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Bone apatite of the person – features of a chemical structure at a pathology

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Abstract

In the present work results of numerous researches of morphology, inorganic and organic components of intercellular substance of bone fabrics of the person are presented at deforming coxarthrosis. It is established that at the given disease in investigated samples changes crystallinity mineral components – hydroxyapatatite, the maintenance apatatite phases, organic substances and waters, and also thermal and paramagnetic properties of the data chemical a component. The thermodynamic estimation of possibility and character of formation of mineral phases with participation synovial liquids of the person is spent at coxarthrosis. Influence pH and ionic force of the biological environment on structure and sequence previous sedimentation hydroxyapatatite (metastable) connections is studied.

The received laws expand representations about a condition of a bone fabric at the given disease and can be used for a choice and working out of effective methods of early diagnostics and treatment coxarthrosis.