

# **EFFECTIVENESS OF COMPLEX GLUKOSAMIN SULPHATE SUBSTANCE IN TREATMENT OF PAIN SYNDROME UNDER KNEE [...]**

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**EFFECTIVENESS OF COMPLEX GLUKOSAMIN SULPHATE SUBSTANCE IN  
TREATMENT OF PAIN SYNDROME UNDER KNEE OSTEOARTHRITIS**

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The research was aimed at evaluating the effectiveness of complex glukosamin sulphate substance (A), (250 mg glucosamin sulphate, 200 mg chondroitin sulphate and 100 mg ibuprofen). The first group included 16 patients (aged  $64,2 \pm 1,9$  years) with knee osteoarthritis of II-III stages, according to Kellgren-Lourenz. The control group included 16 patients with the same diagnosis (aged  $63,9 \pm 1,7$  years), who took other type of complex glukosamin sulphate substance (B) (500 mg glucosamin hydrochloride and 400 mg chondroitin sulphate). The following methods of study were used: Mc-Gill questionnaire, VAS, Leken index, Womac scales, determination of life quality by EuroQol 5D scale.

After two weeks of treatment, patients taking substance (A) observed a reliable decrease of pain syndrome by Womac scale

(before treatment  $58,5 \pm 5,5$ ; after two weeks  $40,7 \pm 5,9$ ;  $t=2,38$ ;  $p=0,037$ ), decrease of constraint in movements (index before treatment  $57,8 \pm 6,5$ ; after two weeks  $36,7 \pm 6,3$ ;  $t=2,65$ ;  $p=0,022$ ), improvement of index of everyday activity (before treatment  $64,6 \pm 4,1$ ; after a fortnight –  $44,0 \pm 6,1$ ;  $t=2,82$ ;  $p=0,017$ ). Over a month intensity of pain in the knee lowered in the group taking substance (A), according to VAS scale (before treatment  $55,0 \pm 3,1$ ; over a month  $44,2 \pm 4,9$ ;  $t=2,32$ ;  $p=0,041$ ), according to Womac scale (before treatment  $58,5 \pm 5,5$ ; over a month  $38,7 \pm 5,7$ ;  $t=2,45$ ;  $p=0,032$ ). Constraint of movement also decreased, according to Womac scale (before treatment  $57,8 \pm 6,5$ ; over a month  $37,5 \pm 7,2$ ;  $t=2,96$ ;  $p=0,013$ ) and index of everyday activity improved (before treatment  $64,6 \pm 4,1$ ; over a month  $42,1 \pm 5,4$ ;  $t=3,51$ ;  $p=0,005$ ). A month after patients ceased taking the drug, intensity of pain remained lower in comparison with indexes before treatment: by VAS scale (before treatment  $55,0 \pm 3,1$ ; over a month –  $39,0 \pm 4,1$ ;  $t=2,26$ ;  $p=0,049$ ), by Womac scale (before treatment  $58,5 \pm 5,5$ ; over a month –  $41,1 \pm 5,5$ ;  $t=1,40$ ;  $p=0,20$ ).

However, the given indexes were lower than before treatment ( $57,8 \pm 6,5$  and  $64,6 \pm 4,1$ , respectively). In the group taking substance (B), intensity of pain syndrome certainly decreased after two months of treatment, according to VAS scale (before treatment –  $50,9 \pm 3,9$ ; after two months-  $42,7 \pm 4,6$ ;  $t=3,1$ ;  $p=0,011$ ), Womac pain scale (before treatment –  $47,0 \pm 5,3$ ; after two months-  $30,4 \pm 6,5$ ;  $t=2,89$ ;  $p=0,016$ ).

Hence, complex glukosamin sulphate substance (A) is instrumental in rapid decrease of intensity of the pain syndrome (after two weeks) in patients with knee osteoarthritis. Over a month after cessation of preparation taking, positive effect remains: knee pain is significantly lower in comparison with indexes before treatment; constraint index increases and index of everyday activity aggravates. Herewith, the given indexes remain lower than before treatment. The analgesic effect after taking other type of complex glukosamin sulphate substance (B) becomes noticeable

after two months when it is followed by the essential decrease of constraint index, improvement of index of everyday activity. Quality of life significantly improved in patients of both groups.