The normal and slowly higher body weight is a protective factor of bone mineral density in premenopausal and Osteoporosis in postmenopausal patients with Rheumatoid Arthritis

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The body weight (BW), relative body weight (RBW) and its correlation with Bone Mineral Density (BMD) was investigated in 352 Rheumatoid Arthritis (RA) female patients, categorized in premenopausal (PreMP) and postmenopausal (PM) patients. BMD was measured by DXA densitometer in the beginning, 6 months and 1 year after trial.

RA PreMP patients with a BW of 45-55 kg had significantly lower BMD compared to those with 56-66 and 67-77 kg (1.087 v. 1.216, 1.260 g/cm², p< 0.01, p< 0.001). There was no significant difference between BMD of RA PreMP patients, age of 40-49 with a higher BW, and those of 30-39 ages RA PreMP (1.255 v.1.260 g/cm²) which suggests that higher BW can prolong and reduce the bone loss during perimenopausal period.

In RAPM, lower BW of 45-55 kgs was connected to reduced BMD and the presence of Osteoporosis. In this group BMD values were significantly lower compared to the same category of patients with a normal BW, BW of 67-77 kg and over 77 kg (0.897 v. 0.996. 1.071.1.061 g/cm². p< 0.01, p< 0.001). Low BW in RA PreMP is followed by BMD reduction of 10.6% compared to patients with a higher BW, while in low BW RAPM patients this percentage rises to 16.5% and the occurrence of Osteoporosis is notified. However RAPM patients with a higher BW or obesity had normal values of BMD.

These results suggest that a lower BW is a risk factor for a lower BMD in PreMP and a significant risk factor for Osteoporosis in postmenopausal RA patients.

Biography
Zora Uzunoska, MD, PhD, specialist of Clinical Immunology is teaching Human Anatomy, Physiology and Immunology to Nutrition graduate and postgraduate students. She had upgraded her knowledge living in 6 countries, working in several fields of medicine: Clinical work with Cardiac and Rheumatic Patients, Laboratory Research, Education and Science. She is the author of two books: “Osteoporosis in Rheumatoid Arthritis” based on her PhD Research, being awarded as the first scientific work published about this topic in Republic of Serbia; and “The basic of Human Anatomy”, a Textbook for Nutrition students. She is the author and coauthor of 45 articles.

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