Methods: We included all new patients who attended a combined ophthalmology–rheumatology clinic at a tertiary referral hospital from the 1st of October 2015 to the 30th of November 2017. We analysed their demographic, clinical, laboratory, and treatment characteristics. Patients were considered to have activity according to the joint opinion of the ophthalmic and rheumatologic consultants.

Results: We included 538 new patients. 331 were female (61.5%) and the median age (range) was 8.1 years (1.1–17.3). 59.5% of the patients had juvenile idiopathic arthritis (JIA), whereas patients with SLE, Behçet's disease, dermatomyositis, scleroderma, and juvenile ankylosing spondylitis represented 8.6%, 8.1%, 7.2%, 4.7%, and 4.3% of the studied cohort respectively.

Of the patients with juvenile idiopathic arthritis, 56.7% had not developed ocular manifestations by the end of the study, while 27.3% suffered from uveitis that was controlled by methotrexate, 7.4% suffered from uveitis that was controlled by both methotrexate and adalimumab, and 8.6% suffered from uveitis that was still active by the end of the study period.

72.3% of the patients with Behçet's disease had uveitis, of which 34.6% suffered profound diminution of vision in the affected eye(s) despite receiving anti TNFs. Other medications that were given were prednisolone, azathioprine, cyclosporine, and cyclophosphamide.

Smaller percentages of patients with dermatomyositis, scleroderma, and juvenile ankylosing spondylitis, developed ocular manifestations, and the vast majority were systemically and ophthalmologically quiescent by the end of the study duration.

Conclusions: More than half the patients attending the combined clinic during the period of the study had JIA. A greater percentage of patients with uveitis due to JIA could be controlled medically than of patients with uveitis due to Behçet's disease. A multidisciplinary clinic can save patients with rheumatologic diseases and uveitis precious time.

REFERENCES:

- Engelhard SB, Bajwa A, Reddy AK. Causes of uveitis in children without juvenile idiopathic arthritis. *Clin Ophthalmol* 2015; 9: 1121–1128.
- Gilles CL. Uveitis in childhood—part I. Anterior. *Ann Ophthalmol* 1989; 21:13–19.
- Tugal-Tutkun I, Havrilikova K, Power WJ, et al. Changing patterns in uveitis of childhood. *Ophthalmology* 1996; 103: 375–383.
- Rosenberg KD, Geuer WJ, Davis JL. Ocular complications of pediatric uveitis. *Ophthalmology* 2004; 111: 2299–2306.
- BenEzra D, Cohen E, Maftzir G. Uveitis in children and adolescents. *Br J Ophthalmol*. 2005;89(4):444–448.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1627

AB1091 TOLERABILITY OF VACCINATION OF 13 PCV IN PATIENTS WITH JIA, WITHOUT SYSTEMIC MANIFESTATIONS

E. Alexeeva^{1,2}, T. Dvoryakovskaya^{1,2}, M. Soloshenko¹, R. Denisova¹, K. Isaeva¹, A. Mamutova¹, N. Mayansky¹, N. Tkachenko¹, I. Zubkova¹, T. Kaluzhnaya¹, A. Gayvoronskaya¹, M. Broeva¹, M. Fedoseenko¹. ¹National Medical Research Center for Children's Health; ²Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russian Federation

Background: Juvenile idiopathic arthritis (JIA) is one of the most frequent and most disabling rheumatic diseases in children. Children with JIA receiving immunosuppressive and genetically engineered biologic drugs belong to the high-risk group for the development of bacterial and viral infections, including those administered by preventive vaccines.

Objectives: Our aim was to evaluate the tolerability of the pneumococcal 13-valent conjugate vaccine (PCV) in children with JIA.

Methods: In a prospective cohort study, 3 groups were formed: children with JIA in the remission phase on methotrexate or etanercept (group I), with JIA in the active phase prior to the appointment of methotrexate or etanercept (group II), control group (conditionally healthy children). 0.5 ml of the 13-valent PCV was administered once subcutaneously during therapy in patients in the remission phase or 3 weeks before the appointment of methotrexate or etanercept in patients in the active phase.

Results: At this stage of work, the tolerability of the 13 PCV vaccine was evaluated in patients with JIA, without systemic manifestations. In our study, the post-vaccination period was asymptomatic in 58% of the children in Group I, 66% in children in Group II, and in 60% in the control group. Most often in the postvaccinal period, local reactions were noted, which were painful at the place of administration of the vaccine in 6% of the children in group I, 8% in group II, and 24% in the control group, respectively. Less developed oedema and hyperemia at the

injection site – in 12% of children in group I, 6% in group II, in 8% of children in the control group. There was no significant difference in the incidence of local reactions to vaccination of 13 PKV in patients with JIA and in children of the control group. Analysis of the time of occurrence and duration of local and systemic reactions to vaccination of 13 PKV showed that the maximum severity of symptoms was noted in the first day, by the 2–3 day of observation, complaints and fever disappeared. The increase in local reactions was noted 2 days after immunisation, followed by extinction to 3–4 days of follow-up. There were no serious adverse events in the post-vaccination period.

Conclusions: Vaccination with the 13-valent PCV in children with JIA is safety and is not accompanied by the development of serious adverse events.

Disclosure of Interest: E. Alexeeva Grant/research support from: Roche, Pfizer, Centocor, Novartis, T. Dvoryakovskaya Grant/research support from: Roche, Pfizer, M. Soloshenko: None declared, R. Denisova: None declared, K. Isaeva: None declared, A. Mamutova: None declared, N. Mayansky: None declared, N. Tkachenko: None declared, I. Zubkova: None declared, T. Kaluzhnaya: None declared, A. Gayvoronskaya: None declared, M. Broeva: None declared, M. Fedoseenko: None declared

DOI: 10.1136/annrheumdis-2018-eular.6439

AB1092 AN AUDIT ON PAEDIATRIC UVEITIS IN THE GREATER GLASGOW AND CLYDE (GGC) SERVICE: GUIDELINE ADHERENCE AND IMPACT ON PATIENT OUTCOMES

E. Parmar¹, J. Waddell¹, J. Gardner-Medwin². ¹School of Medicine; ²Department of Rheumatology, University of Glasgow, Glasgow, UK

Background: 2010 guidelines from the Scottish Paediatric and Adolescent Rheumatology Network (SPARN) and the Scottish Uveitis Network (SUN) outlined management pathways for paediatric uveitis. Given the time since its establishment and last review, an audit on the GGC service's adherence to the guidelines as well as patient outcomes was conducted.

Objectives: To determine the service's compliance to the SPARN/SUN guidelines for the management of paediatric uveitis, in addition to establishing patient outcomes and identifying current shortcomings and areas for improvement in future practice. We also aimed to provide data to inform the revision and updating of the guideline for the year 2018.

Methods: This retrospective audit was conducted by collecting data from patients within the GGC's Royal Hospital for Children's joint rheumatology and ophthalmology service who were diagnosed with uveitis between the 1st of January 2008 and the 31st of December 2017. The data was then compared to the guidelines set by SPARN/SUN, in addition to a study conducted by this service prior to the guideline's development.

Results: 39 suitable patients were identified from the list of 253. From these patients, 92 separate events of uveitis were recorded – 84 of which ended in remission within the audit period. 17 events (20%) remained active after 7 months and required ongoing treatment, falling out with the guideline's standards. Time to remission was further stratified by modality of treatment. Of the 78 eyes evaluated, 7 eyes in 5 patients were found to have had cataracts. This comprises 12.8% of patients, an improvement from the 29% of the previous study. Notably, 5 of the 7 eyes had cataracts detected at the first appointment with the service. An additional 7 eyes across 6 patients (15%) were recorded to have had cystoid macular oedema, which is comparable to the previous study's 11%. A majority of these (4 of 7 eyes, or 57%) were again discovered to already be present at the first appointment.

Conclusions: Guideline adherence was commendable, though improvement is needed in treatment escalation to decrease the time taken for patients to achieve remission. There exists a tendency to maintain patients on topical steroid therapy due to relapsing and remitting disease activity, though given the high risk of glaucoma, consideration should be given to quickly progressing these patients up the treatment ladder. A large proportion of patients with severe complications of uveitis appear to have developed these prior to their first attendance at the service, suggesting a need for more stringent screening processes for early detection. Overall, outcomes in terms of the number of patients affected by complications of uveitis appear to have improved when compared to the study previously conducted by the service, implying a beneficial effect from adherence to the implemented guidelines.

REFERENCES:

- Scottish Uveitis Network (2010). *Uveitis NMCN Treatment Guidelines*. Available from: <http://www.sun.scot.nhs.uk/Documents/uveitis%20treatment%20guideline%20sep%2020101revised%20.pdf>
- Jalila M, Galea P, Gardner-Medwin J, Lavy T. (2004) *Chronic Uveitis in Children with JIA*. Acquired from: Dr Janet Gardner-Medwin, Paediatric Rheumatology, Royal Hospital for Children, Glasgow.

Acknowledgements: We would like to thank the staff at the Royal Hospital for Children, Glasgow for their cooperation during this audit.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.7266

AB1093

CAN DMARDS THERAPY MODIFY CLINICAL HISTORY OF OLIGOARTICULAR JUVENILE IDIOPATHIC ARTHRITIS (JIA)?

E. Bertoldo¹, C. Mansoldo², F. Martinis¹, G. Dallagiocoma¹, D. Biasi¹, M. Rossini¹, S. Pieropan¹. ¹Rheumatology Unit, ²Ophthalmology Unit, AOUI Verona, Verona, Italy

Background: Therapy of oligoarticular JIA is based on intra-articular injections of steroids, methotrexate and biotechnological therapy. ANAs-positive oligoarticular JIA patients with an early onset of disease have a consistent risk to develop uveitis.

Objectives: The primary aim of this study is to evaluate longitudinally the effect of non-systemic therapy and of systemic immunomodulating drugs (e.g MTX) on ANAs in JIA patients; secondary occurrence of iridocyclitis was evaluated.

Methods: Monocentric retrospective not randomised study of 40 patients affected by oligoarticular JIA (ILAR classification) with ANA positivity at the baseline (T0, time of diagnosis). Patient of Group 1 received only intra-articular infiltrations or NSAID. Patients of Group 2 were treated with DMARDs (most of them with subcutaneous MTX 15 mg/m2/week) or MTX +biotechnological therapies. The assay for ANAs (I.I.F.) was assessed in all patients at T0, at T1 (12 months) and T2 (24 months). At 24 months was also recorded the occurrence of uveitis during the follow up. Exclusion criteria were the ANAs negativity at T0 and other subgroups of JIA.

Results: Twenty-one patients (52.5%) were treated with non-systemic therapy (Group 1), and nineteen (47.5%) with systemic immunomodulating therapy (Group 2). In Group 2 fifteen subjects were treated with MTX, one with MTX plus cyclosporine, one with only cyclosporine, two with MTX plus biotechnological agent (etanercept and adalimumab). At T1, in Group 1 only one patient out of 20 (4.8%) became ANAs negative versus 42.1% (8/19) of patients in Group 2 (p 0.0033). At T2 the incidence of ANAs positivity did not change in Group 1 (only 1/21 ANAs negative), while 42.1% of patients treated with systemic therapies were ANA negative (p 0.006). Three patients were lost at the follow up. The two patients who received bDMARDs in addition to MTX remained ANAs-positive both in T1 and T2. At the end of follow-up period eight uveitis have occurred, six in ANAs positive patients of Group 1 (6/21, 28.5%) and two in ANA negatives patients in Group 2 (2/19, 10.5%).

Conclusions: ANAs-positive patients treated with methotrexate seems to have higher possibility to become ANAs-negative versus patients treated with non-systemic immunomodulating therapy. It's known that MTX might prevent onset of uveitis in JIA, as shown in our results. Demonstrating a negativization of antinuclear antibodies using MTX therapy could help to add a role of this drug in the disease history of the oligoarthritis.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2612

AB1094

ACUTE RHEUMATIC FEVER: NEW ASPECTS OF AN OLD DISEASE

F. Martinis¹, S. Pieropan¹, G. Dallagiocoma¹, E. Bertoldo¹, S. Picassi², D. Biasi¹, M. Rossini¹, M.A. Prioli³. ¹Rheumatology, ²Paediatrics, ³Cardiology, AOUI VERONA, Verona, Italy

Background: Acute rheumatic fever is a nonsuppurative sequela that occurs two to four weeks following group A beta-hemolytic Streptococcus (GABHS) pharyngitis. Despite its decline in incidence in Europe, rheumatic fever still represents a serious healthcare concern. The most common manifestations are arthritis and carditis, followed by chorea, erythema marginatum, and subcutaneous nodules. The diagnosis of ARF is clinical and requires satisfaction of revised Jones criteria as well as evidence of a recent streptococcal infection.

Objectives: Aim of this study was to highlight new emerging features of disease clinical presentation.

Methods: Data regarding patients who fulfilled the Revised Jones Criteria for acute rheumatic fever were retrospectively collected from January 1996 and July 2017. The following clinical and demographic data were obtained: patient sex, birth date, age at presentation, clinical manifestations, evolution of cardiac involvement after therapy.

Results: 35 patients (19 males, 16 females) were included. The mean age at diagnosis 7.9±4 years (range 2–17). Carditis was the most frequent manifestation, occurring in 31 patients (89%). Other common symptoms were fever (91%), arthritis (43%) or arthralgias (54%) and chorea (20%). In 6 out of 7 patients chorea occurred together with carditis. Cardiac auscultation revealed new pathologic

murmurs only in 49% of cases. Echocardiography detected cardiac involvement in the absence of auscultatory findings (subclinical carditis) in 11 patients at the time of diagnosis. In 3 cases ultrasound examination became positive within 4 weeks. Throat cultures were negative in 37% of cases. Anti-streptolysin O (ASO) and anti-desoxyribonuclease B (ADB) antibodies titers did not bear correlation with the severity of cardiac involvement.

Conclusions: In our casistic, carditis was the most common and worrisome manifestation of ARF. Detection of cardiac involvement is still challenging and echocardiography testing should be performed even in the absence of abnormal auscultation findings. If the initial ultrasound is negative but clinical suspicion remains high, US investigation should be repeated, given that rheumatic carditis can evolve over weeks to months. Early detection and treatment of manifestations improves outcome as in all the cases of this series.

Streptococcal serology is most helpful in the diagnosis of ARF because culture or detection of the organism is usually no longer possible by the time ARF presents.

The severity of clinical manifestations, particularly of carditis, does not correlate strictly with ASO and ADB titer.

Sydenham chorea, which usually has a longer latent period (up to 6 months), tends to occur earlier in the disease course, presenting in the acute phase in this series.

REFERENCES:

- [1] Gewitz MH, et al. Revision of the Jones Criteria for the Diagnosis of Acute Rheumatic Fever in the Era of Doppler Echocardiography A Scientific Statement From the American Heart Association. *Circulation*. 2015 May 19;131(20):1806–18.
- [2] Parks T, et al. ASO titer or not? When to use streptococcal serology: a guide for clinicians. *Eur J Clin Microbiol Infect Dis*. 2015 May;34(5):845–9.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4725

AB1095

LONG-TERM IMPACT OF JUVENILE IDIOPATHIC ARTHRITIS ON QUALITY OF LIFE OF ADULT PATIENTS IN GREECE

G.C. Paskalis¹, D. Dimopoulou², M. Trachana³, C.C. Theocharidou¹, P. Pratsidou-Gertsis³, T. Oikonomou², T. Dimitroulas², A. Garyfallos². ¹Aristotle University, Thessaloniki, Greece; ²4th Department of Internal Medicine; ³1st Department of Pediatrics, Pediatric Immunology and Rheumatology Referral Centre, Aristotle University, Thessaloniki, Greece

Background: Juvenile Idiopathic Arthritis (JIA) is the most common rheumatic disease in childhood and affects negatively both physical and psychosocial functioning.

Objectives: To explore the long-term impact of JIA on quality of life of adult patients in Northern Greece.

Methods: Adult patients with a definite diagnosis of JIA were assessed by the SF-12v2 questionnaire in the outpatient transition (from Paediatric to adult Rheumatology) clinic of Hippokratio Hospital of Thessaloniki. SF-12 questionnaire is a quality of life assessment tool and consists of a Physical Component Summary (PCS) and a Mental Component Summary (MCS). PCS and MCS of the patient group were compared to an age-matched control group, using *t-test* or *Mann-Whitney U test*, as appropriate. Moreover, percentages of patients and controls who were severely affected (<45 points in PCS or MCS) were compared, using *Chi-squared test*. Finally, correlation between the two summary components of SF-12 of patients was measured, using *Spearman's rho*. Statistical analysis was done using SPSS software. Level of statistical significance is *p*<0.05.

Results: A total of 50 patients and 135 controls were enrolled in the study. The median (IQR) patient age was 32¹⁰ years and disease duration was 24^{9.5} years. PCS scores of patients group were statistically significantly lower compared to control group (*p*=0.021) and more patients than controls scored low values (<45) in PCS (22% versus 6.7%, odds ratio, 4.0 [95% CI, 1.5, 10.2]; *p*=0.007). MCS scores of patients were slightly better than scores of controls (mean difference, 3.67 [95% CI, 0.44, 6.90]; *p*=0.026), but the severely affected were similar in both groups (odds ratio, 0.6 [95% CI, 0.3, 1.2]; *p*=0.174). No correlation between PCS and MCS was found (*p*=0.48).

Conclusions: There is an apparent impact of JIA on many patients' quality of life, specifically in terms of their physical health, that persists for many years after disease onset, which is in line with studies from other countries. This could be related to disease severity, disease subtype and duration, socioeconomic status and availability of treatment options. Interestingly, JIA wasn't found to affect the patients' mental health. A more specific psychometric test would be appropriate for in-depth analysis and confirmation of this result. Study design did not allow subgroup analysis according to JIA subtype, disease severity or duration, highlighting the need for long-term outcome studies focusing on the risk factors which may be involved.