Association of Body Mass Index, Body Fat Distribution and Fat Patterning with Blood Pressure in Two Populations of Andhra Pradesh

P. Venkataramana, C. Geetha Vani and P. Chengal Reddy


ABSTRACT The association of systolic and diastolic blood pressures with body mass index, waist-hip ratio, co-nicity index, the sum of the three trunk skinfolds, the sum of the six skinfolds, the ratio of the sum of the trunk to the sum of the extremity skinfolds and relative fat pattern index and the correlation between each of these were examined among 209 and 204 adults of the Reddi and the Mala populations, respectively of Andhra Pradesh, India. The correlation coefficients of the adiposity measures and blood pressure are intercorrelated with each other with a few exception in both populations. The multiple linear regression of age, BMI, WHR, CI, TSF3, SF6, TE ratio and RFP1 with blood pressure did not show consistent relationship. But regression on blood pressure by BMI, WHR and CI after excluding other adiposity measures shows that the BMI is the best indicator to influence blood pressure in both the populations and CI is influencing SBP only in the Reddis.