

Effectiveness of radiosynoviorthesis in the treatment of chronic synovitis of small and middle-sized joints affected by rheumatoid arthritis

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Abstract

Our aim was to describe and evaluate our experience in the treatment of radiosynoviorthesis (RSO) of small and middle-sized joints in patients with rheumatoid arthritis (RA). *Eighty six patients* with RA enrolled in the study. The criterion for enrolment was destructive process of the joint detected by X-rays and classified as a stage II-III according to Larsen. Seventy-six middle-sized joints were treated each with 74MBq or rhenium-186 sulphate and other 80 small joints with 10-40MBq of erbium-169 citrate each. The effect of treatment was evaluated at 6 and 12 months following the RSO treatment. The obtained values were compared with those of the initial state. The inflammatory and structural changes in activity were assessed according to the results of ultrasound examination, regression of pain, swelling of the joint and the improvement in mobility. The data obtained were statistically processed with the Chi-square test. *Our results showed* that RSO significantly decreased pain of the affected joints, however the influence upon joint motion was minimal. The best treatment results were observed in shoulders and elbows, while the ankles were the worst to respond to the RSO treatment. The significant ($P < 0.05$) beneficial effect of the RSO treatment on pain and swelling reduction were only transient started on 1 week to 1 month and declined over 12 months. *In conclusion*, our study showed that RSO is a suitable alternative in the treatment of chronic synovitis, with a low potential of adverse effects. However the beneficial effect on pain and swelling reduction was only transient and declined over 12 months.

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