

## **Autologous Conditioned Serum (Orthokin) in treatment of osteoarthritis, our experience and observations**

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*Poliklinika Terme Selce, Selce*

Osteoarthritis is characterised by degeneration of articular cartilage, osteophytes, joint effusion and synovitis. Its etiology is base in many etiology factors, one of the most common, molecular mechanism of cytokines interactions, especially IL-1.

Orthokin - Autologous Conditioned Serum containing endogenous anti-inflammatory cytokines including IL-1Ra and several growth factors. By intra-articular application ACS could be affected on the regenerative molecular level.

From the end of 2007. we had over 150 patients with OA of knee, ankle, foot, shoulder, elbow and hand joints, treated with Orthokin intra-articular and peri-articular injections.

In Orthokin therapy of OA we cherish integral, individual and multidisciplinary approach, with protocol suited to the type of activity, age and clinical condition.

We seated the realistic goals of our treatment and performed continuous objective monitoring with the use of conventional radiography, ultrasound, semi-quantitative clinical grading scales: K-L grading, ROM, VAS, Tegner, Lysholm scores, and Biodex Isokinetic test imaging before the start and after 3 months of Orthokin therapy.

Patients whose received Autologous Conditioned Serum Orthokin during the rehabilitation process had more significant recovery in muscle strength and trophic, without any side effect of therapy.

Our conclusion is that Orthokin therapy has positive influence on pain reduction, effusion, synovitis, so the programme of exercises can be carried out with more quality.