AB1378-HPR EFFECT OF CLINICAL CHARACTERISTICS, HABITS, PHYSICAL ACTIVITY LEVELS AND FUNCTIONAL CAPACITY ON QUALITY OF LIFE IN SYSTEMIC SCLEROSIS PATIENTS

Hazal Yakut¹, Sevgi Özalevli¹, Ahmet Merih Birlik². ¹Dokuz Eylül üniversite Fizik Tedavi ve Rehabilitasyon Yüksek Okulu, İzmir, Turkey; ²Dokuz Eylül üniversitesi Hastanesi, İmmunoloji-Romatoloji Anabilim dalı, İzmir, Turkey

Background: In patients with Systemic sclerosis (SSc), many factors such as inactivity, smoking, gastrointestinal system involvement are reported to have an adverse effect on overall health related quality of life, and quality of life is in line with the prognosis of the disease (1,2).

Objectives: The aim of this study was to investigate the effect of clinical characteristics, habits, physical activity levels and functional capacity of patients with SSc on quality of life.

Methods: Twenty-tree SSc patients were included in the study. The ages of patients, the amount of cigarette consumption, duration of diagnosis and body mass indexes (BMI) were questioned and recorded. Functional capacities of patients were measured by 6 Minute Walking Test (6MWT). Physical activity levels of patients were calculated using the International Physical Activity Questionnaire (IPAQ; using metabolic equivalent-MET). Quality of life was evaluated by the short form SF-36 quality of life questionnaire (SF-36 QoLQ). The SF-36 questionnaire was evaluated as two sub-scales, physical and mental.

Results: The mean age of the patients was 51.00±11.10 years and the duration of diagnosis was 7.60±4.80 years, BMI was 26.60±6.37 kg/m² and amount of cigarette consumption was 6.02±3.30 packyears. The mean physical activity levels (IPAQ) were 281.68±60.45 MET, 6MWT distance were 435.39±80.45 m, SF-36 QoLQ-physical were 32.48±13.42 and SF-36 QoLQ-mental were 38.56±11.42 score. It was found that there was a significant correlation between SF-36 QoLQ-physical and BMI ($p=0.043$, $r=-0.426$), 6DWT ($p<0.001$, $r=0.737$) and IPAQ ($p=0.001$, $r=0.647$). There was a significant correlation between the SF-36 QoLQ-mental and 6MWT ($p=0.020$, $r=0.483$) and IPAQ ($p=0.002$, $r=0.614$).

Conclusion: Reduced levels of physical activity in SSc patients affect functional capacity. Reduced physical activity level and functional capacity decrease the quality of life of patients related to both physical and mental health. Physical health related quality of life of patients is negatively affected by the increase in BMI. Functional capacity, clinical characteristics, habits and physical activity levels should be evaluated and improved in treatment programs aimed at improving the overall health-related quality of life of patients.

REFERENCES

- [1] Tureson, C., & Matteson, E. L. (2007). Cardiovascular risk factors, fitness and physical activity in rheumatic diseases. *Current Opinion in Rheumatology*, 19(2), 190-196.
- [2] Hudson, M., Thoms, B. D., Steele, R., Panopalis, P., Newton, E., Baron, M., & Canadian Scleroderma Research Group (2009). Health related quality of life in systemic sclerosis: A systematic review. *Arthritis and Rheumatism*, 61(8), 1112-1120. <https://doi.org/10.1002/art.24676>

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.2659

AB1379-HPR EFFECTS OF DIFFERENT EXERCISE MODELS ON PAIN, FUNCTIONALITY, BALANCE, PROPRICEPTION AND COGNITION FEATURES OF PATIENTS DIAGNOSED WITH FIBROMYALGIA

Hadi Yavuz¹, Türker Şahinkaya², Ayşegül Ketenci¹, Gökhan Metin³. ¹Istanbul University, Physical Medicine and Rehabilitation, Istanbul, Turkey; ²Istanbul University, Sports Medicine, Istanbul, Turkey; ³Istanbul University-Cerrahpaşa, Physiology, Istanbul, Turkey

Background: Fibromyalgia syndrome (FMS) is a chronic disease characterized by diffuse pain, fatigue, sleep disturbance, cognitive impairment, and other physical symptoms that adversely affect physical and sensory functions and impair quality of life. Nowadays, in the treatment of FMS, low intensity aerobic exercises and exercise programs combined with other treatment methods are recommended.

Objectives: The aim of this study was to evaluate the effects of aerobic and balance-proprioception exercises on the symptoms of Fibromyalgia (FMS) and the superiority of the two exercise models.

Methods: 51 female patients who adhere to the inclusion criteria were divided into two groups randomly. Aerobic Exercise Group (AEG; n=26) and Balance-Proprioceptive Exercise Group (BPEG; n=25) was applied to the exercise laboratory under the supervision of physiotherapist in Istanbul Medical Faculty, Department of Sports Medicine 3 days a week for 6 weeks. Before and after the program Pain (VAS), functional status (FIQ), postural stability (Biodex balance system), knee joint proprioception (Cybex isokinetic dynamometer) were evaluated. Cognitive status was assessed by Standardized Mini Mental State Examination (SMMSE) only before program.

Results: There wasn't statistically significant difference between demographic (age, weight, BMI etc.) and clinic (VAS, FIQ, Biodex, Cybex, SMMSE) features of the groups at the beginning ($p>0.05$). Parameters measured in both groups after exercise programs showed progress compared to initial levels ($p<0.05$). There aren't superiority between two exercise groups in terms of VAS, FIQ scores ($p>0.05$). Recovery is found to be superior at BPEG in balance parameters (eyes open overall stability index (EOOSI) and eyes open anteroposterior stability index (EOAPSI)) and some parameters that belongs to proprioception ($p<0.05$).

Conclusion: It is determined that aerobic exercise and balance-proprioception exercise programs at/in FMS are effective in positive way- methods for functionality, pain, proprioception and balance parameter recovery of the patients. Except EOOSI and EOAPSI balance parameter values; according to other parameters it is found that aerobic exercise and balance-proprioception exercises are equal to each other. It is found out that balance-proprioception exercises are superior to aerobic exercises for improving EOOSI and EOAPSI. It is revealed that balance proprioception exercises are more effective for curing proprioception. It is observed that patients with FMS had deterioration in cognitive functions.

REFERENCES

- [1] Duruturk N, Tuzun EH, Culhaoglu B. Is balance exercise training as effective as aerobic exercise training in fibromyalgia syndrome? *Rheumatology international*. 2015;35(5):845-54.
- [2] Kibar S, Yıldız HE, Ay S, Evcik D, Ergin ES. New approach in fibromyalgia exercise program: a preliminary study regarding the effectiveness of balance training. *Archives of physical medicine and rehabilitation*. 2015;96(9):1576-82.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5682

AB1379B-HPR PATIENT SATISFACTION IS HIGH IN PATIENTS TRAINED TO SELF-INJECT WITH A BUTTON FREE AUTO-INJECTION USING VIDEO TRAINING

Dawn Homer. Modality Partnership Community Rheumatology Service, Enki Medical Practice, Birmingham, United Kingdom

Background: Once-weekly subcutaneous injection of methotrexate can optimize long-term treatment of rheumatic diseases such as rheumatoid arthritis.¹ However, available self-injection devices vary in terms of ease of use and level of operational dexterity required.

Objectives: This pilot study compared patient satisfaction with use of a methotrexate pre-filled, button-free, auto-injector pen (Nordic Pharma, UK) for subcutaneous injection with previous use of a button-activated pen device following the option to self-train via video.

Methods: Patients with rheumatoid arthritis currently administering subcutaneous methotrexate using a button-activated pen device were invited to change to a button-free auto-injector by letter. They were given the option to self-train using an online video or receive one-to-one instruction from a rheumatology nurse. Initial follow-up took place immediately after the first injection; invitation to participate in a 10-minute telephone questionnaire to evaluate their experience of using their new device took place after 3-4 weeks. Satisfaction with the device was assessed overall and according to 7 specific autoinjector attributes: ease of injection; experience of injection; comfort in hand; use with dexterity issues or during flare-ups; confidence in full dose being given; convenience of storage and disposal; and portability.

Results: Thirty-three patients were invited to change to an auto-injector: 22 patients responded (response rate: 64.7%), 19 of which made the switch and completed the survey. 79% of patients overall were satisfied or very satisfied with administering methotrexate using the auto-injector; 85% of patients were equally or more satisfied with the use of an auto-injector pen compared to their previous device. Patients were equally or