



Orthokine® –
Body's own help for Osteoarthritis

Your body's own help for Osteoarthritis

Osteoarthritis is a symptom of age, they said. You should just accept it, they said.

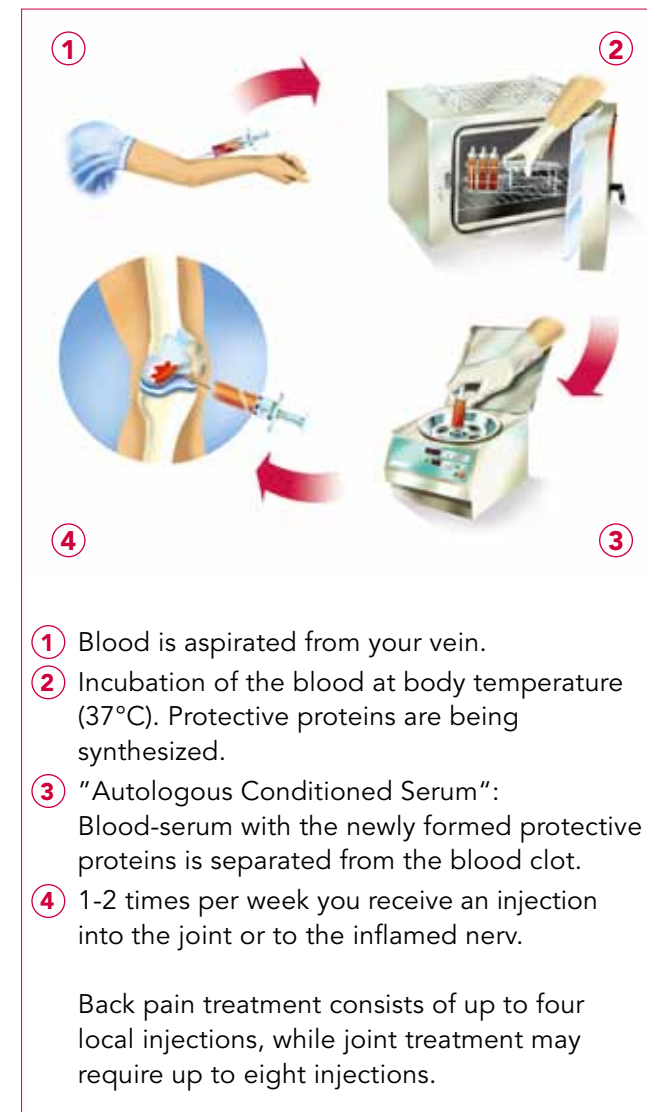
At an age beyond 60 every second person complains about painful joints. Even young persons may suffer from Osteoarthritis. Mostly hips and knees are affected. Osteoarthritis has many causes. Factors such as genetic predisposition, overweight and intensive load at work or sports play a significant role. Pain and reduced joint mobility are the most common symptoms.

Today, the biological causes of osteoarthritis are much better understood. It is not just mechanical cartilage wear but a complex disease that may affect anybody. The aggressive messenger protein Interleukin-1 (IL-1) plays a pivotal role in the development of Osteoarthritis. It stimulates joint inflammation. Although sometimes imperceptible, chronic joint inflammation results in joint pain and cartilage destruction.

Protective messengers (protective proteins) protect the cartilage.

Orthokine® induces your own natural, autologous, protective messenger proteins

How does the Orthokine®-therapy work ?





Orthokine® –
Body's own help for back pain

The biological antagonist of IL-1 is ideal for a gentle and natural Osteoarthritis injection therapy. The protective protein is called Interleukin-1 Receptor Antagonist (IL-1Ra). It displaces the aggressive IL-1 and has a pain reducing, antiinflammatory and cartilage protecting effect.

The Orthokine®-therapy takes advantage of this. The protective protein, IL-1Ra, is a natural component of your blood. It is increased concomitantly with several other protective messengers during incubation. The emerging conditioned blood serum is prepared and will be injected into the affected joint.

Since 1997 patients have been treated successfully with the Orthokine®-therapy. It is evidenced that Orthokine® conditioned serum improves joint pain and joint function. The continuing process of cartilage destruction in the joint is slowed. This also applies for the joints of the spine.

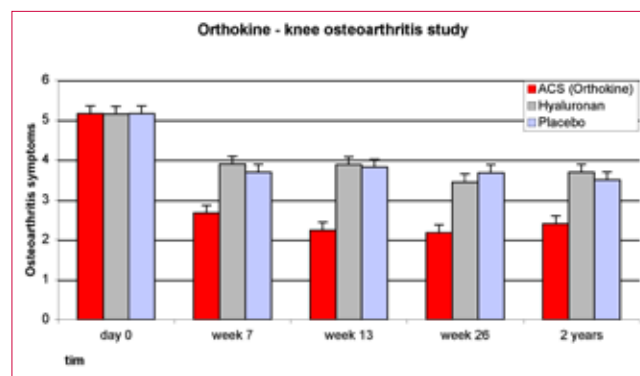


Fig.1 Reduction of Osteoarthritis symptoms after injections of Orthokine®-serum compared to Placebo or Hyaluronan. 2 years post injections the Orthokine®-therapy is still clinically superior to the compared treatments.*

Orthokine® conditioned serum also treats back pain

Back pain is the most common reason for consultation. Often slipped disc or disc protusion are the cause. Pressure on the nerve causes inflammation. Pain is the result (e.g. "scatia"). The Orthokine®-therapy can successfully fight inflammation locally. It can relieve pain as well as improve the nerve damage. The treatment is absolutely natural, 100% autologous and is clinically proven.

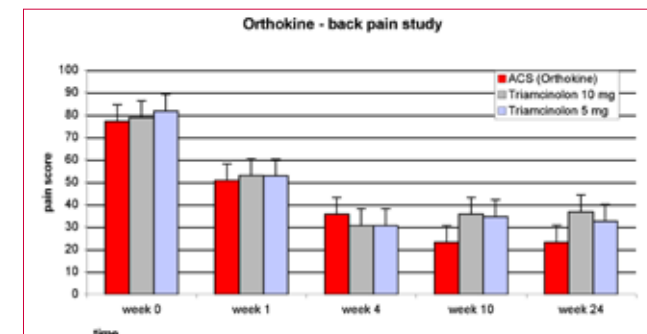


Fig.2 Reduction of back pain after injections of Orthokine®-serum compared to corticosteroids (5mg, 10mg). 6 months after injections the Orthokine®-therapy is clinically superior to the controls.*

The Orthokine®-therapy works not only for joint pain but for muscle and tendon injuries as well.

Messenger proteins (like IL-1) are substances warning the cells about injury or infection. The body reacts by inflammation. If this inflammation does not subside after a few days it may become chronic. This is often the case in osteoarthritis and chronic back pain. The function of the protective messengers like IL-1Ra (protective protein) is to stop the inflammation.

* Orthokine®II-syringe