

AB1382-HPR **COMPARISON OF EFFICACY OF DIFFERENT REHABILITATION APPROACHES IN INDIVIDUALS WITH KNEE OSTEOARTHRITIS**

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Background: Osteoarthritis (OA) is the most common rheumatologic disease in the world, resulting primarily in progressive cartilage destruction. OA-induced changes are the main cause of disability and are mostly seen in the knee joint.

Objectives: To investigate the effects of different rehabilitation practices on the range of motion, muscle strength, pain, physical function and quality of life in patients with knee OA.

Methods: Thirty patients between the ages of 40-65 with knee OA were included in the study and divided into 3 groups. Transcutaneous Electrical Nerve Stimulation (TENS), ultrasound, hotpack/coldpack and home exercise program were given to the 1. group (n=10) for 15 days. 2. group (n=10) received three doses of Platelet-Rich Plasma (PRP) followed by home exercise program for 15 days. The control group (n=10) received only home exercise program for 15 days. All individuals were evaluated using 'Goniometer' for Range of Motion (ROM), 'Manual Muscle Test' for M. Quadriceps femoris muscle strength, 'Visual Analogue Scale' for pain, 'The Western Ontario and McMaster Universities Arthritis (WOMAC) Scale' for physical function and 'Short Form-12 Quality of Life Scale Mental (SF-12 - MC) and Physical Component (SF-12 - PC)' for quality of life at baseline and end of treatment.

Abstract AB1382HPR Table 1. Results before and after treatment

		1. Group			2. Group			Control Group		
		Pre Treatment	Post Treatment	R [*]	Pre Treatment	Post Treatment	R [*]	Pre Treatment	Post Treatment	R [*]
		Ave±SD	Ave±SD		Ave±SD	Ave±SD		Ave±SD	Ave±SD	
Quadriceps Femoris Muscle Strength	Right	4,50±0,52	4,55±0,49	0,317	4,30±0,53	4,45±0,55	0,083	4,45±0,36	4,60±0,45	0,083
	Left	4,35±0,62	4,40±0,61	0,317	4,35±0,52	4,45±0,55	0,157	4,50±0,52	4,60±0,39	0,157
Knee ROM	Right	91,5±28,5	98,0±26,4	0,042	99,0±10,7	101±9,06	0,046	111±9,73	113±8,23	0,083
	Left	94,0±24,0	105±10,9	0,026	94,0±13,2	97,5±13,5	0,038	106±14,3	109±13,6	0,063
VAS	Resting	3,00±2,53	1,40±2,06	0,067	1,50±3,17	0,80±1,75	0,180	1,00±1,05	0,40±0,69	0,034
	Activity	6,50±3,27	2,00±2,35	0,007	4,90±3,34	2,30±2,62	0,007	2,80±2,14	1,00±1,33	0,011
WOMAC		56,3±12,2	37,8±16,5	0,007	45,9±21,2	39,1±20,0	0,005	35,2±12,1	28,1±13,5	0,009
SF-12	PC	33,4±10,6	37,0±10,8	0,139	40,8±5,99	40,9±6,99	0,333	41,2±6,48	47,1±10,1	0,037
	MC	48,5±10,4	58,1±14,4	0,022	37,1±11,4	46,0±15,9	0,028	48,6±12,5	49,8±11,2	0,799

Abstract AB1382HPR Table 2. Comparison of pre- and post-treatment measurement results between groups

		Pre-Treatment				Post-Treatment				Between Groups
		1.Group n=10	2.Group n=10	Control Group n=10	R [*]	1.Group n=10	2.Group n=10	Control Group n=10	R [*]	
		Ave±SD	Ave±SD	Ave±SD		Ave±SD	Ave±SD	Ave±SD		
Quadriceps Femoris Muscle Strength	Right	4,50±0,52	4,30±0,53	4,45±0,36	,652	4,55±0,49	4,45±0,55	4,60±0,45	0,487	
	Left	4,35±0,62	4,35±0,52	4,40±0,52	,775	4,40±0,61	4,45±0,55	4,60±0,39	0,793	
Knee ROM	Right	91,5±28,5	99,0±10,7	111±6,73	,038	98,0±26,4	101±9,06	113±8,23	0,322	
	Left	94,0±24,0	94,0±13,2	106±14,3	,119	105±10,9	97,5±13,5	109±13,6	0,375	
VAS	Resting	3,00±2,53	1,50±3,17	1,00±1,05	,061	1,40±2,06	0,80±1,75	0,40±0,69	0,175	
	Activity	6,50±3,27	4,90±3,34	2,80±2,14	,037	2,00±2,35	2,30±2,62	1,00±1,33	0,031	
WOMAC			40,8±5,99	41,2±6,48	,113	37,0±10,8	40,9±6,99	47,1±10,1	0,013	
SF-12	PC	56,3±12,2	45,9±21,2	35,2±12,1	,007	37,8±16,5	39,1±20,0	28,1±13,5	0,173	
	MC	48,5±10,4	37,1±11,4	48,6±12,5	,059	58,1±14,4	46,0±15,9	49,8±11,2	0,107	

Results: Statistically significant difference was found at pain and WOMAC score at the time of activity in all groups (Table 1). Statistically significant

difference was found at ROM and SF-12 MC score in group 1 and 2; at resting pain and SF-12 PC score in control group (p <0.05) (Table 2). **Conclusion:** In addition to electrotherapy treatment and PRP in knee OA treatment, it is thought that home exercise program can be used to relieve symptoms and improve quality of life in knee OA.

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AB1383-HPR **THE VALIDITY AND RELIABILITY OF UNSUPPORTED UPPER LIMB EXERCISE TEST IN INDIVIDUALS WITH RHEUMATOID ARTHRITIS**

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Background: Rheumatoid arthritis (RA) is a systemic, inflammatory disease that causes pain, joint destruction and disability. RA affects the function of the hand and upper extremities; function deteriorates as the disease progresses and affects independence. Unsupported upper-limb exercise (UULEX) test was developed to evaluate upper extremity function and endurance in individuals with Chronic Obstructive Pulmonary Disease. It is suggested that this test can be used in other clinical cases with arm disabilities.

Objectives: The aim of this study was to examine whether the UULEX Test is valid and reliable in individuals with RA.

Methods: 71 individuals with RA (15 male, 56 female) with an average age of 52.15 10.11 were included in the study. The Intraclass Correlation Coefficient (ICC) was used to assess the reliability of the UULEX test. Each individual was assessed by one physiotherapists in two different sessions, a week apart. The correlations of the UULEX test with Disabilities Arm, Shoulder and Hand (DASH), Health Assessment Questionnaire (HAQ), 30 sec Push Up Test and 6 Peg Board Ring Test were assessed for concurrent validity.

Results: Intrarater reliability of final level, final weight, duration of the UULEX Test were determined to be excellent (ICC= 0.922, 0.960, 0.958). A moderate to excellent correlation was found between UULEX Test and DASH, HAQ, 30 sec Push Up Test and 6 Peg Board Ring Test (p<0.05).

Conclusion: The results of this study showed that the UULEX test is a valid and reliable method in the assessment of upper extremity endurance in individuals with RA.

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