to body mass index (BMI) [G1: 40-45 kg/m² (n = 17); G2: > 45 kg/m² (n = 8)]. Anthropometric, glycemia and insulinemia assessments (fasting, 60 and 120 minutes after high polyunsaturated fatty acids meal) were carried out. The insulin resistance (IR) and insulin sensitivity (IS) were assessed by HOMA-IR and QUICKI respectively. Results: G2 had higher BMI and waist circumference, compared to G1, impaired fasting glucose, low IS and higher IR. The postprandial glucose was normal, but there was a higher insulin peak one hour after the meal in G2. Conclusion: Increased BM and VA were associated with worse glucose metabolism suggesting metabolic differences between morbid obese with Pro12Pro genotype.

Keywords