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**ABSTRACT BOOK
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THE RESULTS OF INTRA-ARTICULAR POLYACRYLAMIDE GEL INJECTION FOR COMPENSATION OF SYNOVIAL FLUID VISCOSITY IN PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT

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Aim: To investigate effectiveness and duration of action of intra-articular administration of polyacrylamide gel for treatment of osteoarthritis. **Materials and methods:** We provide statistically processed results of knee joint osteoarthritis treatment by intra-articular administration of gel. Polyacrylamide gel doesn't occur in living organisms, it is not exposed to enzymatic transformation in joint cavity and it fulfills the function of matrix for short chains of hyaluronan as well as independent viscosity corrector. This factor defines the duration of its action. 303 patients (186 women) with unilateral or bilateral osteoarthritis of stage 2-4 according to Kellgren's scale participated in the study. Patients with osteoarthritis of stages 2 and 3 prevailed. During the period of study (0-24 weeks), no other treatment was applied. Single intra-articular injection of 5 ml of gel was performed. The joint condition was estimated according to Lequesne's scale on the day of procedure, after 1, 3, 6, 24 weeks. Statistical analysis was performed using SPSS software. Parametric and non-parametric indices were used. **Results:** The decrease of Lequesne's index and improvement of certain indices in all study groups were observed, though the dynamics depended on process stage and duration of monitoring. The effect was observed 24 weeks after the administration as well. **Conclusion:** Intra-articular administration of polyacrylamide gel in case of knee joint osteoarthritis demonstrates good functional results and safety in long-term usage.