HPR interventions on the spotlight

**OP0207-HPR**

**EFFECT OF FOOT ORTHOSES IN REDUCING PAIN IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS: A 12-MONTH RANDOMISED CLINICAL TRIAL**


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**Background:** Juvenile idiopathic arthritis (JIA) is the most common rheumatic disease in children and adolescents [1]. The manifestation of JIA may include joint swelling, tenderness, and painful limitation with joint movement. Only few studies have explored the effect of foot orthoses (FOs) alone in children with JIA [2,3]. These studies showed FOs can reduce pain in children with JIA, however, further research with larger sample sizes and longer follow-ups are needed [4]. Prescribing FOs on the same day of the initial assessment may promote early clinical and targeted intervention, which is the gold standard approach in paediatric rheumatology.

**Objectives:** This single blinded multicentre randomised clinical trial (RCT) aims to investigate the effect of customised prefabricated FOs in reducing pain amongst children and adolescents with JIA.

**Methods:** Overall, 66 children and adolescents with JIA presenting with foot symptoms were recruited from the Sydney Children's Hospital Network (Westmead and Randwick) and John Hunter Children's Hospital (Newcastle). The primary outcome measure was pain with a minimal clinical significance of 8mm on the visual analogue scale (VAS). Participants were randomly allocated to receive either customised prefabricated or sham FOs. The trial intervention was a low-density Slimflex Simple device that was customised at chair-side. The control (sham) device was made of 2mm flat leather board with no corrective modifications. Standardised tests such as the Foot Posture Index, navicular drift and drop were used to identify biomechanical abnormalities. The FOs were worn for a total of 12 months, with data collected at baseline, 4 weeks, 3, 6 months and 12 months.

**Results:** Reduction in self-reported pain was statistically and clinically significant at 4-weeks (p=0.018, -14.92 [-27.30, -2.55]) and 3 months (p<0.001, -28.93 [-40.90, -16.96]) post intervention in favour of the trial group. The 6- and 12-month follow-ups were not statistically or clinically significant. Parent reported pain was statistically and clinically significant at the 3-month (p<0.001, -21.92 [-33.16, -10.67]) in the reduction of pain in favour of the trial group. However, parent reported pain was not statistically significant at the 4-week, 6- and 12-month follow-ups. These results are similar to child reported pain with a p-value of less than 0.001 and average coefficients twice that of the clinical significance cut-off for VAS pain in paediatric rheumatology. The trial intervention was safe and tolerated well by participants with high compliance and adherence rates.

**Conclusion:** Results of this clinical trial indicate customised preformed FOs can be effective in reducing pain in children with JIA experiencing foot and ankle symptoms. Significant clinical effects appear to be within the first 3-months of intervention prescription and reduce beyond 6 months. Overall, this podiatric intervention was safe, inexpensive, well tolerated and it can be easily implemented as part of the multidisciplinary paediatric rheumatology care.

**REFERENCES:**


**Acknowledgements:** We would like to acknowledge all parents and children for their precious time.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2022-eular.854

**OP0208-HPR**

**EFFECT OF AN 8-WEEK SPECIALIZED PHYSICAL THERAPY PROGRAM ON SEXUAL HEALTH IN FEMALE PATIENTS WITH SYSTEMIC SCLEROSIS AND IDIOPATHIC INFLAMMATORY MYOPATHIES: A PILOT STUDY**

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**Background:** Systemic rheumatic diseases like systemic sclerosis (SSc) and idiopathic inflammatory myopathies (IIM) may affect all aspects of life, including sexual health. However, no non-pharmacological treatment has been proposed to date.

**Objectives:** This is the pilot project aiming to investigate the effect of an 8-week physical therapy program on sexual function in women with SSc and IIM.

**Methods:** In total, 12 women with SSc and 4 women with IIM, who fulfilled the ACR/EULAR 2013 criteria for SSc and the Bohan/Peter 1975 criteria for DM/PM, respectively, were enrolled in the study. Based on patient’s possibilities and willingness to participate in the program, they were divided into an intervention group (IG) (6 SSc/2 IIM, mean age: 46.8±3.1 years) and a control group (CG) (6 SSc/2 IIM, mean age: 46.3±3.0 years). The IG underwent the 8-week tailored physiotherapy program, including the pelvic floor exercise and physiotherapy of musculoskeletal problems subjectively limiting the patient’s sexual function (1 hour supervised physiotherapy twice weekly), whereas the control group received no specialized therapy. At weeks 0 and 8, all patients filled in questionnaires assessing sexual function: Female Sexual Function Index (FSFI), Brief Index of Sexual Functioning for Women (BISF-W); sexual quality of life: Sexual Quality of Life-Female (SQoL-F); functional ability: Health Assessment Questionnaire (HAQ); quality of life: Medical Outcomes Short Form-36 (SF-36) and depression: Beck’s Depression Inventory-II (BDI-II). At the baseline, patients in IG were assessed by a physician (medical history, mRSS, ESSG activity score, MITAX, MYOACT) and by a physiotherapist (pelvic floor function assessment—PERFECT scheme, MMT-8, Functional Index-II). Normality of data was tested, and inter-group analysis was performed with 2-way ANOVA and intra-group analysis by Friedman’s test.

**Results:** Compared to observed statistically significant deterioration in CG over the period of weeks 0-8, we found statistically significant improvement in both function questionnaires: FSFI (p=0.043), BISF-W (p=0.040), functional status: HAQ (p=0.018), and quality of life: SF-36 Physical Component score (0.050). Only numerical improvement in IG compared to numerical deterioration in CG, which has not reached statistical significance, was observed in SQoL-F, BDI-II, and SF-36 Mental Component Score.

**Conclusion:** Our physiotherapy program not only prevented the natural course of progressive deterioration of functional abilities, but also led to a significant improvement in sexual function and overall quality of life in women with SSc and IIM. Physical therapy might become one of the possible therapeutic treatments for sexual problems in women with SSc and IIM.

**REFERENCES:**


**Acknowledgements:** Supported by MHCR 023728, SVV–260523, GAUK-157532.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2022-eular.357

**Figure 1.**

**Acknowledgements:** Supported by MHCR 023728, SVV–260523, GAUK-1578119.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2022-eular.854

**OP0209-HPR**

**BRIDGE – A QUALITY IMPROVEMENT PROGRAM IN TEAM-BASED REHABILITATION: RESULTS FROM A MIXED METHODS STUDY**