Abstract OP0277-HPR – Table 1 Intergroup and intragroup comparisons

	Experimental group n=30				Control group n=30				p	p	p
	T0	T6	T12	Intergr.	T0	T6	T12	Intergr.			
Numerical pain scale (cm)	6.90 ± 1.50	6.00 ± 1.80	5.20 ± 2.00	<0.001	6.80 ± 1.40	7.00 ± 1.80	6.80 ± 2.00	0.794	0.002		
VAS score	5.60 ± 1.20	6.00 ± 1.70	4.70 ± 1.40	<0.001	5.80 ± 1.20	5.90 ± 1.00	5.80 ± 1.20	0.728	0.021		
Fib-3 Subgen score	5.91 ± 2.87	5.43 ± 2.72	5.13 ± 2.53	<0.001	7.81 ± 3.74	7.53 ± 3.04	6.73 ± 2.18	0.587	0.001		
SP-36 scores											
Physical functioning	48.30 ± 21.30	58.00 ± 19.70	61.30 ± 19.40	0.001	37.00 ± 22.80	36.90 ± 23.40	35.70 ± 23.00	0.794	0.002		
Physical role functioning	15.00 ± 24.20	37.50 ± 38.10	39.20 ± 38.10	0.001	24.20 ± 38.80	15.00 ± 29.10	13.30 ± 20.05	0.068	<0.001		
Bodily pain	37.10 ± 16.40	46.10 ± 16.00	46.80 ± 14.60	0.002	33.20 ± 17.10	37.70 ± 17.40	32.00 ± 16.30	0.065	0.002		
General health perceptions	43.60 ± 22.70	45.80 ± 25.90	51.80 ± 25.50	0.044	38.70 ± 22.90	41.60 ± 24.30	37.80 ± 21.50	0.3	0.034		
Vitality	38.80 ± 19.80	50.30 ± 21.00	52.20 ± 22.40	<0.001	37.50 ± 17.80	35.30 ± 18.70	34.30 ± 19.90	0.561	0.002		
Social role functioning	50.40 ± 23.60	64.20 ± 24.90	62.90 ± 27.20	0.012	48.30 ± 32.80	40.40 ± 25.80	41.70 ± 24.20	0.332	0.013		
Emotional role functioning	12.20 ± 25.50	45.00 ± 45.00	48.70 ± 42.50	<0.001	28.70 ± 45.00	28.90 ± 42.60	23.30 ± 41.20	0.745	0.005		
Mental health	49.10 ± 23.00	55.70 ± 24.80	62.00 ± 22.60	<0.001	45.30 ± 18.60	43.70 ± 17.60	42.10 ± 19.00	0.301	<0.001		
5-Minute walk test (meters)	447.30 ± 89.00	465.50 ± 83.30	482.50 ± 72.60	0.002	420.80 ± 112.00	427.70 ± 101.40	429.40 ± 112.50	0.585	0.045		

Data presented as mean ± SD

Conclusions: The progressive resistance training program was effective in improving pain, quality of life, functional capacity and muscular strength of patients with fibromyalgia.

REFERENCES:

- [1] Wolfe F, Smyth HA, Yunus MB, Bennett RM, Bombardier C, Goldenberg DL, et al. The American College of Rheumatology 1990 criteria for the classification of fibromyalgia: Report of the multicenter criteria committee. *Arthritis Rheum* 1990 Feb;33(2):160–72.
- [2] Wolfe F, Ross K, Anderson J, Russell JJ, Hebert L. The prevalence and characteristics of fibromyalgia in the general population. *Arthritis Rheum* 1995 Jan;38(1):19–28.
- [3] Busch AJ, Webber SC, Richards RS, Bidonde J, Schachter CL, Schafer LA, Danyliw A, Sawant A, Dal Bello-Haas V, Rader T, Overend TJ. Resistance exercise training for fibromyalgia. *Cochrane Database Syst Rev* 2013 Dec 20;(12):CD010884.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5441

OP0278-HPR PATIENT REPORTED OUTCOMES AND SAFETY IN PATIENTS UNDERGOING SYNOVIAL BIOPSY: COMPARISON OF ARTHROSCOPIC, ULTRASOUND-GUIDED PORTAL FORCEPS AND ULTRASOUND-GUIDED NEEDLE BIOPSY TECHNIQUES, IN FIVE CENTRES ACROSS EUROPE

S.A. Just¹, F. Humby², H. Lindegaard¹, L. Meric de Bellefon^{3,4}, P. Durez⁴, E. Vieira-Sousa⁵, R. Teixeira⁶, M. Stoeniou⁷, J. Werlinrud⁸, S. Rosmark¹, P.V. Larsen⁷, C. Pitzalis², A. Filer⁸. ¹Rheumatology, Odense University Hospital, Odense, Denmark; ²Experimental Medicine and Rheumatology, Queen Mary University London, London, UK; ³Rheumatology, Saint-Pierre University Hospital; ⁴Rhumatologie, Cliniques Universitaires Saint-Luc, Brussels, Belgium; ⁵Rheumatology and Bone Metabolic Diseases, Hospital de Santa Maria, Lisbon, Portugal; ⁶Orthopedics, Odense University Hospital; ⁷Epidemiology and Biostatistics, University of Southern Denmark, Odense, Denmark; ⁸Institute of Inflammation and Ageing, University of Birmingham, Edgbaston, UK

Background: Synovial tissue analysis could provide a step towards personalised medicine in daily clinical practice for patients with inflammatory arthritis. However systematic reports comparing the patient's perspective when undergoing synovial biopsy according to different synovial sampling techniques is currently missing from the literature. We here present a multicenter study across Europe, comparing patient reported outcomes (PRO) and safety data from patients undergoing synovial biopsy procedures using either ultrasound guided needle biopsy (US-NB), ultrasound guided portal and forceps (US-PF) or conventional arthroscopy.

Objectives: 1. Describe PRO data on joint indices of pain, stiffness and swelling, procedural discomfort and willingness to undergo a second biopsy for each biopsy technique.

2. Describe and compare safety data.

3. Evaluate the impact of intramuscular (IM) or intra-articular (IA) corticosteroid as part of the biopsy procedure, on PRO data and safety.

4. Evaluate how sequential biopsy procedures impacted on PRO and safety data.

Methods: Information on PROs, safety, diagnosis, disease activity and treatment were collected from five European biopsy centres. Joint pain, swelling and stiffness indices were recorded as 0–100 mm VAS; qualitative variables on balanced 5-point Likert scales. PRO data delta values between post and pre-values were calculated. Between group comparisons with unadjusted and adjusted robust linear regression, adjusting for disease activity, corticosteroid use during biopsy procedure and when relevant pre-biopsy value.

Results: 524 synovial biopsy procedures were included; 329 (78%) had Rheumatoid Arthritis and biopsies were primarily from wrist (n=296, 57%). PRO and safety data are presented in table 1. None of the biopsy techniques caused increase in pain, swelling or stiffness, and there were no differences in post biopsy and delta PROs between biopsy procedures. There was 9 adverse events (1.7%) with no difference between biopsy methods (p=0.85). 71.7% reported none or mild

discomfort during biopsy and 86.5% were positive or neutral to rebiopsy. Corticosteroid use, IM (n=62) or IA (n=38), did not result in more adverse events (p=0.81). However, it was associated with a reduction in post-swelling (p=0.005), but not pain or stiffness. Sequential biopsy procedures (n=103 patients), did not result in more adverse events (p=0.61) or worsening in PRO data between baseline and second biopsy procedure.

Abstract OP0278-HPR – Table 1 Patient reported outcomes and safety

	Needle	Portal & Forceps	Arthroscopic	Total	p-value	Adjusted p-value*
Biopsy procedures, n (%)	402 (76.7)	65 (12.4)	57 (10.9)	524 (100.0)		
Pain, swelling and stiffness before and after biopsy						
Pre pain, mean (SD)	52.21 (29.14)	45.60 (32.90)	62.44 (23.98)	52.51 (29.36)	<0.01	<0.01
Post pain, mean (SD)	39.47 (29.94)	32.46 (27.42)	43.16 (22.62)	38.91 (29.03)	0.06	0.19
Pre swelling, mean (SD)	50.29 (30.70)	41.02 (33.11)	53.09 (29.26)	49.40 (30.99)	0.07	<0.01
Post swelling, mean (SD)	35.95 (30.47)	31.18 (26.66)	36.46 (26.00)	35.35 (29.52)	0.92	0.17
Pre stiffness, mean (SD)	51.48 (30.32)	47.28 (33.89)	48.79 (30.13)	50.62 (30.77)	0.56	0.03
Post stiffness, mean (SD)	37.72 (30.45)	33.75 (28.01)	36.14 (24.91)	37.01 (29.57)	0.56	0.18
Delta pain, mean (SD)	-12.90 (27.74)	-13.14 (30.36)	-20.94 (28.91)	-13.76 (28.27)	0.17	0.19
Delta swelling, mean (SD)	-14.67 (29.57)	-9.83 (27.74)	-18.68 (35.03)	-14.43 (29.96)	0.28	0.17
Delta stiffness, mean (SD)	-13.70 (28.92)	-13.52 (32.25)	-14.18 (37.49)	-13.72 (30.32)	0.99	0.18
Safety						
Syncope or presyncope, n (%)	2 (0.8)	0 (0.0)	0 (0.0)	2 (0.4)		
Tenosynovitis	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.2)		
Neurological affection, n (%)	4 (1.0)	1 (1.5)	0 (0.0)	5 (1.0)		
Tendon damage, n (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)		
Haemarthrosis, n (%)	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.2)		
Deep vein thrombosis	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)		
Joint infection	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0.85*	

* adjusted for biopsy method, disease activity, intra-articular or intramuscular corticosteroid injection during biopsy and in Post and delta values also pre-value.

#) Test for difference in total number of adverse events between groups, by Fishers exact test.

Conclusions: Overall, our results do not suggest a significant difference in tolerability or safety between US-NB, US-PF or arthroscopic synovial sampling. Further, data suggests that use of IM or IA corticosteroid, as part of the biopsy procedure, is safe and improves tolerability. Finally, sequential synovial biopsies were well tolerated and safe when performed using all biopsy techniques.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1499

OP0279-HPR A NATIONAL SURVEY OF THE UTILISATION AND EXPERIENCE OF HYDROTHERAPY IN THE MANAGEMENT OF AXIAL SPONDYLOARTHRITIS: THE PATIENTS' PERSPECTIVE

M. Martin^{1,2}, A. Gilbert³, C. Jeffries^{2,4}. ¹Rheumatology/Physiotherapy, Guy's and St Thomas' NHS Foundation Trust; ²ASTretch, London; ³AKGilbert Ltd, Brighton; ⁴Physiotherapy/Hydrotherapy, Solent NHS Trust, Portsmouth, UK

Background: Hydrotherapy is recommended in the United Kingdom (UK) by the National Institute for Health and Care Excellence (NICE) as an adjunctive therapy in the management of Axial Spondyloarthritis (AS). Despite these guidelines, NHS hospital hydrotherapy services are in decline. The impact on utilisation and patient experience are poorly understood.

Objectives: To identify the utilisation of hospital hydrotherapy services for AS in the UK and capture the patients' experience to inform future services and research.

Methods: An online survey was distributed to the National Ankylosing Spondylitis Society (NASS) patient membership between September and November 2017, with social media updates. The survey design included open and closed questions. Thematic analysis of the qualitative responses was conducted.

Results: 250 members completed the survey (40.4% male; average age 50.4 years; average delay to diagnosis 11.4 years). **Utilisation:** 157 (65.7%) accessed a hospital hydrotherapy service. 102 (63.0%) were referred by rheumatology, 26 (16.0%) via a specialist AS Physiotherapist and 3 (1.9%) self-referring via a telephone helpline. The most frequent service offered was six weekly sessions. 85 (62.5%) reported no access to hospital hydrotherapy when in flare. Barriers to access in a flare included long waiting times, a limit on the sessions offered and pool closures. 'Pay as you Go' hospital hydrotherapy sessions were accessed by 35 (16.1%) with 119 (77.3%) interested in doing so. 59 (26.9%) received written hydrotherapy resources for continuation in a non-hospital pool following discharge. 77 (50.7%) were advised to continue with hydrotherapy for self-management. Barriers to utilising a non-hospital pool were high cost, lower pool temperature, pool crowding and a lack of knowledge of exercises. 28 (18.5%) reported a current threat of closure of their hospital hydrotherapy pool. **Experience:** Five themes emerged from the qualitative data. 1) *Emotional well-being:* Patients described greater control over their condition when exercising in water. 2) *Exercise Behaviour:* Patients performed a wider variety of exercise, often challenging themselves, and not attempted on land. 3) *Group Effect:* Patients described a sense of motivational support when exercising with others. 4) *Professional Support:* Patients cited the benefit of hydrotherapy sessions led by a physiotherapist who shared their expertise and discussed problems. 5) *Pool Environment:* Patients described gains from non-impact exercise and