

Effects of Kinesio Taping® on Pain and Function in Patients with Fibromyalgia Syndrome

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Background

Fibromyalgia syndrome (FMS) is a form of non-articular rheumatism characterized by long term (>3 months) and widespread musculoskeletal pain, morning stiffness, and pressure hyperalgesia at characteristic sites, called soft tissue tender points. It is often associated with symptoms like pain, reduced muscle strength, fatigue, sleep disturbance and psychological disturbances (e.g. depression).

Objectives

The purpose of this study was to investigate the effects of kinesioTaping® on pain and function in fibromyalgia syndrome.

Methods

- Forty-five subjects diagnosed with FMS randomly allocated into 3 groups (n=15 for each group) in this study.
- Laser and exercise program applied to the first group, placebo laser and exercise program applied to the second group and Kinesio Taping®, placebo laser and exercise program applied to the third group.
- Treatment program lasted for 15 sessions (5 days a week for 3 weeks).
- In the evaluation; visual analogue scale (VAS) was used for pain intensity at night, rest and activity, Fibromyalgia Impact Questionnaire (FIQ) was used for impairment and Beck depression scale was used for the evaluation of depression.

References

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Results

According to the statistical analysis, significant differences were found at rest and night pain in group 2 and 3, significant difference was found in group 1 in activity pain ($p < 0,05$). In FIQ significant differences were found in all groups after the treatment ($p < 0,05$). In Beck depression scale significant differences were found in groups 1 and 3 ($p < 0,05$).

Table 1. Statistical analysis

	GROUP 1			GROUP 2			GROUP 3			F	p
	X±SD	t	p	X±SD	t	p	X±SD	t	p		
Rest											
Pre	4,3±2,5	-0,989	0,654	4,4±2,6	-0,764	0,765	4,5±2,7	-0,378	0,567	0,149	0,64
Post	2,6±1,3			2,9±2			3,2±2,1				
Activity											
Pre	5,4±1,9	-1,675	0,023*	5,9±3,3	-0,884	0,897	7,7±1,9	-1,543	0,987	0,143	0,89
Post	1,4±0,4			2,8±1,8			3,7±2,6				
Night											
Pre	6±3	-2,306	0,987	6,4±2,2	-0,366	0,789	7±2,6	-0,852	0,743	0,109	0,79
Post	1,8±0,7			2,8±2,2			2,6±1,5				
FIQ											
Pre	66,8±9,1	7,6	0,00*	56,3±19,6	4,666	0,00*	54,7±16,8	4,077	0,01*	1,897	0,163
Post	41,2±17,8			40,1±17,9			37,1±12,2				
Beck Depression											
Pre	21,5±8,53	4,1	0,001*	14±8,21	1,674	0,116	14,7±9,19	2,905	0,012*	0,448	0,642
Post	15,5±8,35			11,6±7,94			11,8±9,05				

*P<0,05, statistically difference

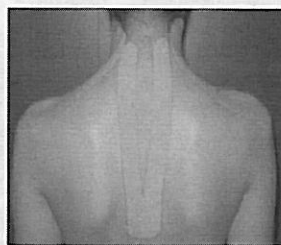


Figure 1. Kinesiotaping method

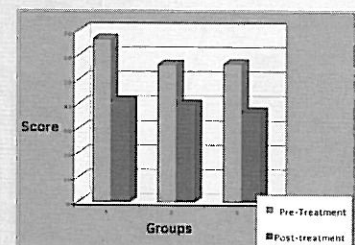


Figure 2. Functional analysis (FIQ)

Conclusion

As a result, KinesioTaping® and exercise program improved pain and function, and decreased depression level in patients with FMS and can be recommended as an alternative method of treatment in fibromyalgia.