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Body fat prevalence and its association with metabolic risk factors among patients with adult onset young diabetes in Sri Lanka; Abstract Sri Lanka Medical Association - 123rd Annual Scientific Sessions; 2010_.54pp

Abstract : Objectives: To assess body fat percentage among young adult diabetic subjects and to find out associations of body fat percentage with known metabolic risk factors i.e. obesity, hypertension, blood glucose and lipids. Methods: In this descriptive cross sectional study 1007 diabetic patients with an age-of-onset < 40 years were recruited. Body composition was measured by "Bio-electrical impedance" (BEI). Blood pressure, weight, height, and waist circumference (WC) were measured and body mass index (BMI) was calculated. Low density lipoprotein cholesterol (LDLC), high density lipoprotein cholesterol (HDLC) and triacylglycerol were assessed. Results: Mean body fat percentage among males and females were 21.3% (SD±4.5) and 33.8% (SD±6.1) respectively. Body fat percentage correlated with BMI, WC and diastolic blood pressure. It did not show a significant correlation with systolic blood pressure, fasting blood glucose, LDLC, HDLC or triacylglycerol. A higher level of adiposity was associated with obesity, hypertension and metabolic syndrome. Conclusions: Young men with diabetes had significantly lower level of adiposity compared to women. The level of adiposity was associated with BMI, WC and diastolic blood pressure significantly. The level of adiposity measured using BEI can be used to predict the risk for obesity and metabolic syndrome.