

Evaluation of Anthropometric Characteristics Due to Sex and Age Variables of Lumbar Vertebra and Spinal Canal

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ABSTRACT Anthropometric measurements of the lumbar spinal canal and lumbar vertebra have been done for seventy people with backache and seventy people with L4-L5 lumbar disc herniation diagnosis in this research. Measurement of corpus vertebra height, intervertebral disc height, antero-posterior transvers diameter of disc herniation and sagittal-transvers diameter of spinal canal were done. Measured values were compared due to age and sex, and between the two groups. Sex and age variables were found to be of statistical significance among groups ($p < 0.001$). Intervertebral disc height did not have any meaning between the two groups ($p = 0.5$). Sagittal diameters of spinal canal were significant in both groups ($p < 0.001$), while there was no other meaning attached when considering sexes ($p = 0.4$), and it seems that sagittal diameter is the significant diameter in the stenosis of spinal canal. Sex difference of the spine affected by disease seems to be a related weak force for men, and menopausal and postmenopausal periods for women according to age. Anthropometric measurement of the lumbar spinal canal and lumbar vertebra could lead to many medical and anthropological applications related to the spine.