

An Anthropological Characteristic of the Distribution of Adipose Connective Tissue in Elderly Bulgarian Females with Type 2 Diabetes Mellitus

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The purpose of this study was to investigate the distribution of adipose connective tissue in Bulgarian females with T2DM. Subjects: 120 women suffering from T2DM, with age range 61-80 years. Control group: 40 Bulgarian women at the same age range. Measured parameters: height, weight, 9 skinfolds (sf) - sfTriceps, sfBiceps brachii, sfForearm, sfSubscapular, sfXrib, sfAbdomen, sfSuprailiaca, sfThigh, and sfCalf; Bioelectrical Impedance analysis - % body fat tissue and visceral fat tissue. Calculated indexes: BMI, ratio sfTrunk/sfLimbs, ratio skin folds upper half of body/skin folds lower half of body, fat mass and subcutaneous fat mass. Statistically significant differences were found between the means of weight, sfTriceps, sfSuprailiaca, sfAbdomen, sfThigh, sfCalf and subcutaneous fat mass between the diabetic and healthy women. In diabetic females aged 61-80 years the model of subcutaneous adipose tissue distribution was mostly in the upper torso region and less in the limbs. In controls the accumulation of adipose tissue was mostly in the limbs and in the lower part of the body.

Key words: T2DM, females, adipose tissue, distribution