REFERENCES:


Acknowledgements: NIL

Disclosure of Interests: None Declared.

DOI: 10.1136/annrheumdis-2023-eular.1634

AB1777-HPR INVESTIGATION OF THE EFFECT OF HAND EXERCISES ON GRIP STRENGTH, FUNCTIONALITY, DISEASE ACTIVITY AND QUALITY OF LIFE IN INDIVIDUALS WITH PSORIATIC ARTHRITIS: A RANDOMIZED CONTROLLED TRIAL

Keywords: Randomized control trial, Psoriatic arthritis, Physical therapy / Physiotherapy

S. Yardım1, S. Y. Cetin1, A. Ayan1. 1Akdeniz University, Physiotherapy and Rehabilitation, Antalya, Turkey; 2Health Sciences University, Division of Rheumatology, Antalya, Turkey

Background: Psoriatic arthritis (PsA) is a chronic inflammatory musculoskeletal disease accompanied by psoriasis in the spondyloarthritis group and often progresses with peripheral arthritis, dactylitis, enthesitis and spondylitis [1]. Majority of PsA patients have peripheral arthritis involvement [2]. In addition to peripheral arthritis in PsA patients, structural damage occurs in the joints as the process is chronic and progressive. This structural damage causes worsening of the functional status of the patients [3]. Worsening functionality reduces patients’ quality of life. Also EULAR (Recent European League Against Rheumatism) recommends physical therapy in inflammatory arthritis including PsA [4]. It is known that individuals with PsA have lower hand strength, dexterity, coordination and functionality compared to their healthy peers [5]. There is no scientific study that applies a hand-focused home exercise program to improve the grip strength and functionality of the hand in individuals with PsA.

Objectives: The aim of this study was to examine the effect of hand exercises on grip strength, functionality, disease activity, and quality of life in patients with PsA.

Methods: 37 PsA patients (29female, 8 male) with an average age of 50.32± 9.12 were included in this study. Patients were randomized into intervention (group 1) and control (group 2) groups. Group 1 received hand home exercises for 4 days a week for 8 weeks. Group 2 was on the waiting-list and they received the same exercises when the study was finished. The Disease Activity Index for Psoriatic Arthritis (DAPSA) was used to evaluate the disease activity. Hand Dynamometer and pinchmeter was used to evaluate the hand grip and pinch strength. Duruoz Hand Index (DHI), Michigan Hand Outcomes Questionnaire (MHQ), Hand Functional Index (HFI), Nine Peg Hole Test (NPHT) were used to evaluate the hand functionality. Psoriatic Arthritis Quality of Life was used to evaluate the quality of life. All evaluations were performed at baseline and at the end of the 8th week.

Results: When the groups were compared before training, there was no significant difference (p > 0.05). In post-training comparisons, there was a significant difference in MHQ, hand grip and pinch strength in hand exercises group. (p:0.02-0.00). In addition, after post-training, hand exercises group was found to be superior in terms of MHQ and NPHT compared with control group.

Conclusion: According to this study, hand exercises have a positive effect on grip strength and functionality in patients with PsA. Hand exercises should be included in rehabilitation programs as a home exercise to improve grip strength, functionality and daily living activities for patients with PsA.

REFERENCES:


Disclosure of Interests: NIL


AB1779-HPR ASSESSING THE INTERNAL VALIDITY OF THE BSR PAIN MANAGEMENT FOR INFLAMMATORY ARTHRITIS QIP TOOL

Keywords: Patient reported outcomes, Inflammatory arthritis, Pain

A. Bhatti1, L. West1, N. Shenker1. 1University of Cambridge, School of Clinical Medicine, Rheumatology, Cambridge, United Kingdom

Background: Pain management is an important component of many Inflammatory Arthritis consultations. The BSR Pain Management for Inflammatory Arthritis Quality Improvement Tool uses 11 questions and 38 sub questions that assess three domains: background information (3 questions), pain management in the consultation (5 questions) and pain management in previous consultations (3 questions) [1]. The questions are based on the EULAR Guidelines for Pain Management in Inflammatory and Osteoarthritis [2]. The tool is free to use, produces results in real time in anonymised PDF form. The project is sponsored by Cambridge University Hospitals NHS Foundation Trust Audit Department (Number 2200).

Objectives: To assess the internal validity of the Pain Management for Inflammatory Arthritis Quality Improvement (QIP) tool 2020.

Methods: Two independent researchers (A & B) reviewed appointment/clinical notes from 33 patients who had attended Rheumatology appointments at Addenbrooke’s Hospital. 20 of these patients were found to experience pain during the consultation and the QIP tool questionnaire was used to assess their pain management. To assess the internal validity of the QIP tool; results from each reviewer were compared to generate a Cohen’s Kappa Score for each question.

Results: The overall Kappa Score for the QIP tool was 0.75, with 570 congruent results and 190 incongruent results. The congruence was found to be high across the majority of questions. 87/190 (46%) of the incongruent scores were from just 6/38 questions. The QIP tool questions can be modified to improve clarity. There was systematic bias in the questions with lower kappa scores (A answering “Yes” and B answering “No”).

Conclusion: The Pain Management for Inflammatory Arthritis QIP Tool has a high internal validity as shown by the Kappa scores generated by results from two independent reviewers. To overcome the low Kappa scores on individual questions; additional guidance on how to answer specific questions may need to be provided to those filling out the questionnaire.

REFERENCES:


Disclosure of Interests: NIL

DOI: 10.1136/annrheumdis-2023-eular.3138

AB1780-HPR FIBROMYALGIA PATIENTS’ EXPERIENCES AFTER ONE-WEEK SELF-MANAGEMENT PROGRAMME FOUR TO TEN MONTHS AFTER DISCHARGE: A QUALITATIVE STUDY

Keywords: Fibromyalgia, Qualitative research methods, Self-management

B. Hannes. 1 Norwegian University of Science and Technology, Faculty of Medicine and Health Sciences in Gjøvik, Gjøvik, Norway

Background: The European League Against Rheumatism (EULAR) emphasizes in its guidelines for the treatment of fibromyalgia (FM) that Health professional should aim to improve health-related quality of life, which often requires a combination of non-pharmacological and pharmaceutical treatment methods. Non-pharmacological approaches have been shown to be effective in this study, a multidisciplinary self-management programme (SMP) was used to treat patients with FM.

Objectives: To investigate and understand the experiences of individuals with FM who participated in an one-week SMP.

Methods: A qualitative study using semi-structured interviews was used to investigate the participants’ experiences. A total of 22 women and 2 men with
FM were interviewed 4 to 10 months after participating in a one-week SMP. The participants’ goals and action plans after the SMP were used together with an interview guide. All the interviews were audio-recorded, transcribed verbatim and analysed using thematic analysis. The large body of material is divided into three sub-studies. The first sub-study is presented here.

**Results:** The mean age of the participants was 54.7 years (range 32–68). The participants’ experiences were categorized into four main themes: recognition of the diagnosis, a turning point for a better life, changing one’s way of thinking and having control over one’s own life. Giving up the past was one description that the participants used as a way of changing their mindset. They could then focus more on the present and the future. To have control over their own lives, it became important to accept the opportunities and limitations they had in everyday life.

**Conclusion:** Four to ten months after completing the SMP, the participants in this study experienced that they were taken seriously with their FM diagnosis. The participants had attained a heightened awareness of what they could do to take control and manage their disease and daily life.

**Acknowledgements:** The author would like to thank all the informants who shared their experiences.

The study was supported by the Norwegian Fibromyalgia Association and the Norwegian Rheumatism Association.

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.6299

**AB1781-HPR**

**PERFORMANCE OF A NURSE-LED INTERVIEW FOR MALIGNANCY SCREENING AND ALERTING PHYSICIAN PROGRAM**

**Keywords:** Malignancy, Rheumatoid arthritis, Nursing

S. Tamaki1, S. Fukui2, M. Suda3, H. Tamaki4, M. Okada4. 1St.Luke’s International Hospital, Department of Nursing, Tokyo, Japan; 2Kyorin University Hospital, General and Emergency Medicine, Tokyo, Japan; 3Suwa Central Hospital, Department of Rheumatology, Nagano, Japan; 4St. Luke’s International Hospital, Immuno-Rheumatology Center, Tokyo, Japan

**Background:** Malignancy is one of the leading causes of death in patients with rheumatoid arthritis (RA). While there has been a debate about whether or not biological disease-modifying antirheumatic drugs (bDMARDs) increase cancer development in RA patients, these patients should be screened appropriately for their malignancies. However, there has been limited data about the method to increase malignancy screening.

**Objectives:** We implemented a nurse-led malignancy screening and alerting physician program into our daily clinical practice. The aim of this study is to evaluate the performance of this program.

**Methods:** Our program included patients with RA treated with intravenous biological DMARDs between September 2015 and October 2020. We first created a list of the required malignancy screening based on the patient’s gender and age (Figure 1). Nurses interviewed the patients during the administration of bDMARDs to assess if they were appropriately screened for malignancies as required and thereafter provided education about the importance of malignancy screening. Nurses recorded the patient’s malignancy screening status and alerted physicians by sharing the results if the patient needed additional screenings. This program was periodically repeated once a year. We assessed the difference in the proportions of completed per required screening between repeated assessment time points.

**Results:** A total of 154 patients were included in the analyses. The mean (standard deviation) age was 64.6 (13.2) at the first screening, and 113 (73.4%) were female. Ninety-three, forty-five, and fourteen patients underwent 2nd, 3rd, and 4th interviews, respectively. Repeating this program numerically increased the proportion of conducted malignancy screenings per required screening. (58.6%, 66.5%, 60.6%, and 73.1% at the 1st, 2nd, 3rd, and 4th interview, respectively) (Table 1). In addition, several patients understood, for the first time, the importance of malignancy screening during this interview with nurses.

**Conclusion:** Implementing a nurse-led interview for malignancy screening and alerting physician program numerically increased the screening of malignancy in RA patients treated with bDMARDs. This multi-disciplinary cooperation can potentially improve the quality of healthcare for patients with RA.

**REFERENCE:**


**Table 1. Result of malignancy screening at each time point of repeated-interview**

<table>
<thead>
<tr>
<th>1st screening</th>
<th>2nd screening</th>
<th>3rd screening</th>
<th>4th screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=154)</td>
<td>(n=93)</td>
<td>(n=45)</td>
<td>(n=14)</td>
</tr>
<tr>
<td>The proportion of conducted per required malignancy screening</td>
<td>58.6 (36.4) % 66.5 (34.1) % 60.6 (30.8) % 73.1 (25.2) %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P value (vs 1st screening)</td>
<td>Ref 0.095 0.89 0.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For each examination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Conducted/Required)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMG or Breast US</td>
<td>50/107 39/68</td>
<td>23/38</td>
<td>8/11</td>
</tr>
<tr>
<td>Uterine examination</td>
<td>30/46 29/24</td>
<td>12/5</td>
<td>6/5</td>
</tr>
<tr>
<td>EGD</td>
<td>94/148 57/92</td>
<td>30/45</td>
<td>11/14</td>
</tr>
<tr>
<td>Occult fecal blood test</td>
<td>65/132 49/83</td>
<td>23/44</td>
<td>9/13</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>84/132 59/83</td>
<td>25/44</td>
<td>8/13</td>
</tr>
</tbody>
</table>

**Male**

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-46 years old</td>
<td>46-50 years old</td>
</tr>
<tr>
<td>Uterine examination (once/year)</td>
<td>EGD (once per two years)</td>
</tr>
<tr>
<td>40-49 years old</td>
<td>Breast US or MMG (once/year)</td>
</tr>
<tr>
<td>EGD (once per two years)</td>
<td>Occult fecal blood (once a year)</td>
</tr>
<tr>
<td>50-65 years old</td>
<td>Colonoscopy (at least once every 5-10 years)</td>
</tr>
<tr>
<td>65 years old or older</td>
<td>Colonoscopy (at least once every 5-10 years)</td>
</tr>
</tbody>
</table>

**Figure 1. The list of recommended malignancy screenings**

**Acknowledgements:** NIL.

**Disclosure of Interests:** NIL.

**DOI:** 10.1136/annrheumdis-2023-eular.6406

**AB1782-HPR**

**USABILITY AND ACCEPTABILITY OF A NEW AUTOINJECTOR DEVICE AND ITS ASSOCIATED APP IN RHEUMATOLOGY PATIENTS**

**Keywords:** Self-management, bDMARD, Inflammatory arthritis

R. Alten1, G. Citera2, M. Latymer3, D. C. Gruben4, H. Kameda5. 1Schlosspark-Klinik University Medicine, Internal Medicine, Rheumatology, Berlin, Germany; 2Instituto de Rehabilitación Psicosófica, Department of Rheumatology, Buenos Aires, Argentina; 3Pfizer Ltd, I&I Medical Affairs, Sandwich, United Kingdom; 4Pfizer, Global Biostatistics and Data Management, Groton, United States of America; 5Toho University (Ohashi Medical Center), Division of Rheumatology, Tokyo, Japan

**Background:** SMARTClic is a new reusable autoinjector with a dose-dispensing cartridge for subcutaneous self-administration of biotherapeutics for patients. The device can connect to the optional SmartClic mobile app to aid in tracking injections and other treatment or symptom data.

**Objectives:** The aim of this study was to assess patient opinion data on ease of use and usability of the SmartClic injector and app.

**Methods:** This study presents final data of all patients (N=264) from a global study. Patients from Argentina (n=50), Australia (n=15), Germany (n=46), France (n=28), Japan (n=75), and Spain (n=50), were included. After completing a patient profiling questionnaire, adult patients (≥18 years old) with rheumatoid arthritis (RA), psoriatic arthritis (PsA) or juvenile idiopathic arthritis (JIA), and prescribed an injectable biologic, each received training to use the device and cartridge and performed simulated injections. Participants completed a device evaluation questionnaire with including the following categories: ‘ease of use’ (14 questions), ‘usability effectiveness’ (11 questions), ‘benefit of device features’ (8 questions) and ‘form factor’ (7 questions). Participants also received a storyboard presentation summarizing key features of the optional app, which they could test on an Android/iOS device,

**Table 2. Device evaluation questionnaire of all patients**

<table>
<thead>
<tr>
<th>Category</th>
<th>Question</th>
<th>Response</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use</td>
<td>How easy is the device to use?</td>
<td>Very easy</td>
<td>5/5</td>
</tr>
<tr>
<td>Usability effectiveness</td>
<td>How effective is the device?</td>
<td>Very effective</td>
<td>5/5</td>
</tr>
<tr>
<td>Benefit of device features</td>
<td>How beneficial are the features of the device?</td>
<td>Very beneficial</td>
<td>5/5</td>
</tr>
<tr>
<td>Form factor</td>
<td>How does the device look?</td>
<td>Very attractive</td>
<td>5/5</td>
</tr>
</tbody>
</table>

**Figure 2. The mean score of the device evaluation questionnaire**

**Acknowledgements:**

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.6406