

TREATMENT OF GONARTHROSIS USING OZONE THERAPY IN A REHABILITATION DEPARTMENT

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We used ozone therapy to treat patients with gonarthrosis. We used the introduction of ozone-oxygen mixture, parenteral (layer-by-layer maintenance: subcutaneous, tendon, injection), the soft tissue around the knee joint (anterior and posterior surfaces). The ozone-oxygen mixture we injected in both knee joints (even if clinical changes were only in one joint). On one session, we used up to 20 ml of the mixture, which was injected at a depth of 1–3 cm ozone Concentration of 5 mg/l. the Treatment was performed daily for 7 days. After the introduction of ozone was carried out by light relaxing massage of the joint area for 3–5 minutes (to evenly distribute the gas under the skin). The course of treatment consisted of 7 sessions. With this method of treatment mechanism of action of ozone was mainly anti-inflammatory, antihypoxic (Russia patent of invention № 2413548, Authors: A.G. Remnev and A.A. Oleynikov, 2009).

Our research involves the study of 253 patients with deforming osteoarthritis. Stage of remission or partial remission. Group 1 patients — 137 persons (age between 55 and 68 years) received complex ozone therapy. Group 2 patients — 116 people (age between 56 and 63 years) received nonsteroidal anti-inflammatory drugs (Voltaren®, Diclofenac®, Ortofen®) and massage. Subjective treatment outcomes (the nature and intensity of pain) we were evaluated on 3 point scale and, by definition, limits movement in the joint (due to pain due to bone changes), pain in joints (palpation and when moving). Objective of instrumental



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diagnostic methods we applied x-rays of the knee and ultrasonography of the knee. The effectiveness of the treatment we evaluated on three levels: significant improvement, moderate improvement, no improvement.

THE RESULTS OF TREATMENT

In group 1 all patients reported positive results. Of these, 98 patients (72%) improved, confirmed by instrumental methods of research (primarily, the reduction or disappearance of the signs of bursitis, synovitis, and effusion in the upper volvulus front). Increased range of motion, decreased pain in the joint. Laboratory data did not change significantly during the treatment. In group 2, 45 patients (39%) reported positive results, not confirmed by instrumental methods. Long-term results after 6 months. In group 1 in 71 patients remained a positive effect. In group 2 the positive effect was preserved in 9 patients.

Thus, the use of ozone therapy allows to achieve lasting positive effect in the treatment of gonarthrosis deforming in the Department of rehabilitation.