Figure 2. Steroid treatment

Conclusion: MEPO effectively controlled systemic and respiratory EGPA symptoms in a large European cohort, with no major safety concerns.

References:

[1] Wechsler et al. MEPO or Placebo for Eosinophilic Granulomatosis with Polyangiitis. *NEJM*. 2017

Disclosure of Interests: Alessandra Bettiol: None declared, Maria Letizia Urban: None declared, Federico Alberici: None declared, Carlo Agostini: None declared, Chiara Baldini: None declared, Enrica Bozzolo: None declared, Paolo Cameli: None declared, Nunzio Crimi: None declared, Stefano Del Giacco: None declared, Allyson Egan: None declared, Georgina Espigol-Frigole Consultant of: Roche and Janssen, Mara Felicetti: None declared, Marco Folci: None declared, Paolo Fraticelli: None declared, Marcello Govoni: None declared, Anna Kernder Grant/research support from: Grant/research support from: GlaxoSmithKline and UCB Pharma for performing the LuLa-study., Carlo Lombardi: None declared, Giuseppe Lopalco: None declared, Claudio Lunardi: None declared, Aladdin J Mohammad Speakers bureau: lecture fees from Roche and Eli Lilly Sweden, PI (GiACTA study), Frank Moosig: None declared, Simone Negrini: None declared, Thomas Neumann: None declared, Pavel Novikov Grant/research support from: This work was supported by the 5-100 Project, Sechenov University, Moscow, Giuseppe Paolazzi: None declared, paola parronchi: None declared, Luca Quartuccio Consultant of: Abbvie, Bristol, Speakers bureau: Abbvie, Pfizer, Vito Racanelli: None declared, Carlo Salvarani: None declared, Maxime Samson: None declared, Jan Schroeder: None declared, Savino Sciascia: None declared, Renato A. Sinico: None declared, Benjamin Terrier: None declared, Paola Toniati: None declared, Domenico Prisco: None declared, Augusto Vaglio: None declared, Giacomo Emmi: None declared

DOI: 10.1136/annrheumdis-2020-eular.5544

OP0149 VISUAL LOSS IN PATIENTS WITH GIANT CELL ARTERITIS TREATED WITH TOCILIZUMAB

J. Amsler¹, I. Kysela¹, L. Christ¹, C. Tappeiner², L. Seitz¹, G. Scholz¹, F. Kollert¹, S. Reichenbach¹, P. Villiger¹. ¹Bern, Department of Rheumatology, Immunology and Allergy, Bern, Switzerland; ²Bern, Department of Ophthalmology, Bern, Switzerland

Background: Whether Tocilizumab (TCZ) may prevent vision loss in Giant Cell Arteritis (GCA) to the same extent as glucocorticoids remains a key and unanswered question. A patient cohort observed over up to 8 years addresses this issue.

Objectives: To investigate the frequency of vision loss/visual impairment in a GCA cohort treated with TCZ.

Methods: In this observational monocentric study, the courses of 192 patients with GCA treated with TCZ between 01.01.2011 and 31.12.2018 were analyzed. Data were extracted from medical records and collected in a Clinical Trial Unit (CTU) - based registry. Demographic, clinical and laboratory data were analyzed.

Results: 192 patients with GCA were treated with TCZ; 121 (63%) were female, 112 (58%) fulfilled 1990 American College of Rheumatology (ACR) criteria, all others had large vessel vasculitis based on magnetic resonance-angiography (MRA). The cumulative duration of TCZ treatment was 3467 months; the median treatment duration was 13.8 (8.5; 22.8) months. At baseline, visual impairment was present in 71 (37%) and vision loss in 21 (7.8%) patients. Visual loss was associated with higher age (74 (70; 82) vs. 70 (63; 76) years; $p=0.029$), lower C-reactive protein at baseline (14.0 (3.5; 42.0) vs. 54.5 (21.0; 101.0) mg/l;

$p<0.001$), cranial symptoms ($p<0.0001$), jaw claudication ($p=0.030$) and negative MRA of the aorta ($p=0.020$). Over the observed time span only one patient taking part in a clinical trial developed vision loss. In total 4 (2%) patients with vision impairment showed deterioration and 61 (32%) improvement.

Conclusion: Collectively, our data suggest that TCZ is able to prevent visual loss and may have a favorable effect on visual impairment.

Disclosure of Interests: Jennifer Amsler: None declared, Iveta Kysela: None declared, Lisa Christ Consultant of: BMS, Christoph Tappeiner: None declared, Luca Seitz: None declared, Godehard Scholz: None declared, Florian Kollert Employee of: Novartis, Stephan Reichenbach: None declared, Peter Villiger Consultant of: MSD, Abbvie, Roche, Pfizer, Sanofi, Speakers bureau: Roche, MSD, Pfizer

DOI: 10.1136/annrheumdis-2020-eular.6068

OP0150 WHAT IS THE ROLE OF TEMPORAL ARTERY BIOPSY IN GIANT CELL ARTERITIS FAST-TRACK PATHWAYS WHEN TEMPORAL ARTERY ULTRASOUND IS NEGATIVE?

A. Sachdev¹, S. Dubey², C. Tiivas³, M. George³, P. Mehta³. ¹Russells Hall Hospital, Dudley, United Kingdom; ²Oxford University Hospitals NHS Foundation Trust, Oxford, United Kingdom; ³University Hospital Coventry and Warwickshire NHS Trust, Coventry, United Kingdom

Background: A number of centres are now running fast track pathways for diagnosis and management of Giant cell arteritis with ultrasound as the first port of call for diagnosis¹. Temporal artery biopsies (TABs) have become the second line of investigation, and it is unclear how useful TAB is in this setting.

Objectives: This study looked at accuracy of Temporal artery biopsy (TAB) in patients with suspected Giant Cell arteritis (GCA) with negative/inconclusive ultrasound (U/S) and how duration of treatment on steroids prior to these investigations and arterial specimen size affected it.

Methods: Prospective study of all patients with suspected GCA referred for TAB when U/S was negative or inconclusive, as part of the local fast-track pathway (Coventry). Database included clinical findings, serological work up, U/S and TAB results and treatment. Sensitivity and specificity of U/S and TAB was calculated and compared based on duration of treatment with steroids.

Results: One hundred and nine patients were referred for TAB via Coventry fast-track-pathway. The sensitivity of U/S in this cohort of patients was 9.08% and specificity was 93.33%. After 3 days of steroid this was 0% and 100% respectively. For TAB when done within 10 days of starting steroids, this was 65% and 87.5% respectively. After 20 days of steroids this was 0 % and 100%. The sensitivity and specificity was 20% and 85% when arterial specimen size was 11-15mm and 47% and 100% when specimen size was 16mm or more. Sensitivity and specificity of U/S of 644 suspected GCA patients was 48% and 98%.

Conclusion: Our study demonstrates that TAB plays a relevant role in GCA fast-track-pathways, when U/S is negative/inconclusive. TAB was more sensitive than U/S in this cohort of patients, but overall sensitivity of U/S was higher when calculated for all patients suspected with GCA. Both remain useful tests if performed early. TAB specimen size should ideally be 16mm or more and done within 10 days of starting steroids.

References:

[1] Jonathan Pinnell, Carl Tiivas, Kaushik Chaudhuri, Purnima Mehta, Shirish Dubey, O38 The diagnostic performance of ultrasound Doppler in a fast-track pathway for giant cell arteritis, *Rheumatology*, Volume 58, Issue Supplement_3, April 2019, kez105.036, <https://doi.org/10.1093/rheumatology/kez105.036>

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.6534

OP0151-PARE WORK IMPACTS EXPERIENCED BY YOUNGER PEOPLE WITH ARTHRITIS: A SYSTEMATIC REVIEW

D. Berkovic¹, C. Parker¹, D. Ayton¹, A. M. Briggs², I. Ackerman¹. ¹Monash University, Melbourne, Australia; ²Curtin University, Melbourne, Australia

Background: On a global scale, it is estimated that adults in their peak income-earning years are disproportionately impacted by arthritis (1). Younger adults with arthritis are less likely to be employed and are more likely to face productivity challenges at work when compared to healthy similar-aged peers (2). The work-related impacts of arthritis on younger adults remain largely unexplored and are rarely considered in routine clinical care for arthritis.

Objectives: To systematically identify, appraise and synthesise the available evidence on work impacts experienced by individuals aged 16-50 years with arthritis.

Methods: Eligible studies from 2000 - 2020 were identified in OVID Medline, PsycINFO, Embase, and CINAHL databases using a comprehensive search strategy. Quantitative and qualitative studies containing self-reported data on the work impacts of arthritis on younger people were included. Quality assessment was undertaken using validated quality appraisal tools (3).

Results: From a yield of 300 studies, 35 were included in the review. After quality assessment and exclusion of the lowest-ranked studies, 28 studies (17 quantitative, 11 qualitative) were analysed. Work outcomes data were organised into five themes (1-3 for quantitative outcomes, 4-5 for qualitative outcomes): (1) the impacts of arthritis on work productivity; (2) the impacts of arthritis on work participation; (3) other arthritis attributable workplace challenges; (4) barriers to work participation associated with arthritis, and (5) enablers to work participation associated with arthritis. For quantitative themes, arthritis was strongly associated with other workplace challenges: scores on the Workplace Activity Limitations Scale ranged from 5.9 (moderate workplace difficulty) to 9.8 (considerable workplace difficulty); and work disability relative to the healthy population (prevalence ranging from 6% - 80%). For qualitative themes, barriers to work participation included lack of workplace support; enablers included workplace support and intrinsic motivation to work.

Conclusion: Arthritis is associated with poorer work outcomes for younger people relative to healthy peers. The available evidence was heterogeneous across studies. Additional research focusing solely on the unique workplace needs of younger population groups is required. This would inform the development of tailored intervention or workplace support strategies to maximise productive working years.

References:

- [1] European League Against Rheumatism. Horizon 2020 Framework Programme: EULAR's positions and recommendations. EULAR 2011.
- [2] Jetha A. (2015). The impact of arthritis on the early employment experiences of young adults: A literature review. *Disabil Health J.* 8(3) 317-324.
- [3] Joanna Briggs Institute. Critical Appraisal Tools. The University of Adelaide 2019.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.1461

Innovative care

OP0152-HPR

A COST-UTILITY ANALYSIS OF MULTIMODAL OCCUPATIONAL THERAPY IN PATIENTS WITH THUMB BASE OSTEOARTHRITIS

A. T. Tveter¹, L. Kleven², N. Osteras¹, R. Nossun³, R. E. Mehl Eide⁴, Å. Klokkeide⁵, K. Hoegh Matre⁴, M. Olsen⁵, Ø. Andreassen¹, I. Kjekken¹.

¹Diakonhjemmet Hospital, Department of Rheumatology, National Advisory Unit on Rehabilitation in Rheumatology, Oslo, Norway; ²Oslo University Hospital, Department of Clinical Research Support, Oslo, Norway; ³Trondheim University Hospital, St. Olavs Hospital, Trondheim, Norway; ⁴Haukeland University Hospital, Bergen, Norway; ⁵Haugesund Rheumatism Hospital AS, Haugesund, Norway

Background: Patient education, hand exercises, and use of assistive devices and orthoses are regarded as first-line treatment for patients with hand osteoarthritis (OA) (1), however there is limited evidence for the cost-effectiveness of such treatment.

Objectives: The objective of this study is to assess the cost-utility of a multimodal occupational therapy treatment delivered in the waiting period before surgical consultation in patients with thumb base OA compared to usual care.

Methods: This study presents an economic evaluation assessing the difference in health care use and quality-of-life during a 24-month period in a Norwegian multicenter randomized controlled trial. All patients referred to surgical consultation due to thumb base OA at three departments of rheumatology between 2013 and 2015 were eligible for inclusion. In total, 180 patients were included and randomized to a control group or a multimodal occupational therapy group (90 patients in each group). During the waiting period between referral and actual surgical consultation, the control group continued with usual care which was staying on the waiting list and receiving information on hand OA. The intervention group got information on hand OA, ergonomic principles and use of assistive devices, and they were instructed in home-based hand exercises and received a day and a night orthosis. The intervention group was instructed to use the orthoses and assistive devices as much as possible and perform home exercises three times per week for 12 weeks. The patients were assessed at baseline and after 4, 18 and 24 months. The within-trial economic analysis reports the incremental cost-effectiveness ratio (ICER) reflecting the between-group difference in incremental cost per adjusted life years (QALY) over 24 months. A generic

health-related quality of life questionnaire, the EuroQol 5 Dimension, was used to calculate the QALYs at baseline, 4, 18 and 24 months. Costs were collected from different sources, taking a health care perspective; The occupation therapist reported the number of consultations related to the intervention; surgical procedure and post-operative follow-up were collected from patients' journals; and additional consumption of primary and specialist health care was self-reported by the patient. Sensitivity analyses were performed. The results are presented in a cost-effectiveness plane using bootstrapping. Willingness-to-pay threshold is set to be € 27 500 linked to the severity of this condition.

Results: The mean age of the included patients was 63 years (SD 7.6) and 79% were women. There was a total between-group difference in QALYs of 0.07 utilities after 24 months, in favour of the intervention group. Operations constituted the main costs with 22 operations in the intervention group compared to 33 in the control group. The between-group difference in costs due to health care consumption was estimated to € 500 in favour of the intervention group (Figure 1).

Conclusion: The results in this within-trial analysis indicate that multimodal occupational therapy in the waiting period before surgical consultation compared to usual care is a cost-effective alternative taking a health care perspective.

References:

- [1] Kloppenburg, M., et al. (2018). "2018 update of the EULAR recommendations for the management of hand osteoarthritis." *Ann Rheum Dis.*

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.3345

OP0153-HPR

HOW CAN WE HELP PEOPLE WITH FIBROMYALGIA? NO EFFECTS OF AN EVIDENCE-BASED MULTICOMPONENT REHABILITATION PROGRAMME

H. A. Zangi¹, T. Haugmark¹, S. A. Provan², G. Smedslund^{1,3}, K. B. Hagen^{1,3}.

¹Diakonhjemmet Hospital, National Advisory Unit on Rehabilitation in Rheumatology, Oslo, Norway; ²Diakonhjemmet Hospital, Dept. of Rheumatology, Oslo, Norway; ³Norwegian Institute of Public Health, Oslo, Norway

Background: Patients with fibromyalgia (FM) suffer from high symptom burden, lack of understanding and few available treatments. EULAR evidence-based recommendations for the management of FM state that optimal management should focus on prompt diagnosis, patient education and initially non-pharmacological treatments¹. Physical exercise is recommended for all patients and may be combined with tailored psychological therapies for those with unhelpful coping strategies. The evidence for these combined therapies is still weak and further studies are warranted. A Norwegian mindfulness- and acceptance-based intervention, the Vitality Training Programme (VTP), has shown beneficial effects in groups of patients with rheumatic and musculoskeletal diseases^{2,3}, but has previously not been tested in combination with physical exercise.

Objectives: To test the effects of a multicomponent rehabilitation programme comprising the VTP followed by supervised physical exercise for patients with recently diagnosed FM.

Methods: Patients with widespread pain ≥ 3 months; aged 20 to 50, who were working or had not been out of work >2 years, were referred to rheumatologists for diagnosis clarification according to ACR 2010 FM diagnosis criteria. All eligible patients participated in a 3-hour group-based patient education programme before inclusion and randomization. The intervention group received the VTP, a 10-session group programme followed by 12 weeks supervised physical exercise. The control group followed treatment as usual. Self-reported data were collected electronically. Primary outcome was Patient Global Impression of Change