

THU0727-HPR **COMPARISON OF KINESIO TAPE APPLICATION AND MANUAL LYMPHATIC DRAINAGE ON LOWER EXTREMITY OEDEMA AND FUNCTIONS AFTER TOTAL KNEE ARTHROPLASTY**

H. Guney Deniz¹, G.I. Kiriikli¹, S. Onal¹, C. Sevinc¹, O. Caglar², I. Yuksel¹.
¹Physiotherapy and Rehabilitation Department, Hacettepe University Faculty of Health Sciences; ²Orthopedics and Traumatology Department, Hacettepe University Faculty of Medicine, Ankara, Turkey

Background: Significant trauma and muscular tightness often result during Total Knee Arthroplasty (TKA) surgery and thus act to restrict tissue fluid movement resulting with lower extremity oedema. Kinesio Taping is applied directly on the skin for restoration of normal fluid perfusion, removing congestion of lymphatic fluid or haemorrhages. In addition manual lymphatic drainage (MLD) enhances blood circulation and stimulates the lymphatic movement and unblocks lymphatic territories.

Objectives: The aim of the study was to investigate the effectiveness of Kinesio Taping and MLD in reducing postoperative oedema, pain and lower extremity functions in the early stage after TKA.

Methods: Forty patients who underwent unilateral TKA were randomised as Kinesio Taping group (n=12), MLD group (n=13) and control group (n=15). For all patients, postoperative rehabilitation program included early mobilisation and physical therapy twice a day during the stay in orthopaedic traumatology department. On the second day after surgery, lymphatic correction method was used on the Kinesio Taping group patients and a standardised 30 min MLD treatment was applied to the MLD group patients. Control group received only physiotherapy treatment. Circumference measurements were applied on preoperatively and the second, third, fourth day and 6th weeks after surgery. Knee Injury and Osteoarthritis Outcome Score (KOOS) was used to determine the functional outcomes on the 6th weeks after surgery. Repeated measures analysis was used to determine the group by time differences between groups.

Results: A significant group effect was observed for oedema difference ($F_{(4,42)}=2.44$, $p=0.047$) and pain levels ($F_{(3,54)}=4.56$, $p=0.006$) and post hoc testing demonstrated a significantly lower oedema and pain levels in the both Kinesio Taping and MLD compared to control group. There was no difference found between Kinesio Taping and MLD groups ($p=0.933$). KOOS results were better in Kinesio Taping and MLD groups when compared to control group ($p=0.021$). There was no difference in KOOS results between Kinesio Taping and MLD groups ($p=0.851$).

Conclusions: Applications of both Kinesio Taping and MLD to remove congestion of lymphatic fluid at the early stage after TKA surgery were found affective in enhancing blood circulation and stimulating the lymphatic movement. In addition, Kinesio Taping and MLD were both effective on relieving pain and improving functional outcomes after TKA surgery.

REFERENCES:

- Donec V, Kriščiūnas A. The effectiveness of Kinesio Taping® after total knee replacement in early postoperative rehabilitation period. A randomized controlled trial. *Eur J Phys Rehabil Med* 2014;50(4):363–71.
- Ebert JR, Joss B, Jardine B, Wood DJ. Randomized trial investigating the efficacy of manual lymphatic drainage to improve early outcome after total knee arthroplasty. *Arch Phys Med Rehabil* 2013;94(11):2103–11.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3360

THU0728-HPR **A MIXED METHODS STUDY OF A GROUP PHYSIOTHERAPY PROGRAMME INCORPORATING EXERCISE AND EDUCATION IN FIBROMYALGIA PATIENTS**

J. Pereira, C. Caeiro, R. Fernandes, E. Cruz. *School of Health Care, Polytechnic Institute of Setúbal, Setúbal, Portugal*

Background: Research on non-pharmacological treatments for fibromyalgia patients has demonstrated that exercise and education have positive effects on pain and disability¹. However, the traditional approach of studying treatment effectiveness based exclusively on quantitative measures has been questioned. There is growing recognition of the importance of integrating patients' perspectives into clinical research. Outcome measures focused on patients' perceptions of improvement have been increasingly used, however they do not offer expanded definitions of what constitutes a "successful" outcome². The further exploration of patients' perspectives about treatment benefits may contribute to the development of treatments that better match patients' needs.

Objectives: The aim of this study was twofold: firstly, to examine the effectiveness of a group physiotherapy programme (incorporating exercise and education) on pain intensity, disability and global impression of change in fibromyalgia

patients; and, to explore how patients, who achieved success in pain and/or disability (according to the score from the Patient Global Impression of Change Scale - PGIC), understand and make sense of the results.

Methods: A sequential explanatory mixed methods approach, combining quantitative (1 st phase) and qualitative methods (2nd phase), was carried out. In the 1 st phase, the participants underwent an 8 week (3 times weekly) standardised group programme. Participants were assessed at baseline, 4 and 8 weeks later. Outcome measures included the Numeric Pain Rating Scale (NPRS), the Revised Fibromyalgia Impact Questionnaire (FIQR) and the PGIC. Participants who had scored ≥ 5 in the PGIC were invited to participate in a focus group. In the 2nd phase, 2 focus groups meetings were carried out to collect data. A semi-structured interview schedule was used and the sessions were audiotaped and transcribed verbatim.

Results: Thirty-seven participants (females; 49.3 ± 10.2 years) completed the 1 st phase. Analysis using SPSS revealed statistically significant improvements on pain intensity (mean SD change: -1.38 ± 2.363 , $p=0.001$) and disability (-21.577 ± 21.02 , $p<0.001$). In what concerns to participants' impression of change, 26 participants (70.3%) perceived substantial improvements on pain and disability (PGIC ≥ 5). From these, 12 accepted to participate in the focus groups. The qualitative analysis indicated that "doing more daily-life activities" and "taking less medication" were identified as the main reasons for the participants' improvements. According to these participants, the knowledge about strategies for self-management played a key role in their success.

Conclusions: The combination of data from both phases provided detailed information about the participants' perceptions regarding the key elements for achieving success with a physiotherapy programme. Further research on patients' perspectives regarding treatment effectiveness is recommended since it may contribute to the design of more effective and patient-centred treatments.

REFERENCES:

- Macfarlane GJ, Kronisch C, Dean LE, et al. EULAR revised recommendations for the management of fibromyalgia. *Annals of the Rheumatic Diseases* 2017;76:318–328.
- Evans R, et al. "I Know It's Changed": a Mixed-Methods Study of the Meaning of Global Perceived Effect in Chronic Neck Pain Patients. *European Spine Journal* 2014;23(4):888–97.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5452

THU0729-HPR **PATIENT WITH RHEUMATOID ARTHRITIS ARE STILL NOT SUFFICIENTLY PHYSICAL ACTIVE. TIME FOR A PERSONALISED PHYSICAL ACTIVITY PROGRAMME!**

J. Weijers¹, S. Rongen-van Dartel^{1,2}, P. van Riel^{1,2}. ¹*IQ healthcare, Scientific Center for Quality of Healthcare, Radboud university medical center, Nijmegen;* ²*Rheumatology, Bernhoven, Uden, Netherlands*

Background: For individuals with rheumatoid arthritis (RA), it is important to be sufficiently physically active. The international recommendation for physical activity states that each adult should perform moderate-intensity aerobic physical activity for at least 30 min, five days a week. In recent years, attention and awareness of the importance of being physically active has increased, including the development of exercise programmes for people with rheumatic diseases. However, it is unknown whether patients with RA actually became more physically active in daily practice in the past years.

Objectives: Primary, this study will estimate whether the percentage of RA patients that meet the recommended level of physical activity has changed in recent years. Secondary, this study aims to identify RA patients of the outpatient clinic who are physical inactive and motivated to improve their level of physical activity.

Methods: In 2014, 740 RA patients from seven outpatient clinics across the Netherlands filled out a questionnaire which contained items about self-reported physical activity and sport habits. In 2017, the same items were assessed again by sending a questionnaire to all 727 RA patients of the outpatient clinic in Bernhoven, a hospital in the south of the Netherlands. In addition, questions about motivation to increase the level of physical activity were added.

Results: In 2014, 52% of the RA patients met the recommendation for physical activity. In 2017, 33% of the 514 RA patients of the outpatient clinic in Bernhoven who filled out the questionnaire reported that they met the recommendation. Walking, cycling, aerobic and strength fitness training and swimming were mentioned as the most popular sports among RA patients in 2014 as well as in 2017. 133 of the 233 (57%) inactive RA patients of the outpatient clinic in Bernhoven reported that they were convinced to be able to improve their physical activity level and 51% reported that they were motivated to become more physically active in the upcoming months.