Full Paper

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Phase, elemental, amino acid and structural composition of physiogenic minerals

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Abstract

Results of research of human bone fabric by methods of the X-ray diffraction, IR-spectroscopy, electronic paramagnetic resonance, high performance liquid chromatography and mass spectroscopy with the with inductively coupled plasma are presented. It has been shown that the processes occurring in the bone at coxarthrosis are characterized by reduction of crystallinity and orderliness of structure apatite. It has been revealed that coxarthrosis leads to collagen change, the structure and the general content of amino acids are preserved constants. Variations of amino acid composition of human bones are given depending on age and sex.