

AB1188

DYNAMICS OF PAIN SYNDROME DURING 180-DAY TREATMENT WITH UNDENATURED COLLAGEN TYPE II IN COMPARE TO GLUCOSAMINE AND CHONDROITIN COMBINATION

Keywords: Pain, Quality of life, Osteoarthritis

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Background: OA osteoarthritis is a heterogeneous group of diseases of different etiology with similar biological, morphological, clinical manifestations and consequences, which are based on damage to all articular structures (cartilage, subchondral bone, synovial membrane, ligaments, capsules, periarticular muscles). A key role in the pathogenesis of OA is played by an increase in the catabolic activity of various cytokines, as well as matrix metalloproteinases (MMP) of the cartilage itself.

Objectives: The purpose of the study was to compare the dynamics of pain syndrome (based on Western Ontario McMaster Osteoarthritis Index – WOMAC pain subscale) during 180-day treatment with undenatured collagen type II (UC-II) and glucosamine and chondroitin (G + Ch) combination in patients with Grade II knee OA.

Methods: Patients with Grade II knee OA were investigated. 20 patients were administered the UC-II during 180-day period, 20 patients took the combination of G + Ch during the same period. WOMAC pain subscale was used to evaluate the effectiveness and was completed before the start of therapy and after 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 90, 120, 150, 180 day of treatment. Visual analog scale (VAS) from 0 to 10 was used for assessment the WOMAC subscale by patient. In this abstract we presented the dynamics of pain during walking and nocturnal pain.

Results: The initial data of pain during walking and nocturnal pain in UC-II group were 6.29 ± 0.37 and 4.35 ± 0.59 , after treatment – 2.99 ± 0.37 (-52.46% , $p < 0.05$) and 1.7 ± 0.41 (-60.92% , $p < 0.05$). In G + Ch group initial data were 7.05 ± 0.43 and 4.85 ± 0.69 , after therapy – 3.85 ± 0.35 (-45.39% , $p < 0.05$) and 2.85 ± 0.51 (-41.24% , $p < 0.05$). Comparing groups demonstrated the better results according to decrease of WOMAC pain subscale in the group of UC-II: reduce of pain during walking by 28.76 % and reduce of nocturnal pain by 67.65 % ($p < 0.05$). The analysis of the graph of pain during walking has recorded the beginning of significant pain reducing after 30 day of treatment in both groups (Figure 1). The analysis of the graph of nocturnal pain has showed the beginning of significant pain reducing after 50 day of treatment in both groups. Dynamics of nocturnal pain reducing in the G + Ch group was more unstable with periods of reduced efficiency, while in the UC-II group the dynamics was smooth without fluctuations.

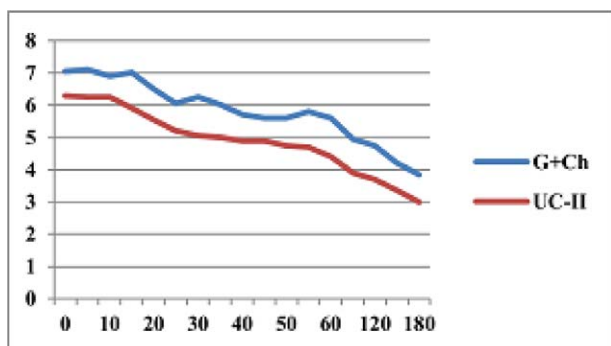


Figure 1.

Conclusion: The therapy of Grade II knee OA with UC-II during 180-day demonstrates the benefit in reducing of pain during walking and nocturnal pain in compare to G + Ch combination. The dynamics of nocturnal pain reducing in the UC-II group characterizes by gradual decline without significant fluctuations.

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AB1189

BOTULINUM TOXIN TYPE A OR SELECTIVE GENICULAR PULSED RADIOFREQUENCY FOR TREATING ADVANCED KNEE OSTEOARTHRITIS

Keywords: Randomized control trial, Pain, Osteoarthritis

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Background: Knee osteoarthritis was the most common type (6% of all adults). Developing osteoarthritis increases with age. Pain is a key symptom in the decision to seek medical care and is an important antecedent to disability.

Objectives: To discuss the effectiveness, indications, limitations and side effects of botulinum toxin type A and genicular nerves pulsed radiofrequency for treating osteoarthritis to help clinicians choose the most appropriate treatment.

Methods: Randomized double blind controlled trial study, **fifty two participants were recruited divided into 2 groups as follows:** Group I (Bx): 25 patients given intra-articular botulinum toxin type A 100 IU sonographically guided in patient with osteoarthritis knee according to American Collage of Rheumatology criteria and in stage 3 or 4 of the Kellgren_Lawrence classification Group II (RF): 27 patient get radiofrequency ablation of genicular nerves. The primary outcome was Visual analogue pain score (VAS), secondary outcome was stiffness, physical function of each knee using Western Ontario and McMaster University Osteoarthritis Index (WOMAC), and Calculation of Oxford knee score at base line, 4, 8, 12 and 24 weeks.

Results: 16 female and 9 male in group I versus 10 female and 17 male in group II. The mean age were 54.36 ± 7.8 years, there was significant difference in pain VAS between groups at 4th week (P value = 0.005). A significant difference in WOMAC pain at 4th and 12th weeks (P value > 0.001), WOMAC stiffness at 12th and 24th weeks (P value > 0.001), WOMAC function 4th, 12th and 24th weeks (P value > 0.001) and WOMAC total at 4th, 12th and 24th weeks (P > 0.001). However there were no significant difference in Oxford between the two groups.

Conclusion: Intra-articular Botulinum toxin type A 100 IU can reduce the overall pain and improve the function in Knee osteoarthritis with higher efficacy than Pulsed Radiofrequency. However. Further research is needed to compare the effect of botulinum toxin type A and Radiofrequency for the different stages of Osteoarthritis.

Variables	Group I (Botox) (n=25)	Group II (Radiofrequency) (n=27)	P-value
WOMAC pain preintervention	16 (1)	16 (1)	0.84
WOMAC pain 4 wk	5 (2) *	15 (5) *	<0.001
WOMAC pain 12 wk	5 (2) *	8 (6) *	<0.001
WOMAC pain 24 wk	5 (2) *	5 (11) *	0.77
WOMAC stiffness preintervention	7 (1.5)	7 (2)	0.88
WOMAC stiffness 4 wk	3 (1.5) *	3 (5) *	0.15
WOMAC stiffness 12 wk	3 (1.5) *	7 (2)	<0.001
WOMAC stiffness 24 wk	3 (1) *	7 (1)	<0.001
WOMAC function preintervention	50 (10)	51 (5)	0.42
WOMAC function 4 wk	16 (8) *	49 (26) *	<0.001
WOMAC function 12 wk	16 (7.5) *	50 (26) *	<0.001
WOMAC function 24 wk	16 (8.5) *	50 (17) *	<0.001
WOMAC total preintervention	73 (11.5) *	71 (6) *	0.38
WOMAC total 4 wk	23 (11)	68 (34)	<0.001
WOMAC total 12 wk	24 (10.5)	66 (33)	<0.001
WOMAC total 24 wk	24 (10.5)	64 (25)	<0.001

REFERENCES: NIL.

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AB1190

ATTITUDES AND BELIEFS REGARDING TREATMENT IN PATIENTS WITH OSTEOARTHRITIS

Keywords: Osteoarthritis, Patient information and education

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Background: Therapeutic decision is one of the essential procedures for coping with the disease, so adherence to treatment is one of the key elements of care, particularly in patients with degenerative musculoskeletal pathologies, in particular osteoarthritis.