

WBVT: $\Delta 7.03 \pm 9.26$). In within-group comparison, both groups showed a significant difference in peak torque (control: $p=0.026$, WBVT: $p=0.011$). There was no statistically significant difference between and within groups in SPPB, SF-36, body composition analysis.

Conclusion: Our results showed that WBVT showed peak torque improvement, but there was no statistically significant difference between stretching and WBVT for improving muscle strength and physical performance.

Acknowledgements: This research was supported by a grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry of Health & Welfare, Republic of Korea (grant number: HI15C1529)

P557

EFFICACY OF LOW-INTENSITY PULSED ULTRASOUND FOR CARTILAGE REGENERATION, PAIN, AND FUNCTIONAL ACTIVITY IN KNEE OSTEOARTHRITIS

G.-W. Kim¹, N.-K. Jo¹, Y.-J. Jo², G.-H. Jeon², Y.-H. Won¹, S.-H. Park¹, J.-H. Seo¹, M.-H. Ko¹

¹Department of Physical Medicine and Rehabilitation, Jeonbuk National University Medical School, ²Translational Research and Clinical Trials Center for Medical Devices, Jeonbuk National University Hospital, Jeonju, South Korea

Objective: Therapeutic ultrasound is a frequently used modality for the treatment of knee OA associated pain. Moreover, there are some studies about the effect of low-intensity pulsed ultrasound (LIPUS) on cartilage regeneration in patients with knee OA. The aim of this clinical trial was to investigate the efficacy and safety of low-intensity pulsed ultrasound (LIPUS) for cartilage regeneration through knee MRI, pain, and functional improvement in knee OA patients.

Methods: This study was designed prospective, single-group, home-based self-therapy trial. Each patient took an ultrasonic stimulation device (BODITREK JOINT™), underwent a 30 min/d, more than 5 sessions per week for 4 weeks, more than 20 sessions in total. The primary outcome measure was articular cartilage thickness in femoral condyle and tibial plateau. The secondary outcome measure was visual analogue scale (VAS); P1 (pain at the current moment); P2 (pain with the knee movement); P3 (pain in resting position), WOMAC, 36-Item Short Form Survey (SF-36). These measures were assessed at three times: evaluation 1 (E1, pretreatment), evaluation 2 (E2, after treatment), and evaluation 3 (E3, 4 weeks follow-up after treatment). Knee MRI was conducted twice only at E1 and E3.

Results: Seven subjects were included in the study. Although the increment of mean cartilage thickness was observed ($\Delta E3 - E1 = 0.02 \pm 0.05$ mm), but there was no statistically significant difference ($p=0.290$). There was a significant improvement in SF-36 (E2 vs. E3; $p=0.019$). There was no statistically significant difference in VAS and WOMAC score.

Conclusion: In this study, the clinical efficacy of LIPUS therapy is still statistically indefinite. Further study is currently in progress with more subjects.

Acknowledgements: This research was supported by a grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry of Health & Welfare, Republic of Korea (grant number: HI15C1529)

P558

A DISCRETE-CHOICE EXPERIMENT TO ASSESS EXPERTS' PREFERENCES FOR SARCOPENIA OUTCOMES

C. Beaudart¹, J. Bauer², F. Landi³, O. Bruyère¹, J.-Y. Reginster¹, M. Hilgsmann⁴

¹University of Liège, Division of Public Health, Epidemiology and Health Economics, Liège, Belgium, ²Center for Geriatric Medicine and Network Aging Research (NAR), University of Heidelberg, Heidelberg, Germany, ³Department of Geriatrics, Neurosciences and Orthopedics, Catholic University of the Sacred Heart Rome, Milano, Italy, ⁴Department of Health Services Research, CAPHRI Care and Public Health Research Institute, Maastricht University, Maastricht, The Netherlands

Objective: After evaluating patients' preference for sarcopenia outcomes[1], this study aimed to assess experts' preference for sarcopenia outcome through a similar discrete-choice experiment (DCE).

Methods: Sarcopenia experts recruited from the Special Interest Group in Sarcopenia from the EUGMS. In the DCE survey, experts were repetitively asked to choose which one of two patients (Patient A and Patient B) suffering from sarcopenia deserves the most a treatment. The two hypothetical patients presented different levels of risk for five pre-selected sarcopenia outcomes [2]: quality of life, mobility, domestic activities, fatigue and falls. The DCE included 12 choice sets. Mixed logit panel model was used to estimate the relative importance of each DCE attribute for the experts and comparison with the previous DCE including 216 sarcopenic persons was done.

Results: A total of 37 experts were included for the analysis (50% women with a median clinical experience of 8 y (3-15 y)). All five pre-selected sarcopenia outcomes were shown to be significant and thus important for experts. Overall, the most important sarcopenia outcome was falls (27%) followed by domestic activities and mobility (24%), quality of life (15%) and fatigue (10%). Compared to sarcopenic patients, experts considered falls as more important (27% vs. 18%), while fatigue (10% vs. 17%) and domestic activity (24% vs. 30%) were less important for experts.

Conclusion: Some differences in the relative importance of sarcopenia outcomes were observed between experts and persons with sarcopenia. In particular, falls was the most important outcome of sarcopenia for the expert while this outcome was only the third most important outcome for persons suffering from sarcopenia. On the other hand, fatigue was considered more important by persons with sarcopenia compared to expert evaluation. Both experts and patients seem concordant about the importance of mobility and the ability of managing domestic activities as outcomes of sarcopenia. Taking into account expert's opinion in preference studies could add an additional nuance to the results obtained from patients.

References:

1. Hilgsmann M et al. J Am Med Dir Assoc 2020;21:267.
2. Beaudart C et al. J Am Med Dir Assoc 2020;21:284.

P559

DISABILITY-ADJUSTED LIFE YEARS RELATED TO FRAGILITY FRACTURES

F. Borgström¹, N. V. Norton², L. Karlsson², G. Orsäter², N. C. Harvey³, E. V. McCloskey⁴, J. A. Kanis⁵