



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 (ESCISIT). *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.

REFERENCES:

- [1] Kabat-Zinn J. Mindfulness-Based Interventions in Context: Past, Present, and Future. *Clinical Psychology: Science and Practice*, 10(2): 144–156, 2003
- [2] Grossman, P, Niemann, L, Schmidt, S, et al.(2004) Mindfulness-Based Stress Reduction and health benefits. A meta-analysis. *Journal of Psychosomatic Research*, 57, 35–43
- [3] Alhajeri H, Hudson M, Fritzier M, et al. 2013 American College of Rheumatology/European League against rheumatism classification criteria for systemic sclerosis outperform the 1980 criteria: data from the Canadian Scleroderma Research Group. *Arthritis Care Res (Hoboken)* 2015; 67: 582–587

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AB1433-HPR IMPROVING NURSING CARE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic Lupus Erythematosus (SLE) is a systemic inflammatory autoimmune disease with a heterogeneous presentation in which almost every organ can be affected¹. SLE patients experience a lower health-related quality of life, due to variation of disease severity over time, arthritis, arthralgia, skin abnormalities, myalgia and general fatigue². The treatment and support of patients with SLE is carried out by a multi-disciplinary team, composed of rheumatologists, clinical immunologists, nurse practitioners and rheumatology nurses. Although nurses have a major task concerning providing information, support, and education in SLE care³, little is known about how patients experience nursing care and what needs and expectations they have.

Objectives: To investigate the patients' needs for nursing support in order to optimise and standardise nursing care in a SLE clinical pathway.

Methods: To identify specific factors regarding nursing care for SLE patients, a literature search was performed. Subsequently, semi-structured interviews were held among patients with SLE from the department Rheumatology and Clinical Immunology of the University Medical Centre Utrecht (tertiary care referral centre with approx. 300 SLE pts/year). The interviews focused on patients' needs, quality of life and nursing care. The questions regarding quality of life were partially derived of the SLE QoL Questionnaire⁴ and focused on; daily-, social- or occupational activities, symptoms, medical treatment, and negative emotions. Interviews were recorded, transcribed and analysed with thematic analysis by the researchers and patient partners.

Results: Several tools to explore individual needs among patients with SLE, such as the Dutch version of the Educational Needs Assessment Tool (D-ENAT), were identified⁵. Eight SLE patients were interviewed (female n=6, average age 37.5 years). All were using a DMARD and/or biological. Patients indicated a need for help with problems in daily life, information regarding SLE, peer support, and psychosocial help. Pain and fatigue were the most commonly reported symptoms. Most patients saw their nurse on an irregular basis. They appreciated the accessibility, accuracy, clarity, and patience of nurses.

Conclusions: There is a need for individualised nursing support in dealing with SLE. To assess individual needs among patients, a needs assessment tool could be used. Further research on the usefulness and effectiveness of a needs assessment tool in daily clinical practice is needed.

REFERENCES:

- [1] Rahman A, Isenberg DA. (2008) Systemic lupus erythematosus. *N Engl J Med*. 358(9):929–39.
- [2] Morgan C, Bland AR, Maker C, Dunnage J, Bruce IN. (2018) Individuals living with lupus: findings from the LUPUS UK Members Survey 2014. *Lupus*, 0,1–7.
- [3] Ferenkeh-Koroma A. (2012) Systemic Lupus Erythematosus: nurse and patient education. *Nursing Standard*. 50–59.
- [4] Leong KP, Kong KO, Thong B, Koh E, Lian T, et al. (2005) Development and preliminary validation of a systemic lupus erythematosus-specific quality-of-life instrument (SLEQOL). *Rheumatology*, 1267–1276.
- [5] Zirkzee EJM, Ndosi ME, Vliet Vlieland TPM, Meesters JLL. (2014) Measuring educational needs among patients with systemic lupus erythematosus (SLE) using the Dutch version of the Educational Needs Assessment Tool (D-ENAT). *Lupus*, 23,1370–1376.

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AB1434-HPR EFFECTS OF CORE STABILITY EXERCISES ON GRIP STRENGTH AND MANUAL DEXTERITY IN PATIENTS WITH CHRONIC NECK PAIN

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Background: It is known that chronic neck pain causes sensorimotor disturbances. A reduction occurs in upper extremity functions due to pain and sensorimotor disturbances in chronic neck pain patients. Core stability exercises were thought to be effective in order to improve stability and muscular strength. However, there is insufficient information on whether core stability training improve grip strength and/or manual dexterity in chronic neck pain patients.

Objectives: The aim of this study was to investigate the effect of core stability exercises on grip strength and manual dexterity in patients with chronic neck pain.

Methods: Thirty-six patients with chronic neck pain were enrolled. Grip strength and manual dexterity were evaluated by hand held dynamometer and Nine Hole Peg Test, respectively. Patients were randomly divided into supervised core stability exercise and home exercise group. Patients underwent twelve-week exercise training. All assessments were repeated at the 12th week.

Results: Grip strength and manual dexterity were significantly increased in both groups (p<0.05). While both treatment methods had positive effects on grip strength and manual dexterity, core stability exercises were found to be more effective than home exercises to improve grip strength (p<0.05) and manual dexterity (p=0.003 for right side, p=0.008 for left side).

Conclusions: Core stability exercises were more effective than home exercises to improve manual dexterity and grip strength. Core stability training should be added to rehabilitation approaches in order to enhance upper extremity functions in patients with chronic neck pain.

REFERENCES:

- [1] Comparative effectiveness of Pilates and yoga group exercise interventions for chronic mechanical neck pain: quasi-randomised parallel controlled study. Dunleavy K, Kava K, Goldberg A, Malek MH, Talley SA, Tutag-Lehr V, Hildreth J. *Physiotherapy*. 2016 Sep;102(3):236–42. doi: 10.1016/j.physio.2015.06.002. Epub 2015 Aug 13.
- [2] The effectiveness of a 6-week Pilates programme on outcome measures in a population of chronic neck pain patients: a pilot study. Mallin G, Murphy S. *J Bodyw Mov Ther*. 2013 Jul;17(3):376–84

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AB1435-HPR EFFECTS OF FLAT CUSHIONING INSOLE ON GAIT PARAMETERS OF INDIVIDUALS WITH CHRONIC IDIOPATHIC NECK PAIN

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Background: Shock waves caused by ground reaction force dissipate through the body during walking, which brings about dynamic loading on bones and soft tissues. It was showed that individuals with neck pain walk with a stiffer spine due to protective movement strategy against pain. Degenerative changes, pain and increased stiffness decrease the shock absorption capacity of the spine and cause an increase in dynamic loading affecting the spine. It was known that chronic idiopathic neck pain (CINP) causes alternations in gait parameters, but it is still unclear if using flat cushioning insole affects gait parameters in individuals with CINP.

Objectives: The aim of the study was to investigate the effects of flat cushioning insole on neck pain during walking and gait parameters in individuals with CINP.

Methods: Twenty-one individuals with CINP (15 female – 6 male, mean age: 35,67±12,64) and 21 healthy controls (15 female – 6 male, mean age: 35,33±12,51) recruited into this study. Assessment of gait