

Table 1 Baseline demographic and clinic characteristics of patients

	Group 1 n=47	Group 2 n=47	Group 3 n=45	Group 4 n=50	p
Age (year)	48.1 ± 10.13	48.38 ± 10.12	50 ± 8.56	48.48 ± 9.79	0.325 [§]
Gender					
Female n, %	40, 85.1%	39, 83%	41, 91.1%	47, 94%	0.298 [†]
Education					
duration (year)	5.68 ± 3.49	7.48 ± 4.21	5.51 ± 3.25	6.84 ± 3.25	0.002*
Co-morbid disease					
DM: %	15%	15%	8.8%	22%	
Hypothyroidism: %	19.2%	25.6%	13.3%	18%	
HT: %	21.4%	23.5%	20%	26%	0.940 [†]
Symptom duration (month)	22.21 ± 26.93	33.68 ± 38.10	23.48 ± 27.27	24.8 ± 31.47	0.152
VAS night	6.23 ± 3	6.11 ± 2.69	5.89 ± 2.86	6.01 ± 2.56	0.899
VAS	4.17 ± 3.04	4.22 ± 2.3	4.13 ± 2.55	4.54 ± 2.39	0.876
BCSS	2.63 ± 0.86	2.54 ± 0.67	2.53 ± 0.89	2.54 ± 0.74	0.914 [§]
BCFS	2.23 ± 0.95	2.3 ± 0.73	2.24 ± 0.76	2.47 ± 0.69	0.480
Finger pinch (kg)	5.02 ± 1.66	5.74 ± 1.83	5.1 ± 1.32	4.9 ± 1.4	0.017 ^{*,§}
LANSS	9.85 ± 6.81	9.13 ± 5.93	9.56 ± 6.15	9.45 ± 5.95	0.900
Neuropathic pain					
*** (n, %)	30 (41.7%)	27 (38.6%)	26 (40.6%)	24 (29.3%)	0.361 [†]

Group 1: Only wrist splint treatment, Group 2: *ESWT* + wrist splint treatment, Group 3: Only *ESWT*, Group 4: Placebo *ESWT* + wrist splint treatment, n: number of patients, DM: Diabetes mellitus, HT: Hypertension; VAS: Visual Analog Scale, (0-10 cm), BCTQs: Boston Carpal Tunnel Symptom Severity Score, BCTQf: Boston Carpal Tunnel Functional Capacity Score, LANSS: Leeds Assessment of Neuropathic Symptoms and Signs; kg: Kilogram; [†] Chi square test; [§] one way analysis of variance (Kruskal Wallis analysis was used for parameters without normal distribution)

* difference between Group 1 and Group 2 p=0.021

† difference between Group 2 and Group 3 p=0.006

§, difference between Group 2 vs Group 4, p=0.018

** LANSS score ≥ 12

Conclusions: In the group with ESWT and using wrist splint together, it was found that the improvement of hand function and electrophysiological measures was higher than other groups. ESWT, a valuable and practical treatment modality without serious side effects, reduces pain, neuropathic symptoms, disability and improves electrophysiological findings for patients with mild to moderate CTS.

REFERENCES:

- Seok H, Kim SH. The effectiveness of extracorporeal shock wave therapy vs. local steroid injection for management of carpal tunnel syndrome: a randomized controlled trial. *Am J Phys Med Rehabil* 2013;92:327-34.
- Vahdatpour B, Kiyani A, Dehghan F. Effect of extracorporeal shock wave therapy on the treatment of patients with carpal tunnel syndrome. *Adv Biomed Res.* 2016;29:120.
- Ke MJ, Chen LC, Chou YC, et al. The dose-dependent efficiency of radial shock wave therapy for patients with carpal tunnel syndrome: a prospective, randomized, single-blind, placebo-controlled trial. *Sci Rep* 2016;6:38344.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3137

FRI0690

COMPARISON OF EFFECTIVENESS OF DIFFERENT STRETCHING EXERCISES COMBINED WITH PRESSURE RELEASE TECHNIQUE ON LATENT TRIGGER POINTS IN THE PECTORALIS MINOR MUSCLE

T. Birinci¹, R. Mustafaoglu², E. Kaya Mutlu³, A. Razak Ozdinciler³. ¹Istanbul Medeniyet University, Faculty of Health Sciences, Division of Physiotherapy and Rehabilitation, ²Istanbul University, Faculty of Health Sciences, Division of Neurological Physiotherapy and Rehabilitation, ³Istanbul University, Faculty of Health Sciences, Division of Physiotherapy and Rehabilitation, Istanbul, Turkey

Background: A myofascial trigger point (MTrP) is a hyperirritable spot located in a palpable taut band of skeletal muscle which are painful upon compression, stretching, or overload of the muscle. It is well known that latent triggerpoint (LTrPs), highly prevalent in healthy subjects, are usually silent even though they can easily develop into ATrPs under the influence of perpetuating factors; therefore LTrPs need to be treated.

Objectives: To investigate which type of stretching exercise using after a single-session ischemic compression is more effective for muscle length, pressure pain threshold (PPT), pulmonary function, and respiratory muscle strength in subjects with latent trigger point in the pectoralis minor (PM) muscle.

Methods: Two-hundred-six individuals were screened for possible inclusion criteria. Fourty subjects were randomized to the Group-1 (ischemic compression with modified contract-relax PNF stretching), Group-2 (ischemic compression with static stretching), Group-3 (ischemic compression with myofascial release) or Group-4 (no intervention). The assessments were performed at baseline, immediately after the intervention, and at 24-hours later. The pectoralis minor length (PML) was measured using a standard tape measure. Then, pectoralis minor index (PMI) was calculated. Rounded shoulder posture (RSP) was assessed by the measuring the distance between the posterior border of the acromion and the table 1. Digital algometer was used to evaluate the PPT; spirometer and respiratory pressure meter were used to assess pulmonary function and maximal respiratory pressure, respectively.

Results: Improvements were found for PML and PMI between baseline and immediately after intervention in Group-1 and Group-3 (p<0.05). RSP showed a significant improvement only in Group-3 (p=0.03), whereas there was a statistically significant improvement for PPT value in Group-1 immediately after intervention (p=0.005). Significant difference were found in the PEmax at baseline to 24-hours later in Group-1 (p<0.05). There was a statistically significant difference in the PIMax and PEmax in Group-3 (p<0.05).

Conclusions: For effective trigger point therapy, ischemic compression should be followed by myofascial release or contract-relax PNF stretching exercises.

REFERENCES:

- Simons DG. Review of enigmatic MTrPs as a common cause of enigmatic musculoskeletal pain and dysfunction. *Journal of electromyography and kinesiology* 2004;14(1):95-107.
- Ge H-Y, Arendt-Nielsen L. Latent myofascial trigger points. *Current pain and headache reports* 2011;15(5):386-392.
- Mutlu EK, et al. Latent Trigger Points: What Are the Underlying Predictors? *Archives of physical medicine and rehabilitation* 2016;97(9):1533-1541.

Acknowledgements: The present work was supported by the Research Fund of Istanbul University (Project No: TYD-2017-24415).

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1554

FRIDAY, 15 JUNE 2018

Education

FRI0691

EFFECT OF AN EDUCATIONAL INTERVENTION BASED ON CLINICAL SIMULATION IN THE DIAGNOSIS OF PSORIATIC ARTHRITIS IN LATIN AMERICAN DERMATOLOGISTS

S. A. Mora Alfonso^{1,2} on behalf of Sociedad para la Investigación, atención y educación en enfermedades reumáticas Inverder Sas, D. G. Fernández Ávila^{2,3} on behalf of Sociedad para la Investigación, atención y educación en enfermedades reumáticas Inverder Sas. ¹Rheumatology, Universidad de la Sabana, ²Rheumatology, Sociedad para la Investigación, atención y educación en enfermedades reumáticas Inverder Sas, ³Pontificia Universidad Javeriana – Hospital Universitario San Ignacio. Bogotá, Colombia, Bogotá, Colombia

Background: Previously our group has shown the use of clinical simulation in rheumatology, an area in which it had not been used. We demonstrated the effectiveness of an educational intervention based on clinical simulation to improve the diagnostic approach to RA¹, so we wanted to apply this same principle in the learning of Psoriatic Arthritis (PsA) and SpA (Spondyloarthritis).

Objectives: This paper wants to quantify the rate of improvement in the diagnosis of Psoriatic Arthritis (PsA) among a group of Latin American dermatologists who received an educational intervention based on clinical simulation.

Methods: Observational study before and after

Results: 192 Latin American dermatologists received an educational intervention based on clinical simulation. The topic of this educational intervention was based on PsA. A workshop that includes clinical simulation models of feet, fingers and a mannequin with prominent entheses was created for this purpose. It was used an strategy of problem-based learning. The workshop lasted 5 hours and it was divided into two parts: the first was about the clinical approach of joint pain and lumbar pain diagnosis and relevant aspects of PsA. The second part focused on clinical cases applied to clinical simulation models, applying the knowledge acquired during the theoretical phase. Participants made a several stations where they could appreciate for periods of 15 minutes each simulator of 3 feet, 6 simulated fingers and a mannequin where they can identify entheses, dactylitis, arthritis, psoriasis lesions and improve visual and tactile sensitivity in each semiologic findings for the diagnosis of PsA. The participants filled out a pre and post test, which included 6 (six) clinical cases with simulators and photographs of hands and feet of patients with suspected PsA. 192 participants (82 %