Medical Center, Department of Child and Adolescent Psychiatry/Psychology, Rotterdam, Netherlands

Background: Land and water-based exercise intervention programs have demonstrated positive effects on fibromyalgia symptoms¹. However, research comparing the efficacy of both protocols is limited.

Objectives: The aim of this study was to assess the effect of two exercise interventions (land-based and water-based training) and a subsequent detraining period on fatigue in women with fibromyalgia.

Methods: Among the 272 participants initially randomised, a total of 161 women (age: 50.7±7.7) completed all the assessments with an attendance of at least of 70% (land-based *n*=50, water-based *n*=44, control *n*=67). The intervention groups trained 3 non-consecutive days/week (60 min/ses) during 24 weeks. Each session involved exercises to improve cardiorespiratory fitness, muscle strength, and flexibility. Four dimensions of fatigue were assessed using the Multidimensional Fatigue Inventory. Participants were evaluated at baseline (pre-test), at the end of the intervention (post-test) and following a detraining period of 12 weeks (re-test). Land-based, water-based, and control groups were comparable in sociodemographic characteristics, disease duration, drugs intake, and body mass index. Age, tenderness, and baseline outcome values were used as covariates in the comparisons (analysis of covariance) of the changes from baseline (post-test vs. pre-test and re-test vs. pre-test) between groups.

Results: The land-based exercise group reduced general fatigue (mean difference: -1.17; 95% confidence interval: -2.30 to -0.03; *P*=0.04) and physical fatigue (-2.48; -3.80 to -1.16; *P*<0.001) compared to the control group (-1.61; -3.04 to -0.19; *P*=0.02). No significant reductions were observed in other dimensions of fatigue in either group compared to the control group and no differences between intervention groups were observed (all comparisons, *P*>0.05). The reductions in fatigue were not sustained after the detraining period in any of the intervention groups (all comparisons, *P*>0.05).

Conclusion: Twenty-four weeks of land or water-based exercise were both effective in reducing physical fatigue of women with fibromyalgia. Furthermore, land-based exercise led to additional reductions in general fatigue. Reductions in fatigue were not sustained after a 12-week detraining period. Participation in regular exercise, specially land-based, might be an easily accessible treatment option to manage fatigue in this population.

References:

[1] Macfarlane GJ, et al. *Ann Rheum Dis*, 2018; 76(2), 318-328.

Acknowledgments: This study was supported by the Spanish Ministry of Economy and Competitiveness (I+D+i DEP2010-15639; I+D+i DEP2013-40908-R) and the Spanish Ministry of Education, Culture and Sport (FPU15/00002).

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.5576

HPR Service developments, innovation and economics in healthcare

FRI0648-HPR

OUTPATIENT FOLLOW-UP ON DEMAND IN RHEUMATOID ARTHRITIS HAS SAME CLINICAL AND RADIOGRAPHIC OUTCOMES BUT FEWER VISITS THAN SCHEDULED ROUTINE CARE

R. P. Poggenborg¹, O. Rintek Madsen¹, L. Dreyer^{1,2}, A. Hansen¹. ¹Copenhagen University Hospital Gentofte, Center for Rheumatology and Spine Diseases, Copenhagen, Denmark; ²Aalborg University Hospital, Department of Rheumatology, Aalborg, Denmark

Background: Medical treatment and care are often life-long in patients with rheumatoid arthritis (RA). During periods of stable disease, patients typically attend routine visits every 3–8 months at the rheumatology outpatient clinic. Between scheduled medical visits, it may be difficult to get acute appointments with the rheumatologist. Scheduled routine visits may be in a stable period without any symptoms and with no need for control and adjustment of treatment. Consequently, there is a demand for developing outpatient control procedures that cater to the needs of the individual patient and which support the patient's experience of active participation in the control and treatment of their own disease.

Objectives: To compare a patient self-controlled outpatient follow up system (Open Outpatient Clinic System (OOCs)) with traditional scheduled routine visits at a rheumatology outpatient clinic.

Methods: A two-year randomised controlled trial with RA patients aged 18 to 80 years with a disease duration of at least one year. Patients were recruited consecutively from the rheumatology outpatient clinic of a major university hospital in the Copenhagen region of Denmark from February 2015 to January 2017. Patients were randomised electronically. Joints were examined by a blinded rheumatologist. Patients in the OOCs group had no scheduled appointments but

were allowed to book acute appointments with their contact rheumatologist within 5 days and had access to nurse-led consultations without pre-booking, and a nurse-led telephone helpline. Appointments for the control group were scheduled according to routine procedures. Outcome measures were collected at baseline, year 1 and year 2. Clinical parameters: DAS28, CRP, VAS pain, 28-tender and swollen joint count (28-TJC and 28-SJC), HAQ score and radiographs of hands and feet. Psychological parameters: VAS patient satisfaction (Pt satisfact) and quality of life (EQ-5D).

Results: Of 282 patients, 266 completed the first year, 239 the second year. Patient characteristics (OOCs/controls): age 61.4±10.5/60.9±12.2 years, females 77/74%, ACPA positive 66/65%, treatment with synthetic DMARDs 67/65% and/or biologics 33/35%. Clinical and psychological parameters are shown in Table 1. OOCs at year one and two was comparable to traditional scheduled routine procedures regarding clinical and psychological outcome measures. Radiographic progression was detected in 2.9% (4/138) and 2.1% (3/140) of the OOCs and control group, respectively (*p*=0.69; Chi-squared test).

Table 1. Outcome measures in patients with RA randomised to on demand Open Outpatient Clinic System (OOCs) or traditional follow-up (control group) in a rheumatology out-patient clinic. Results are shown as mean±SD.

	OOCs	Controls	OOCs	Controls	OOCs	Controls
Time	Baseline	Baseline	Year 1	Year 1	Year 2	Year 2
Visits			3.2±1.9	3.8±1.6*	2.6±1.6	3.5±2.2**
Phone calls			1.8±3.3	0.4±0.8**	0.7±1.4	0.1±0.3**
DAS28	3.0±1.2	2.9±1.0	2.6±1.1	2.6±1.0	2.7±1.2	2.5±1.0
CRP	10.2±7.2	10.1±8.0	8.2±9.9	5.7±5.1*	9.6±8.8	5.5±8.9*
28-SJC	0.6±1.5	0.6±1.2	0.2±0.5	0.3±1.0	0.3±0.9	0.4±1.2
28-TJC	3.3±5.7	2.4±4.2	2.4±4.7	2.1±3.7	2.4±4.9	2.3±4.7
VAS pain	27±25	26±21	28±26	28±24	32±27	29±25
HAQ-score	0.6±0.6	0.6±0.6	0.7±0.6	0.6±0.6	0.8±0.7	0.6±0.7
EQ-5D	0.8±0.2	0.8±0.1	0.8±0.2	0.8±0.2	0.8±0.2	0.8±0.1
Pt satisfact	88±21	87±19	84±25	82±23	82±24	83±23

p*<0.05; *p*<0.0005, OOCs vs. control group (Student's *t*-test).

Conclusion: The patient self-controlled outpatient follow up system OOCs was associated with fewer visits, but more phone calls to the nurse, and was comparable with traditional scheduled routine procedures regarding clinical, psychological and radiographic outcomes after two years. Thus, organisation of outpatient care according to OOCs may be applied to strengthen patient-centred care in patients with RA.

Disclosure of Interests: René Panduro Poggenborg Speakers bureau: Novartis, Ole Rintek Madsen: None declared, Lene Dreyer: None declared, Annette Hansen Consultant of: AbbVie, Speakers bureau: Eli Lilly

DOI: 10.1136/annrheumdis-2020-eular.1184

FRI0649-HPR

HYDROXYCHLOROQUINE PRESCRIBING AND OPHTHALMOLOGY SCREENING WITHIN RHEUMATOLOGY DEPARTMENTS IN THE NORTH-WEST OF THE UNITED KINGDOM: A PROSPECTIVE REGIONAL AUDIT

S. Juman¹, T. David², L. Gray³, R. Hamad⁴, S. Horton⁵, M. Ibrahim⁶, B. Khan⁷, Y. Khazaleh⁸, M. Porter⁹, A. Sheikh⁹, P. Ho¹⁰, S. Wig¹¹, L. Mercer¹². ¹Pennine Acute Hospital NHS Trust, Manchester, United Kingdom; ²Manchester Royal Infirmary, Rheumatology, Manchester, United Kingdom; ³Trafford General Hospital, Manchester University NHS Foundation Trust, Manchester, United Kingdom; ⁴Bolton NHS Foundation Trust, Bolton, United Kingdom; ⁵Lancashire Care NHS Foundation Trust, Lancashire, United Kingdom; ⁶Royal Lancaster Infirmary, Lancaster, United Kingdom; ⁷Blackpool Teaching Hospitals Foundation Trust, Blackpool, United Kingdom; ⁸Manchester Royal Infirmary, Manchester, United Kingdom; ⁹Tameside Hospital NHS Foundation Trust, Tameside, United Kingdom; ¹⁰Manchester University NHS Foundation Trust, Manchester, United Kingdom; ¹¹Bolton NHS Foundation Trust, Bolton, United Kingdom; ¹²Stockport NHS Foundation Trust, Stockport, United Kingdom

Background: Hydroxychloroquine (HCQ) is widely used in the management of rheumatoid arthritis and connective tissue disease. The prevalence of retinopathy in patients taking long-term HCQ is approximately 7.5%, increasing to 20–50% after 20 years of therapy. Hydroxychloroquine prescribed at ≤5 mg/kg poses a toxicity risk of <1% up to five years and <2% up to ten years, but increases sharply to almost 20% after 20 years. Risk factors for retinopathy include doses >5 mg/kg/day, concomitant tamoxifen or chloroquine use and renal impairment. The UK Royal College of Ophthalmologists (RCOphth) 2018 guidelines for HCQ screening recommend optimal treatment dosage and timing for both baseline and follow-up ophthalmology review for patients on HCQ, with the aim of preventing iatrogenic visual loss. This is similar to recommendations made by the American Academy of Ophthalmology (2016).