nominates the steering committee members and a plenary meeting to be kept informed about research they are involved in.
2) Insight Panels:
Access to technology was viewed as the major barrier to remote involvement. Mechanisms to overcome included multiple modes of communication: online, telephone, postal communication. Providing the opportunity for face-to-face or speaking directly with a researcher in an informal setting was seen as crucial in building interpersonal relationships and sustaining involvement.
3) Patient Educator:
Extremely well received. Barriers to participation revolved largely around travel and physical accessibility. This can be overcome with in-house resources.
Our research strategy is being revised with the PPI strategy as a central tenet. We are adopting the new steering committee under the three-tier format and yearly research meeting with plenary session. We have a PPI newsletter, the editorial board for which is made up of researchers and patient insight partners. A patient educator module is under review for incorporation into a new PhD programme. We have expanded our research into multidisciplinary areas, with new sociology researchers and psychology collaborators.
Conclusions: The development a true patient partnership in our group has fundamentally changed the scope and remit of our research, allowing us to expand our biomedical and clinical research into a more holistic model.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.6815

OP0210-PARE **DUTCH JUVENILE IDIOPATHIC ARTHRITIS PATIENTS, CARERS AND CLINICIANS CREATING A RESEARCH AGENDA TOGETHER FOLLOWING THE JAMES LIND ALLIANCE METHOD**

C.G Schoemaker[1,2], W. Armbrust[3,4], J.F. Swart[2,4], E. Versluis[1], W. Olsder[5], N. M. Wulffraat[2]. *[1]Dutch JIA patient organisation, member of ENCA, Rijen*; *[2]Department of Pediatric Rheumatology, University Medical Center Utrecht, Utrecht*; *[3]Department of Pediatric Rheumatology, University Medical Center Groningen, Groningen*; *[4]Netherlands Association for Pediatric Rheumatology, Utrecht*; *[5]Youth-R-Well.com, Young Patient Organization, Lisse, Netherlands*

Background: Biomedical research should support patients, carers and clinicians to take important decisions in the consulting room and eventually to improve the lives of patients.[1] Thus far the end-users of Juvenile Idiopathic Arthritis (JIA) research have not been involved in the prioritisation of future research. The JIA research community clearly sees the unmet need and has repeatedly expressed the wish to do something about this. As Parsons et al. have put it: 'Understanding young people's research priorities is important to develop research that is in tune with their needs'.[2] Putting this into practice starts with a search for relevant issues, working together with the end users of scientific knowledge on JIA – patients, carers and clinicians – and to prioritise research questions that can really make a difference.[3]
Objectives: In 2018 Dutch organisations of patients, carers and clinicians will collaboratively develop a research agenda for JIA, following the James Lind Alliance methodology.[3,4] An established research agenda, created by patients, carers and clinicians, will inform researchers and research funders about what the most important, relevant research questions for JIA are.
Methods: The James Lind Alliance (JLA) methodology enables us to do a systematic search for unanswered questions that are relevant to patients, carers and clinicians.[4] In a 'Priority Setting Partnership' (PSP), we will gradually establish a top 10 list of the most important unanswered research questions for JIA. In this process the input from patients and their carers will be given the same weight as that from clinicians.
The Dutch JIA PSP will be led by a steering group. This steering group coordinates the PSP and organises the activities. It will include representatives of patients (for JIA: young and adult JIA-patients), carers (for JIA: parents and spouses) and clinicians (for JIA: paediatric rheumatologists, physiotherapists, nurses, psychologists, social workers, ophthalmologist, etc.).
Results: The Dutch JIA organisations support the agenda; also financially. Following the JLA method it will take approximately twelve to eighteen months to formulate a research agenda, so te research agenda for JIA will be published in 2019.
Conclusions: A research agenda that will be jointly inspired by patients. carers and clinicians can really make a difference for decision-making in the consulting room and for the lives of JIA-patients.

REFERENCES:
[1] Macleod MR, Michie S, Roberts I, et al. Biomedical research: increasing value, reducing waste. Lancet 2014;383:101–4. doi:10.1016/S0140-6736(13)62329-6
[2] Parsons S, Thomson W, Cresswell K, Starling B, McDonagh JE. Barbara Ansell, National Network for Adolescent Rheumatology. What do young people with rheumatic disease believe to be important to research about their condition? A UK-wide study. Pediatr Rheumatol Online J 2017;15:53.
[3] Schoemaker CG, Prakken AB, Furth EF. Patients and physicians creating a research agenda together: the method of the British James Lind Alliance [Article in Dutch]. Ned Tijdschr Geneeskd 2017;161(0):D1764.
[4] JLA Guidebook. www.jla.nihr.ac.uk/jla-guidebook [Accessed 24 Jan 2018].

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.2756

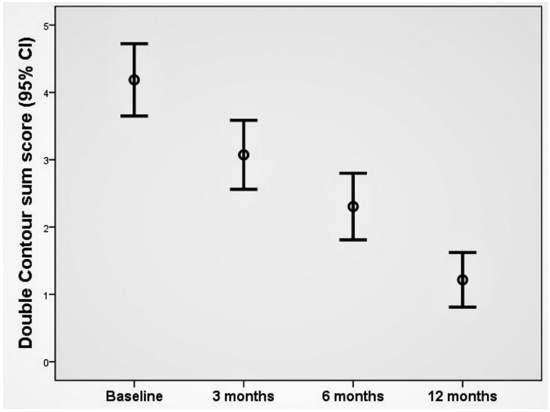
THURSDAY, 14 JUNE 2018

Can we improve the care of gout?

OP0211 **ULTRASOUND SHOWS RAPID REDUCTION OF URIC ACID LOAD DURING A TREAT-TO-TARGET APPROACH IN GOUT PATIENTS: RESULTS FROM A LONGITUDINAL STUDY (NOR-GOUT)**

H.B. Hammer[1], L. Karoliussen[1], L. Terslev[2], E.A. Haavardsholm[1,3], T.K. Kvien[1], T. Uhlig[1]. *[1]Dept Of Rheumatology, Diakonhjemmet hosptial, Oslo, Norway*; *[2]Centre for Rheumatology and Spinal Diseases, Copenhagen University Hospital at Glostrup, Copenhagen, Denmark*; *[3]University of Oslo, Oslo, Norway*

Background: Ultrasound (US) has received an increasing attention in detecting uric monosodium urate (MSU) deposits, and is included as a domain in the ACR/EULAR classification criteria for gout. The OMERACT US group has developed definitions for US elementary lesions in gout including the double contour sign (DC) (deposits of crystals on the surface of cartilage), tophus (larger hypo-echoic aggregation of crystals, usually well delineated), aggregates (small hyper-echoic deposits) and erosions. MSU deposits may be found in many different regions with some predilection sites, but only a few small studies have explored the decrease of deposits during treatment.
Objectives: To explore by US the longitudinal resolution of MSU deposits during a treat-to-target approach with urate lowering therapy (ULT) in patients with gout.
Methods: In a prospective observational study, patients with crystal-proven gout were included if they presented after a recent gout flare and had increased serum urate levels (>360 μmol/L/>6 mg/dl). In a treat-to-target approach using ULT and increasing drug doses with monthly follow-up until treatment target was met (<360 μmol/L, or <300 μmol/L if clinical tophi). An extensive US assessment was performed (GE E9 machine, grey scale 15MHz) at baseline and after 3, 6 and 12 months to detect MSU deposits, using the OMERACT definitions for DC, tophi and aggregates with bilateral assessment of radiocarpal joints, MCP 2, insertion of triceps and quadriceps, proximal and distal patellar tendon, the Achilles tendon and cartilage of distal femur (maximal flexed knee) and the talar cartilage of tibiotalar joint and MTP 1 joint. The degree of elementary lesions was semi-quantitatively scored 0–3 (0=none, 1=possible, 2=certain, 3=major deposits). Sum scores of DC, tophi and aggregates, as well as total sum score of all lesions, were calculated for each visit. Changes from baseline were explored by paired samples T-test and response by Standardised Response Mean (SRM).
Results: 161 patients were included at baseline (93.3% men, mean (SD) age 57.0 (14.1) years, disease duration 8.0 (7.7) years). The mean (SD) serum urate level decreased from 487 (82) μmol/L at baseline to 312 (52) μmol/L at 12 months, with 72% reaching the target at 3 months, and 84% at 12 months. Sum scores of deposits decreased over 12 months (table 1, with*=p<0.05, **=p<0.001), and the numeric decrease was largest for DC (figure 1). SRM from baseline to 3, 6 and 12 months was 0.73, 1.02 and 1.26 for DC, 0.06, 0.57 and 0.91 for tohpi and 0.20, 0.51 and 0.66 for aggregates.



Abstract OP0211 – Table 1

	Baseline (n=161) Mean (SD)	3 months (n=124) Mean (SD)	6 months (n=115) Mean (SD)	12 months (n=88) Mean (SD)
Double Contour score	4.2 (3.4)	3.1 (2.8)**	2.3 (2.7)**	1.2 (1.9)**
Tophi score	6.5 (6.6)	6.3 (5.7)	5.4 (6.1)**	4.2 (5.3)**
Aggregates score	9.1 (5.3)	8.8 (4.9)*	7.9 (5.2)**	6.7 (4.9)**
Double Contour, tophi and aggregates sum score	19.8 (13.6)	18.1 (12.0) **	15.6 (12.8) **	12.1 (10.9)**

Conclusions: During a treat-to-target approach with ULT all deposits decreased, and most extensively for DC. This study shows that reduction of the uric acid load in gout during treat-to-target ULT can be visualised by US, and that DC may be the most sensitive to change.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.3250

OP0212 MOBILE PHONE TEXT MESSAGES FOR IMPROVING ALLOPURINOL ADHERENCE: A RANDOMISED CONTROLLED TRIAL OF TEXT MESSAGE REMINDERS

K. Bunphong, P. Narongroeknawin. *Internal Medicine, Phramongkutklao Hospital, Bangkok, Thailand*

Background: Medication adherence is important to treatment success, particularly in gout where the target level achievement is critical. However, there is no evidence that mobile phone text message reminder is effective in improving treatment adherence and clinical outcomes for gout.
Objectives: To evaluate the effect of mobile phone text messaging on the adherence to allopurinol treatment and serum uric acid (SUA) level of patient with gout in a randomized-controlled trial.
Methods: Adult patients who were diagnosed of gout by 1977 ARA classification criteria for gout, receiving at least 1 month of allopurinol, and had estimated glomerular filtration rate greater than 30 mL/min/1.73 m^2 were enrolled and randomly assigned to 2 groups by block randomization. Patients in the intervention group received a daily short message reminder to take allopurinol for 90 days. Patients in the control group received a weekly short message information about non-pharmacologic treatment for gout in plain language. The primary outcomes were allopurinol adherence, defined as the Medication Taking Behaviour for Thai patient (MTB-Thai) score >21, and SUA level at 12 weeks. The primary analysis was by intention-to-treat. This trial is registered with Thai Clinical Trials Registry, TCTR20171229004.
Results: Eighty-two patients were randomised, with 42 in the intervention group and 40 in the control group. No significant different of baseline characteristic, SUA (7.66±1.24 vs 7.78±1.17 mg/dL) and MTB-Thai score (18.38±0.73 vs 18.37 ±0.95) between two groups. At week 12, 37 patients (88.1%) in the intervention group achieved adherence compared with none of patient in the control group (RR for adherence 71.5, 95% CI: 4.54 to 1126.80; p=0.002). SUA level was decreased significantly from baseline in both study groups, however, the reduction in the intervention group was significantly greater than in the control group (−1.47±0.86 vs −0.28±0.39 mg/dL, p<0.001). Serum creatinine was significantly decreased in the intervention group (−0.03±0.09 mg/dL, p<0.031), while serum creatinine was unchanged in the control group (0.01±0.08 mg/dL, p=0.84).
Conclusions: Patients who received daily short message reminder had significantly improved adherence and reduction in SUA compared with the control individuals. Mobile phones text reminders may be an important tool to enhance allopurinol adherence and help in controlling SUA level in gout patients.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.2251

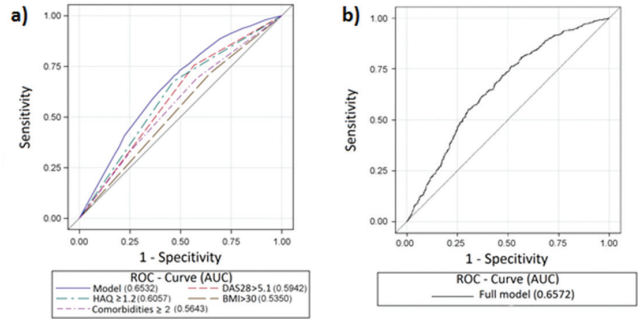
THURSDAY, 14 JUNE 2018

'Why does BMI matter?'

OP0213 WHAT IS THE IMPACT OF POOR PROGNOSTIC FACTORS ON THE ACHIEVEMENT OF LOW DISEASE ACTIVITY OR REMISSION IN PATIENTS WITH RHEUMATOID ARTHRITIS?

L. Baganz[1], A. Richter[1,2], K. Albrecht[1], M. Schneider[3], G.-R. Burmester[4], A. Zink[1,4], A. Strangfeld[1]. [1]*German Rheumatism Research Center, Berlin*; [2]*Institute for Community Medicine, Greifswald*; [3]*Heinrich-Heine-University, Düsseldorf*; [4]*Charité University Medicine, Berlin, Germany*

Background: Poor prognostic factors were initially developed using radiologic progression as outcome. In the 2016 update of the EULAR recommendations it is proposed to use these factors for decision whether or not a biologic should be started.[1] However, the treatment target is not radiologic progression but low disease activity (LDA) or remission.
Objectives: To investigate the impact of indicators of unfavourable prognosis on the achievement of LDA and remission in patients with RA.
Methods: Patients from the German biologics register RABBIT switching from 1 st to 2nd csDMARD were studied. High disease activity (DAS28 >5.1), autoantibodies (RF/ACPA positive), prevalent erosions, functional limitation (HAQ ≥1.2), comorbidities (≥2), obesity (BMI >30kg/m^2), and smoking were evaluated as prognostic factors. Generalised regression analyses were applied to investigate the role of prognostic factors regarding the achievement of LDA (DAS28 <3.2) or remission (DAS28 <2.6). Receiver operating characteristic (ROC) curves were calculated to compare the ability of the prognostic factors (baseline values) to discriminate patients achieving LDA from those maintaining moderate or high disease activity within six months. The prognostic value of all factors was determined by the area under the ROC curve (AUC).
Results: A total of 1613 patients were studied (mean age 58.9 years, mean disease duration 4.8 years). 35% had DAS28 >5.1, 60% were RF/ACPA positive, 27% had erosions, 44% functional limitation, 37%≥2 comorbidities, 32% were obese, and 26% current smokers. LDA was achieved by 33% of patients with DAS28 >5.1, by 30% if also autoantibodies and erosions were present, and by 20% if DAS28 >5.1, HAQ≥1.2,≥2 comorbidities and obesity were present. DAS28 >5.1 (OR 0.41 [95% CI: 0.32 to 0.52]), HAQ≥1.2 (0.58 [0.46;0.74]),≥2 comorbidities (0.66 [0.47 to 0.90]) and obesity (0.72 [0.57;0.91]) independently decreased the probability of LDA within six months. Current smoking (0.67 [0.48;0.93] was negatively associated with remission. RF/ACPA and erosions were not associated. The ROC curves for achieving LDA for the significant factors (DAS28 >5.1, HAQ≥1.2,≥2 comorbidities and obesity) and a model containing only these four factors are shown in figure 1(a). The AUC of the model is higher than the one of the single curves. The AUC for the full model (figure 1(b)) which was additionally adjusted for age, sex, autoantibodies, erosions, current smoking, therapy and time is similar to the one of the reduced model.



Conclusions: High disease activity, functional limitation, comorbidities and obesity had significant negative impact on LDA and remission. They should be considered as poor prognostic factors in csDMARD-treated patients. It appears that a combination of the factors is better than using single ones.