

Hormones and Mineral Elements Associated with Osteoporosis in Postmenopausal Women in Eastern Slovakia

Authors : M. Mydlárová Blaščáková, J. Poráčová, Z. Tomková, L. Blaščáková, M. Nagy, M. Konečná, E. Petrejčíková, Z. Gogalová, V. Sedlák, J. Mydlár, M. Zahatňanská, K. Hricová

Abstract : Osteoporosis is a multifactorial disease that results in reduced quality of life, causes decreased bone strength, and changes in their microarchitecture. Mostly postmenopausal women are at risk. In our study, we measured anthropometric parameters of postmenopausal women (104 women of control group – CG and 105 women of osteoporotic group - OG) and determined TSH hormone levels and PTH as well as mineral elements - Ca, P, Mg and enzyme alkaline phosphatase. Through the correlation analysis in CG, we have found association based on age and BMI, P and Ca, as well as Mg and Ca; in OG we determined interdependence based on an association of age and BMI, age and Ca. Using the Student's t test, we found significantly important differences in biochemical parameters of Mg ($p < 0,001$) and TSH ($p < 0,05$) between CG and OG.

Keywords : factors, bone mass density, Central Europe, biomarkers

Conference Title : ICABBBE 2018 : International Conference on Applied Biochemistry, Biotechnology and Bioprocess Engineering

Conference Location : Prague, Czechia

Conference Dates : August 13-14, 2018