test (P<0,001), Wall sit test (P=0.042), 15D QL (P=0.048) and Lequesne index (P=0.030). There were no significant changes in VAS pain level (P=0.651), FRT value (P=0.442) and Stanford HAQ-20 scale result (P=0.186).

Conclusion: Tai Chi can improve functional status and quality of life in people with OA and IA.

References:

[1] Rausch Osthoff AK, Niedermann K, Braun J, et al. 2018 EULAR recommendations for physical activity in people with inflammatory arthritis and osteoarthritis. Ann Rheum Dis. 2018;77(9):1251-1260.

AB1263 **THE EFFICACY OF PULMONARY REHABILITATION IN PATIENTS WITH ANKYLOSING SPONDYLITIS**

N. Sahin[1], N. Sarıoğlu[2], B. Görcan[1]. [1]*Balikesir University, Physical Medicine and Rehabilitation, Balikesir, Turkey*; [2]*Balikesir University, Chest Diseases, Balikesir, Turkey*

Background: Ankylosing spondylitis (AS) is a rheumatic disease that can cause a restrictive lung condition. Pulmonary rehabilitation increases lung capacity in patients with lung disease. In this study, we aimed to show increase in exercise capacity, decrease in dyspnea and change in quality of life with pulmonary rehabilitation in patients with AS.

Objectives: In this study, we included 20 AS patients of whom admitted to our outpatient clinic. At the beginning and end of the study, patients some findings such as SFT, FEV1 values, saturations, arterial blood pressures and heart rates were recorded separately. Also, BODE index results, 6-minute walk test (MWT) values, BORG dyspnea scores, Modified Medical Research Council (MMRC) dyspnea scales, Anxiety Stress Scales (ASS) were examined. Short Form-36 (SF-36) questionnaires were filled out.

Methods: Patients underwent rehabilitation for 8 weeks, two days in a week at hospital and one day at home. According to their exercise tolerances in rehabilitation, patients were given upper and lower limb endurance training, strength training, flexibility and stretching exercises, balance exercises, inspiratory muscles training.

Results: In our study, patients with AS showed significant improvement in MMRC, borg dyspnea scales and 6 MWT at the end of rehabilitation compared to beginning of rehabilitation (p<0.05). It is shown that there was significant improvement in the values of PEF % and FVC%, when the difference averages before and after rehabilitation were compared (p < 0.05) but there was no difference in FEV1 %, FEV1/FVC values (p > 0.05). There was also significant improvement in BASDAI-BASFI values (P=0.006, P=0.016, respectively). The bode index showed no significant difference (p > 0.05). There was significant improvement in anxiety on ASS. Only the mental parameter showed significant improvement when parameters evaluated by the SF-36 survey (p < 0.05). There was no significant difference in the rest of all parameters (p>0.05).

		Before treatment n=20 (Mean ±SD)	After treatment n=20(Mean ±SD)	p*
FVC		84,35±13,92	86,40±13,42	,007
FEV1		84,50±13,03	85,30±11,13	,431
FEV1_FVC		105,30±9,57	85,30±11,13	,837
PEF		64,80±17,14	67,60±16,65	,003
6-Minute Walk Test		415,5500±124,88625	439,900±122,364	,000
MMRC Dyspnea Scale		1,350±1,136	1,150±,87509	,046
BORG Dyspnea Score		2,400±1,273	1,650± 0,988	,000
BODE Index		,7500±1,86025	,700±1,688	,317
BASDAI		3,622±1,837	3,140±1,392	,006
BASFI		4,350±1,692	6,065±8,638	,016
ASS		9,00±5,036	7,050±3,034	,006
SF36	General Health	47,000±15,165	49,125±14,171	,485
	Energy	47,000±20,026	52,000±18,020	,120
	SocialFunctioning	55,000±22,725	58,875±18,217	,129
	Role limitations due to emotional problems	47,765±46,185	64,515±36,463	,117
	Mental	52,450±19,527	62,800±17,572	,041

Conclusion: After pulmonary rehabilitation in patients with AS dyspnea symptoms decreased. As a result of this study, it is thought that pulmonary rehabilitation applied to patients with AS can minimize the adverse effects of the disease over the respiratory system.

Key words; pulmonary rehabilitation, ankylosing spondylitis, respiratory function test

References:

[1] Zão A, Cantista P.The role of land and aquatic exercise in ankylosing spondylitis: a systematic review. Rheumatol Int. 2017; 37: 1979-1990.

[2] Fuschillo S, De Felice A, Martucci M et al. Pulmonary Rehabilitation Improves Exercise Capacity in Subjects with Kyphoscoliosis and Severe Respiratory Impairment. Respir Care. 2015; 60(1): 96-101.

[3] Spruit MA, Pitta F, McAuley E et al. Pulmonary Rehabilitation and Physical Activity in Patients with Chronic Obstructive Pulmonary Disease. Am J Respir Crit Care Med. 2015; 15;192(8): 924-33.

[4] Drăgoi RG, Amaricai E, Drăgoi M et al. Inspiratory muscle training improves aerobic capacity and pulmonary function in patients with ankylosing spondylitis: A randomized controlled study. Clin Rehabil. 2016; 30(4):340-346.

AB1264 **THE EFFECTIVENESS OF KINESIOTHERAPY FOR PAIN SHOULDER SYNDROME**

O. Tikhoplav[1], E. Guryanova[1,2], O. Moskovskaya[1], A. Moskovskij[1]. [1]*Chuvash State University, Cheboksary, Russian Federation*; [2]*Institute for Advanced Medical Studies, Cheboksary, Russian Federation*

Background: Pain shoulder syndrome is one of the most common conditions that is inherent in patients with various diseases and conditions. This problem is faced by both patients of a rheumatological profile (rheumatoid arthritis), and patients of other profiles: neurological (stroke, hernia of the cervical spine), traumatological (periarthritis). The regular use of painkillers and NSAID is associated with a risk of serious adverse reactions in patients.

PNF therapy can have a fairly quick positive effect. Kinesiotaping is a common and easily accessible treatment method that, due to the inclusion of local neuromuscular adaptation mechanisms, can have an analgesic effect.

Objectives: The purpose of the study is to compare the effectiveness of traditional treatment methods in combination.

Methods: Patients with pain shoulder syndrome who were admitted to the doctor of physical and rehabilitation medicine were randomly assigned to one of three groups: group G1 - 20 patients who received combined treatment, including massage, acupuncture, PNF, kinesiotherapy.

Patients of group G2 (20 people) who received massage and acupuncture sessions, kinesiotherapy, but did not deal with PNF.

Patients in group G3 (20 people) received massage, acupuncture, and PNF, excluding kinesiotaping.

All patients received treatment 5 times a week (Monday to Friday, excluding Saturday and Sunday), the total duration of the rehabilitation course is 20 days. The program included: 30 minutes an acupuncture session, 20 minutes massage, 45 minutes physical exercises with a physical therapist. Classes using the PNF technique were carried out separately every other day for 45 minutes using the standard method for shoulder pain.

VAS was used to monitor efficacy. Pain was assessed at the beginning of the study, with the third, sixth, ninth and last visit to the clinic.

Results: The age composition of the patient group is from 31 to 70 years. The gender composition is 35 (58.33%) women, and 25 (41.67%) men.

The average time between the onset of clinical symptoms and the first treatment session was 47.3 days. In 90% of patients, a history of pain lasted from 6 weeks or more. 52 patients (86.67%) completed the treatment completely. Of these, G1 is 19 people (90% of this group), 16 (80%) in G2, and 17 of 20 in the G3 group (85%).

The average VAS score in G1 was 5.15 at the start of the study, and after the tenth session, it dropped to 2.78. A significant decrease in pain is also observed in the G2 group (from 5.17 at the beginning of the study to 3.19 after the tenth session). The G3 group in terms of pain reduction almost equaled the G1 group, where the level of pain from 5.16 decreased to 2.71.

Patients within 6 months after treatment evaluated the level of pain on their own and reported the data to the doctor. In patients of group G1, after 6 months, the average VAS score is 3.71. G3 patients after 6 months, the VAS score is 4.25 points. Patients of the G2 group at 3 months noted a return of the pain syndrome, after 3 months, the VAS score was 5.11.