Association of Anthropometric Indices with Duration of Low Back Pain

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ABSTRACT The present study deals with the estimation of nutritional status by four body indices, viz. Quetelet’s index, Oliver’s typologic index, Lorenz’s constitutional index and muscle index in conveniently selected 106 confirmed cases of patients with low back pain (69 males and 37 females) those who came to the OPD of Aulakh Bone and Joint Centre, Tarn Taran, Punjab, India aged 21-76 years. The data was further divided into two groups, viz. duration of low back pain less than one year (n = 62, 22 males and 40 females) and duration of low back pain more than one year (n = 44, 15 males and 29 females). In the findings, no significant differences (p > .05) were found between the male and female patients regarding the duration of LBP. One way ANOVA showed statistically significant differences (p < .05 - .000) in height, weight, ideal body weight, relative body weight, circumference of the upper arm during an isometric contraction of biceps brachii, circumference of the upper arm in relaxed position of muscle biceps brachii, muscle index, circumference of thorax, shoulder width and Oliver’s typologic index among these four sets of populations. When comparisons were made between male and female patients with the duration of LBP less than one year, statistically significant differences (p < .01 - .000) were found in all the variables studied, except BMI, Quetelet’s index, circumference of abdomen and Lorenz’s constitutional index. Similarly, when the data of male and female patients with the duration of LBP more than one year were compared, statistically significant differences (p < .001 - .000) were found in all the variables, except BMI, Quetelet’s index, circumference of abdomen and Lorenz’s constitutional index.