

REFERENCES:

- [1] Cools AM, Struyf F, De Mey K, Maenhout A, Castelein B, Cagnie B. Rehabilitation of scapular dyskinesis: from the office worker to the elite overhead athlete. *British journal of sports medicine*. 2013; 48:675–676.
- [2] Williams JJ, Holleman JD, Simel D. Measuring shoulder function with the Shoulder Pain and Disability Index. *The Journal of rheumatology*. 1995; 22 (4):727–732.

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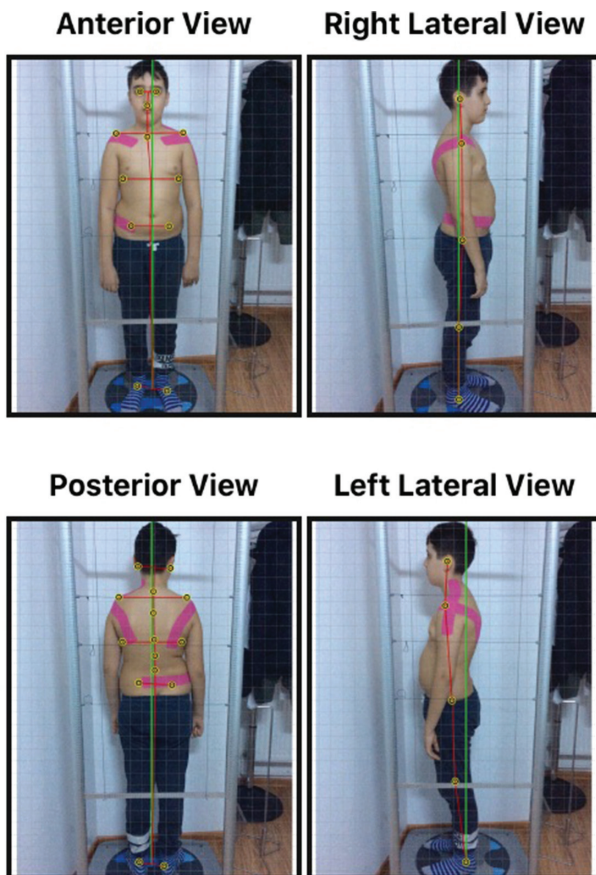
AB1429-HPR KINESIOTAPING MIGHT HELP TO IMPROVE POSTURAL DISPLACEMENTS IN ADOLESCENTS

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Background: The optimal posture plays an important role for preventing musculoskeletal problems. The therapeutic effects of kinesiotaping have been shown in forward head posture and rounded shoulder posture in adults previously.^{1,2} However, as to our knowledge, the effect of kinesiotaping on total posture has not been evaluated before in adolescents.

Objectives: To investigate the effect of kinesiotaping application on total posture in adolescents.

Methods: Twenty children (11 M/9 F) with postural displacements were enrolled in the study. The postural displacements were evaluated with a mobile application (PostureScreen) which was validated for postural assessment previously. The total scores which were obtained from the anterior view was used for the analysis. Assessments were performed at baseline and 45 min following the kinesiotaping application. The kinesiotaping application was performed as seen in Figure 1.



Abstract AB1429-HPR – Figure 1

Results: The median age was 12.5 years (IQR: 11.0/15.0 years), the median height was 145.5 cm (IQR: 142.5/166.5 cm) and the median

weight was 38.0 kg (IQR: 33.5/51.0 kg). A significant improvement was observed in anterior angulation degrees. While the baseline score was 8.70° (IQR: 4.10°/14.55°), the score improved following kinesiotaping application to 4.35° (IQR:2.35°/6.30°) (p=0.009). No significant changes were detected in anterior translation, lateral translation and lateral angulation parameters (p>0.05).

Conclusions: According to our results kinesiotaping has a potential to improve postural displacements in adolescents. The improvement in the posture might be resulted from a sustained feedback on the trunk by the kinesiotaping. However, future longitudinal studies which are mainly focused on the chronic effect of kinesiotaping are needed to reveal the real potential of kinesiotaping on the postural displacements in adolescents.

REFERENCES:

- [1] Shih HS, Chen SS, Cheng SC, Chang HW, Wu PR, Yang JS, Lee YS, Tsou JY. Effects of Kinesio taping and exercise on forward head posture. *J Back Musculoskelet Rehabil* 2017;30:725–33.
- [2] Gak HB, Lee JH, Kim HD. Efficacy of kinesiology taping for recovery of dominant upper back pain in female sedentary worker having a rounded shoulder posture. *Technol Health Care* 2013;21:607–12.

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AB1430-HPR EFFECTIVENESS OF FUNCTIONAL RIGID TAPING ON PAIN, FUNCTION AND KINESIOPHOBIA IN PATIENTS WITH LOW BACK PAIN

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Background: A small number of studies in the literature suggest that rigid bands applied with different techniques in different regions are effective treatment techniques. On the other hand, there is no study of how rigid bands are effective in the treatment of acute and subacute lumbar pain.

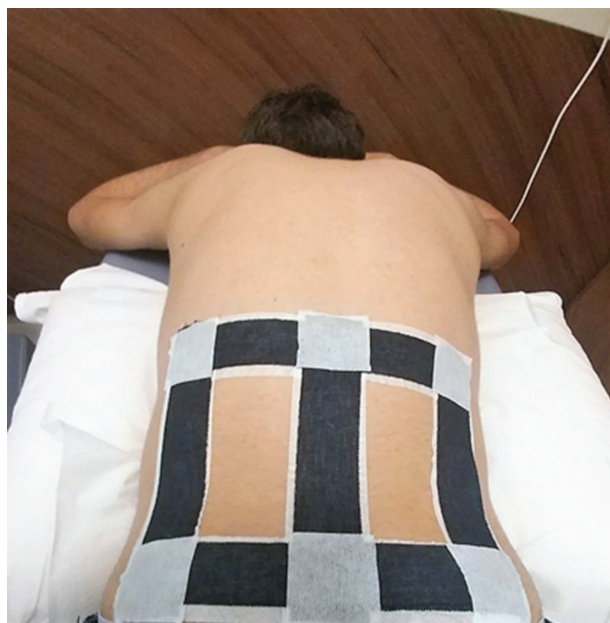
Objectives: Purpose of this study is to determine the efficiency of functional tape application to patients with acute or subacute low back pain.

Methods: 40 patients with acute-subacute low back pain were divided into two groups: control and experimental group. To control group, McKenzie exercises, Transcutaneous Electrical Nerve Stimulation (TENS), Hot Pack (HP) and pulsed ultrasound treatments were applied. To experimental group, functional taping were applied in addition of these treatments. Range of Motion (ROM), Visual Analogue Scale (VAS), Tampa Scale of Kinesiophobia (TSK) and The Oswestry Disability Index (ODI) were evaluated pre- and post-treatment and datas were analysed with statistical methods. In analysis; p value was accepted p<0,05 for t test and Mann Whitney U test process.

Results: In the measurements that compared the improvement of both groups, based on pre- and post-treatment evaluations; improvement in the experimental group was significantly higher in all of these parameters of ROM, VAS, TSK and ODI than in the control group (p<0,05).

Abstract AB1430-HPR – Table 1

Difference	N	D ±	SD	U	p
Lumbar flexion angle	control 20	10,70 ±	4,18	346,50	0,000*
	intervention 20	20,30 ±	7,25		
Lumbar extantion angle	control 20	2,25 ±	1,65	282,50	0,024*
	intervention 20	3,95 ±	2,42		
VAS-rest	control 20	-1,86 ±	1,53	109,50	0,014*
	intervention 20	-3,37 ±	2,26		
VAS mobility	control 20	-1,87 ±	1,10	48,00	0,000*
	intervention 20	-3,87 ±	1,47		
TSK	control 20	-5,55 ±	3,95	46,00	0,000*
	intervention 20	-14,25 ±	5,89		
ODI	control 20	-18,07 ±	10,63	69,00	0,000*
	intervention 20	-30,89 ±	16,51		



Abstract AB1430-HPR – Figure 1

Conclusions: The use of functional rigid taping in patients with acute and subacute low back pain provided a statistically significant improvement in all measured values of patients and provide better results than the control group. However, there is a need for comparative new studies in order to measure the effectiveness of rigid taping in a more accurate way.

REFERENCES:

- [1] Faqih A, et al. Effect of rigid taping on pain angait parameters in knee osteoarthritis", *International Journal of Cur Research Review*, 2015, 7(1), January; 24–27.
- [2] Polakowski EG. *Systematic review of musculoskeletal taping methods*. University Of Pittsburgh, School of Health and Rehabilitation Sciences Bachelors of Philosophy; 2015

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AB1431-HPR DEVELOPING AN EVIDENCE-BASED GROUP PROGRAMME FOR OCCUPATIONAL THERAPY MANAGEMENT OF OSTEOARTHRITIS

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Background: Patients with Hand OA form a significant proportion of Rheumatology referrals to Occupational Therapy. Occupational Therapy (OT) interventions for patients with Hand OA can reduce hand pain, and improve grip strength, hand function and quality of life. Under-resourcing of staff can mean that patients with Hand OA are waiting a long time for OT intervention. Providing OT interventions in a group setting for patients with arthritis has been used in Ireland and the UK with good results.

Objectives: To review the process of developing and piloting a group-based Occupational Therapy programme for patients with Hand Osteoarthritis. The programme would include self-management education, splinting and a hand exercise programme.

Methods: The group programme was developed and piloted with 4 different patient groups between December 2016 and September 2017. The programme was delivered by two OTs and one OT Assistant, with between 3 and 9 patients per group. Outcome measures were taken at week 1 and at the end of the programme, week 13.

Results: Initial results are very positive, with the majority of patients who attended the group sessions showing improved grip strength, reduced hand pain, better hand function and they also reported increased confidence of how to manage their arthritis.

Conclusions: The development and commencement of a pilot group programme for OT management of Hand OA in Our Lady's Hospital, Navan, Ireland, has provided effective intervention, and also provides patient access to therapy in a more timely manner.

REFERENCES:

- [1] Dzedzic K, et al. Self-Management approaches for osteoarthritis in the hand: a 2 × 2 factorial randomized trial. *Ann Rheum Dis* 2015, 74 (1), 108–18
- [2] Hennig T, et al. Effect of home-based hand exercises in women with hand osteoarthritis: a randomised controlled trial. *Ann Rheum Dis* 2015, 74 (8), 1501–8
- [3] Zhang W, et al. EULAR evidence based recommendations for the management of hand osteoarthritis: Report of a Task Force of the EULAR Standing Committee for International Clinical Studies Including Therapies (ESCSIT). *Ann Rheum Dis* 2007, 66, 377–388
- [4] Ye L, et al. Effects of rehabilitative interventions on pain, function and physical impairments in people with hand osteoarthritis. *Arthritis Research & Therapy* 2011, 13 (1)

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AB1432-HPR MINDFULNESS-BASED STRESS REDUCTION (MBSR) PROTOCOL APPLIED TO SYSTEMIC SCLEROSIS (SSC) PATIENTS: A PILOT INTERVENTIONAL STUDY FOCUSED ON NURSING ASSESSMENT AND PERCEIVED STRESS

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Background: MBSR is a protocol, developed by John Kabat-Zinn, which fosters awareness by focusing on the present experience. Basing on scientific evidences, the numerous benefits of MBSR on diseases symptoms have been widely demonstrated.¹⁻² No studies have used MBSR on SSC. SSC is characterised by skin and systemic involvement: patients may complain for pain, psychological distress, concerns about disfigurement and reduced self-esteem.³ Thus, nurse's role is pivotal not only in improving SSC patients global health and quality of life (QoL) but also in ameliorating their self-management strategies.

Objectives: to assess the effect of MBSR protocol on sleep quality, QoL and perceived stress in SSC.

Methods: 28 SSC patients were enrolled and randomly assigned to experimental group or to control group, and were assessed at baseline and after 8 weeks of MBSR program for the experimental group compared to the control group. The following clinimetric outcomes were measured: QoL with SF-36, sleep quality with a NRS (0–10 range) and Likert scale on night awakenings, perceived stress scale (PSS) and Likert Scale on the way they cope with the stress. Data are presented as differences of Mean and Percentage (%), between and within the groups.

Results: QoL presented an improvement for Mental Index Subscale for the experimental group (44.3 to 49.06) while the control group did not show any modification (40.73–40.75). For the impact of sleep quality, MBSR obtained an improvement from 53.3% at baseline to 26.7% at the end of the study: these patients still felt a bad sleep quality but were from far better in respect to controls that did not show any change. In MBSR group night awakenings were reduced from 73% to 60%, while in the control group were increased from 54% to 67%. Satisfaction of sleep quality was slightly improved in MBSR group (6.8 to 7.6) while controls did not experience any change (5.25 to 5.45). MBSR patients at baseline classified stress as a "high" health problem (53%) while after MBSR training only 20% kept the same answer.

Conclusions: MBSR program, applied for the first time to SSC patients, showed a very good tolerability and a positive impact on aspects of life like sleep quality, stress perception and self-management strategies. The present study has limitations, nevertheless this is the first time that an alternative approach, such as MBSR, is used. Obviously, MBSR is a supportive approach which can provide to patients a self-management strategy against stress and disease perceptions and in the future it can be integrated to pharmacological therapy and clinical rehabilitation.