Abstract

Introduction: Human immunodeficiency virus (HIV)-associated lipodystrophy syndrome (LS) includes body composition and metabolic alterations. Lack of validated criteria and tools make difficult to evaluate body composition in this group. Objective: The aim of the study was to compare different methods to evaluate body composition between Brazilians HIV subjects with (HIV+LIPO+) or without LS (HIV+LIPO-) and healthy subjects (Control). Methods: in a cross-sectional analyses, body composition was measured by bioelectrical impedance analysis (BIA), skinfold thickness (SF) and dual-energy x-ray absorptiometry (DXA) in 10 subjects from HIV+LIPO+ group; 22 subjects from HIV+LIPO- group and 12 from Control group. Results: There were no differences in age and body mass index (BMI) between groups. The fat mass (FM) (%) estimated by SF did not correlate with DXA in HIV+LIPO+ group (r = 0.46/ p > 0.05) and had fair agreement in both HIV groups (HIV+LIPO+ =0.35/ HIV+LIPO- = 0.40). BIA had significant correlation in all groups (p < 0.05) and strong agreement, mainly in HIV groups, for FM (HIV+LIPO+ = 0.79/ HIV+LIPO- = 0.65 / Control = 0.60) and for fat free mass (FFM) (HIV+LIPO+ = 0.93 / HIV+LIPO- = 0.92 / Control = 0.73). Discussion: Total fat mass can be measured by BIA with good precision, but not by SF in HIV-infected patients with LS. Segmental BIA, tricipital SF, circumferences of arms, waist and legs maybe alternatives that need more studies. (Nutr Hosp. 2011;26:458-464) DOI:10.3305/nh.2011.26.3.4794

Keywords