

forces increase in the KTG; flexion, extension, internal and external rotation muscle forces increased in the GPTG ($p < 0.05$ for all). But there was no significant difference between the two groups.

Table 1. The level of pain in GPTG and KTG

	GPTG (mean \pm sd)			KTG (mean \pm sd)		
	Before Therapy	After Therapy	p	Before Therapy	After Therapy	p
Night pain severity	6,69 \pm 3,4	3,62 \pm 2,9	<0,001	5,28 \pm 3,18	2,32 \pm 2,23	<0,001
Rest pain severity	3,97 \pm 3,31	2,45 \pm 2,78	0,005	2,96 \pm 3,29	1,08 \pm 1,75	0,031
Pain severity with motion	8,07 \pm 1,81	5,14 \pm 2,47	<0,001	7,72 \pm 2,03	4,36 \pm 2,21	<0,001
Severity of general pain	7,76 \pm 4,54	4,66 \pm 3,99	<0,001	8,40 \pm 3,13	4,8 \pm 2,69	0,005

Active internal and external rotation ROM increased in KTG ($p < 0.05$). Functionality and disability scores were improved in two groups. It was detected that while there was no difference between the groups in terms of the values of muscle strength, functionality and disability scores.

Conclusions: The kinesiological band can be used as a supportive therapy method in the early shoulder treatment program because of it provides painless shoulder motion to clinicians. We consider that KT applications in addition to general physical therapy applications may have positive effects in the treatment of impingement syndrome.

Disclosure of Interest: None declared

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THU0723-HPR A PHYSIOTHERAPY-LED IN-PATIENT INTENSIVE REHABILITATION PROGRAMME FOR ANKYLOSING SPONDYLITIS: FOLLOW-UP OUTCOMES

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Background: Physiotherapy and exercise are highly important in the management of Ankylosing Spondylitis (AS). Physiotherapy is delivered to patients with AS in either in-patient or out-patient settings. Knowledge of the effectiveness of an in-patient delivered programme is useful for physiotherapists in assisting patients to achieve their goals.

Objectives: To assess the short-term effectiveness of an intensive rehabilitation programme using BASMI and EASI-QOL outcomes, and long-term patient satisfaction and physical activity behaviour and adherence to exercise plan.

Methods: Thirty-two AS patients (25 males and 7 females) admitted to an in-patient rheumatology ward underwent a 1 to 2-week physiotherapy-led intensive rehabilitation programme and were then discharged with a home exercise programme. Pre/post rehabilitation BASMI scores were available for 26 patients. The primary outcome measure was the proportion of patients achieving an improvement on BASMI scores at discharge. Secondary outcome measures included improvements in physical activity levels and adherence to home exercise plan for longer than 3 months which was obtained via a postal patient satisfaction and physical activity questionnaire achieving a response rate of 50% ($n=16$).

Results: Improvements in BASMI scores was achieved in 69% of patients ($n=18$) at the end of the in-patient rehabilitation period. Improvements in EASI-QOL were achieved in 83% of patients ($n=15$) at the end of the in-patient rehabilitation period. Ninety-four percent of patients ($n=15$) increased their physical activity levels after discharge, with 81% ($n=13$) of patients maintaining their home exercise programme for 3 months or more. Thirty-seven percent ($n=7$) of patients carry out at least 150 minutes of physical activity per week (National Recommended Physical Activity Guidelines is 150 minutes/week of moderate intensity).

Conclusions: This recent audit shows the effectiveness of an intensive physiotherapy-led in-patient rehabilitation programme for Ankylosing Spondylitis improving BASMI scores in the short-term and increasing physical activity behaviour over the long-term. Future work will aim to compare demographics and medical treatment differences between improvers and non-improvers.

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THU0724-HPR SELF-MANAGEMENT EXERCISE PROGRAM ASSOCIATED TO SPA THERAPY INCREASED THE PHYSICAL ACTIVITY LEVEL OF PEOPLE WITH SYMPTOMATIC KNEE OSTEOARTHRITIS: A QUASI-RANDOMIZED CONTROLLED TRIAL

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Background: Treating knee osteoarthritis (OA) in the medical phase is today

well standardized. Guideline orientated approaches aiming at increasing physical activity (PA), improving pain and disability.

Objectives: To assess effectiveness of self-management exercise program associated to spa therapy at 3 month on the improvement of physical activity (PA) level, disability, pain, anxiety, fears and believes in symptomatic knee osteoarthritis people.

Methods: Prospective, multicentric, quasi-randomized controlled trial with alternate month design method (one month periods). People with symptomatic knee OA people (stage I-IV, Kelgren and Lawrence scale) with low and moderate PA level were included in 3 spa therapy resorts. Intervention group (IG) received 5 self-management exercise sessions (1h30; education, aerobic, strength training, range of motion) + information booklet + 18 sessions (1h) of conventional spa therapy (STC). Control group (CG) received information booklet + 18 sessions of STC. The primary outcome was changes at 3 months in PA level (IPAQ short form score) and secondary outcomes were WOMAC function, pain (VAS), HAD anxiety/depression, KOFBeQ fears and believes changes.

Results: 131 subjects were included. The mean age was 65.6 years [\pm 6.7]. WOMAC function score was 22.1/68 [\pm 11.3] and pain was 4.6/10 [\pm 1.9] at inclusion. Both groups significantly increased PA level measured with continuous IPAQ total score (MET-minutes/weeks), with superiority for IG (+77.8%; $p=0.0062$) than CG (+50.7%; $p=0.0099$). There was no change in setting time. Disability (-11.3%; $p=0.0370$) and pain (-15.2%; $p=0.0032$) also decreased significantly for both groups. Anxiety (-11.6%; $p=0.0195$) and fears and believes (-18.2%; $p=0.0146$) decreased significantly only in intervention group. Other data will be presented later.

Conclusions: This study confirms the impact of STC on disability and pain and gives news data's on physical activity level. Self-management exercise program improve anxiety, fears and believes. Complex educational strategies comprising information booklet with or without self-management exercise program can be proposed and adapted to OA phenotypes.

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THU0725-HPR COST EFFECTIVENESS ANALYSIS OF ABATACEPT COMPARED WITH TNF INHIBITORS IN PATIENTS WHO ARE POSITIVE FOR ANTI-CITRULLINATED PROTEIN ANTIBODIES BASED ON RESULTS FROM AN OBSERVATIONAL TRIAL

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Background: Anti-citrullinated protein antibodies (ACPA) are highly specific to RA and patients (pts) who are ACPA positive (+) tend to develop more severe, erosive disease than ACPA-negative pts.¹ In an observational study exploring the status of ACPA on RA treatment response to abatacept (ABA) or a TNF inhibitor (TNFi), mean (SE) changes from baseline in CDAI at 6 months was -8.8 for ABA and -5.6 for TNFi initiators.²

Objectives: To evaluate the costs and benefits of treating pts with RA who are ACPA+ with ABA vs TNFi on background MTX.

Methods: An economic analysis was carried out estimating lifetime direct costs and quality-adjusted life years (QALYs) of ACPA+ pts with RA treated with ABA or TNFi from a UK National Health Service (NHS) perspective. QALYs are a measure of disease burden, adjusted to reflect quality of life lived. As data for the economic analysis were derived from a real-world study, an "average" pt was modelled, whose baseline characteristics were based on the observational study. CDAI changes at 6 months for each treatment were converted to HAQ changes, and disease progression was based on HAQ score changes over a lifetime. Continuation of therapy was based on rates from the real-world study. Mean long-term survival on treatment with ABA or TNFi was derived from the literature.³ In the base case, pts discontinuing ABA or TNFi moved to palliative care (MTX). Direct medical costs and quality of life scores were correlated to HAQ scores.^{3,4} Costs included hospitalizations, joint replacements and treatment costs. Estimates of differences in costs and QALYs between ABA and TNFi initiators were used to calculate an incremental cost-effectiveness ratio (ICER; cost per QALY gained). The annual cost of TNFi was calculated as an average of TNFi drugs in the UK (£ 9113). For ABA, an average cost of five biologics was used (£ 9244) to reflect a realistic cost to NHS UK. A sensitivity analysis examined the effect of varying the input parameters of efficacy, cost and utilities on costs and outcomes.

Results: Based on an "average" pt from the observational study, the total estimated QALYs for ABA and TNFi initiators were 6.4 and 6.27, respectively. Total lifetime costs were £ 41,378 and £ 40,627, respectively. The lifetime cost for

ABA initiators was higher than for TNFi initiators due to the higher proportion of pts continuing ABA after 6 months. ABA treatment resulted in lower hospitalization costs. The cost per QALY for ABA (vs TNFi) was £ 8667. An intervention with an ICER of less than £ 30,000 per QALY gained is generally considered to be cost effective in the UK. In a sensitivity analysis, in which the annual cost of TNFi was assumed to be the same as a biosimilar agent (£ 7829), the ICER increased to £ 25,660.

Conclusions: Based on real-world data, abatacept is a cost-effective alternative to TNFi in an ACPA+ pt with RA. The increased treatment costs of abatacept are offset by the gain in benefits (QALYs) from higher CDAL reductions with abatacept.

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THU0726-HPR WHAT CHARACTERISES PATIENTS REFERRED FOR SURGICAL CONSULTATION DUE TO CARPOMETACARPAL OSTEOARTHRITIS?

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Background: Carpometacarpal osteoarthritis (CMC-OA) is a common joint condition, with a prevalence of 13% in people aged 41 to 50 years, increasing to 68% in people between 71 and 80 years. In the absence of disease-modifying interventions, non-pharmacological approaches are considered as core treatments for hand OA, while surgery is recommended for those with severe CMC-OA.

Objectives: To describe function and previous treatment in patients referred for surgical consultation due to CMC-OA.

Methods: Individuals referred for surgical consultation due to their CMC-OA at three Norwegian departments of rheumatology were invited to participate. Those who agreed attended a clinical assessment and reported their symptoms, disability and function using validated outcome measures including the Quick-Dash (0–100, 0=no disability) and the MAPHand (1–4, 1=no limitations).

Results: A total of 180 patients (mean age 63, range: 45 to 82; 79% women) were included. Thirty-six percent were referred for right hand, 43% for left hand, and 21% for bilateral surgery. Concerning previous treatment for hand OA, 21% (78% women) had received hand surgery, 22% (81% women) physical or occupational therapy, and 11% (95% women) had consulted a rheumatologist. Women consistently reported higher pain levels compared to men, had more finger joints with bony enlargements and significantly lower grip and pinch strength in both hands (Table). They also reported significantly more disability and activity limitations at Quick Dash; 38.6 versus 30.4, (p=0.006) and MAPHand; 2.0 versus 1.7 (p<0.001), for women and men, respectively. However, for finger range of motion, men had slightly more flexion deficit and less palmar abduction in their left hand compared to women.

Conclusions: Among patients referred for surgical consultation due to CMC-OA, women self-reported lower hand function and scored poorer than men in observer based assessments. Even if conservative treatment is recommended before referral for surgery, only a few participants had received such treatment for their hand OA.

Disclosure of Interest: None declared

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THU0727-HPR BLENDED INTERVENTIONS FOR FATIGUE SELF-MANAGEMENT: IS THIS THE WAY PATIENTS AND PROFESSIONALS LIKE TO GO?

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Background: Blended care, the integration of online and face-to-face care, promises to combine the best of two worlds.

Objectives: To explore the attitudes and needs concerning blended care of two key stakeholders: health professionals and patients.

Methods: Rheumatologists (8) and specialized nurses (5) were recruited in a Dutch hospital and patients with an inflammatory rheumatic disease (10) were recruited via flyers in hospitals and patient organizations in Germany. A semi-structured interview scheme was used to explore knowledge, experiences, needs and perceived (dis)advantages of a blended care format for fatigue self-management. Transcribed verbal data were coded with hierarchical coding schemes.

Results: Perspective of professionals: Blended care matches needs for psychosocial interventions in medical settings, has a patient-friendly and flexible format, reflects the active role of patients and can easily be imbedded in standard care. Reported barriers were low education and skills in technology use in patients, the lack of proven and safe interventions and costs for development/ implementation. Patient perspective: Patients expected better communication, time saving and improvement of autonomy in self-management. They were concerned about loss of personal contact and in general, patients were very critical regarding online activities, privacy risks and guaranteed quality of eHealth products.

Conclusions: Health professionals and patients differ in their attitudes towards blended care. Professionals are better informed and have a more positive attitude, whereas patients' attitudes towards blended care are mainly driven by their reservations towards the reliability and safety of the internet in general. Results will be discussed on the background of attitudes towards eHealth in different countries.

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THU0728-HPR COMPARISON OF THE EFFECTIVENESS OF FUNCTIONAL AND NIGHT SPLINT FOR RHIZARTHRITIS: ONE-YEAR FOLLOW-UP OF A CONTROLLED, RANDOMIZED, BLINDED CLINICAL TRIAL

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Background: Rhizarthritis is an inflammatory degenerative joint disease affecting the trapeziometacarpal joint. The main symptom is pain, leading to difficulty with hand functions and reduced quality of life. Two randomized controlled trials found in the literature reported similar findings in terms of pain reduction and improved hand function with the use of a short orthosis for rhizarthritis; one of the trials showed the benefits when the device was used for daytime function while the other showed the benefits when the orthosis was used during nighttime rest.

Objectives: To compare the effectiveness of functional (daytime) and night splint (Figure 1) in reducing pain and improving functionality in patients with rhizarthritis.

Methods: A controlled, randomized, blinded clinical trial with sixty patients diagnosed with rhizarthritis. The patients were assessed by a blinded assessor at the beginning of the treatment and after 45, 90, 180 and 360 days the following variables were evaluated: pain at the base of the thumb using a numerical pain scale; thumb range of motion measured using a goniometer; grip strength evaluated by a hydraulic hand dynamometer; pinch strength using the pinch gage; hand dexterity evaluated with the pick-up test; function evaluated by the Brazilian version of the AUSCAN LK 3.01 Hand Osteoarthritis Index, the Cochin Hand Function Scale, the Michigan Hand Outcomes Questionnaire and a Likert-type scale. The Hand Outcomes Questionnaire, Cochin Scale and Michigan Questionnaire were used to assess hand function and patient satisfaction using a Likert scale.

Results: Most of the variables analyzed, including patient characteristics such

Abstract THU0726-HPR – Table 1. Hand function

	Right hand		p-value	Left hand		p-value
	Women	Men		Women	Men	
No. of joints with bony enlargements, mean (SD)	1,9 (2,3)	1,2 (2,9)	0,10	1,6 (2,3)	1,3 (2,8)	0,46
Proportion with normal max grip strength ^a , % (SD)	65,7 (27,6)	90,9 (26,1)	<0,001	64,0 (26,3)	83,5 (21,2)	<0,001
Proportion with normal max pinch strength ^a , % (SD)	66,2 (28,8)	73,6 (28,3)	<0,001	66,8 (25,8)	71,5 (29,0)	<0,001
Number of painful joints, mean (SD)	4,2 (3,3)	2,0 (2,1)	<0,001	3,8 (3,0)	1,8 (1,7)	<0,001
Pain at rest ^b , mean (SD)	2,3 (2,2)	1,7 (1,8)	0,10	2,8 (2,6)	2,3 (2,1)	0,23
Pain following grip strength assessment ^b , mean (SD)	2,7 (2,5)	2,4 (2,9)	0,60	2,6 (2,3)	2,5 (2,4)	0,92
Pain following pinch strength assessment ^b , mean (SD)	2,9 (2,7)	2,7 (3,0)	0,67	3,1 (2,8)	3,1 (2,7)	0,98
Total flexion deficit (mm), mean (SD)	11,2 (30,5)	8,0 (24,4)	0,56	10,4 (27,8)	10,7 (33,6)	0,96
Palmar abduction thumb ^c , mean degrees (SD)	50,9 (11,7)	51,5 (12,5)	0,77	50,0 (11,9)	48,5 (10,6)	0,49
Abduction CMC ^c , mean degrees (SD)	37,9 (9,6)	40,3 (12,0)	0,20	37,9 (9,9)	38,1 (10,6)	0,92

^aMeasured in Newton using the Grippit. ^bNumeric rating scale (NRS): 0–10, 0= no pain. ^cMeasured in degrees using the Pollexograph.