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.

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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

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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.

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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

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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 %

women) from 5 Latin American countries (Argentina, Brazil, Colombia, Mexico and Peru), average age 42.43 years (SD 6.2 years). Dermatologists obtained an improvement in the correct diagnosis of PsA of 56.1 % (the correct diagnosis increased from 33.1 % to 89.2 %). the total number of exams requested in the cases presented decreased significantly, from an average of 9 to 3 exams requested by each clinical case presented. 95 % of participants would recommend to other colleagues to make this workshop. 98.8 % believe that this educational intervention will improve the diagnostic approach to patients with suspected PsA.

Conclusions: The present research is a pioneer and innovator in the rheumatology education. We have shown the usefulness of clinical simulation given by an improvement in the diagnostic sensitivity towards the diagnosis of PsA, highlighting the semiology as a key element at the time of making the diagnosis. A significant decrease in the total number of exams requested for each of the clinical cases analyzed was documented, which can have a positive effect on costs for the national health systems in each country of the participating dermatologists.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6100

FRI0692

ANTI-TNF TREATMENTS FOR WOMEN WITH CHRONIC INFLAMMATORY DISEASES: COMPARING ATTITUDES AND PERCEPTIONS OF PHYSICIANS IN EUROPE AND THE US

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Background: For Women of Childbearing Age (WoCBA) with chronic inflammatory diseases (CID), onset, diagnosis and treatment initiation often overlap with peak reproductive years. High disease activity is associated with increased risk of pregnancy complications and adverse outcomes, and achieving disease control in these patients (pts) is therefore an important goal. Tumour necrosis factor antagonists (anti-TNFs) are effective treatments, but few data are available on how physicians utilise them in clinical practice for this specific pt group.

Objectives: To help better understand physicians' perceptions and attitudes towards treating WoCBA pts with anti-TNFs during pregnancy and lactation, and gain insights into differences between Europe- and US-based physicians.

Methods: The survey was conducted online in the US in July 2017, and in EU5 (France, Italy, Spain, UK and Germany) in Nov/Dec 2017, through SERMO Real-Time. WoCBA were defined as female pts aged 18–45. Participants included

rheumatologists (RH), gastroenterologists (GI), dermatologists (DM) and obstetricians/gynaecologists (OB). Here, we present data for RH and OB.

Results: 203 healthcare professionals (HCPs) from the US participated, of whom 50 were RH and 50 OB; 401 HCPs from EU5 participated, of whom 152 were RH and 114 OB; over half of the female pt population with CID among the prescribing specialists were WoCBA. Overall, EU5 HCPs were less inclined to prescribe anti-TNF treatments for WoCBA pts; compared to the other specialists, US RH (43%) had the highest proportion of WoCBA pts prescribed anti-TNFs (EU5 RH: 33%; EU DM: 24%; US DM: 27%; US GI: 31%). However, HCPs' comfort with prescribing anti-TNF treatments consistently declined in both US and EU5 with onset of family planning (figure 1A). EU5 RH (61%) and OB (67%) were more likely to recommend discontinuation of anti-TNFs before conception than US HCPs (RH: 46%; OB: 62%); similarly, >50% EU5 RH and OB agreed that women should stop anti-TNFs post-conception (US RH: 34%; OB: 54%). These findings may be explained by the fact that more US HCPs strongly agreed on making disease control during pregnancy their priority (US RH: 42% vs EU5 RH: 25%) and that controlled disease reduces risk of pregnancy complications (US RH: 42% vs EU5 RH: 28%), as well as the observation that more EU5 RH (34%) than US (12%) were very concerned about adverse events, including infection or poor birth outcomes, in pregnant pts taking anti-TNFs. More EU5 than US RH strongly believed breastfeeding pts should not take anti-TNFs, although a high degree of uncertainty was indicated (figure 1B).

Figure 1A HCP level of comfort with anti-TNF treatment prescription for WoCBA patients.

1B HCP agreement on discontinuation of anti-TNFs during breastfeeding. HCP: healthcare professional; OB: obstetricians/gynaecologists; pts: patients; RH: rheumatologists; TNF: tumour necrosis factor; WoCBA: Women of Childbearing Age.

Conclusions: Our survey demonstrates the variability in confidence in clinical management of women with CID and highlights differences in physicians' attitudes between RH vs OB and EU vs US. Uncertainty and concerns about risks of anti-TNF use during pregnancy and breastfeeding are common, emphasising the need for better information and education of HCPs, especially in Europe, regarding the appropriate use of anti-TNFs during pregnancy and breastfeeding.

Acknowledgements: This study was funded by UCB Pharma, conducted by SERMO, with editorial services by Costello Medical. We thank the physicians who contributed.

Disclosure of Interest: A. Tincani Grant/research support from: AbbVie, Actelion, Pfizer, UCB Pharma, Consultant for: Celgene, Pfizer, P. Taylor Grant/research support from: UCB Pharma, Janssen, Galapagos, Eli Lilly, Abide Therapeutics, Consultant for: Novartis, AbbVie, Eli Lilly, UCB Pharma, Pfizer, Biogen, Janssen, Sanofi, GSK, R. Fischer-Betz Consultant for: AbbVie, BMS, Celgene, Chugai, Novartis, Lilly, UCB Pharma, Pfizer, Janssen, Sanofi, C. Ecoffet Employee of: UCB Pharma, E. Chakravarty Grant/research support from: UCB Pharma

DOI: 10.1136/annrheumdis-2018-eular.1919