PPS. EVALUATION OF AN NHS JIA TREATMENT PATHWAY COMPARED WITH PUBLISHED INTERNATIONAL RECOMMENDATIONS
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Background: The ACR recommendations for the treatment of JIA (ACR-JIA) were published in 2011 with the aim of providing an evidence-based, consensus-approved therapeutic pathway for safe and effective JIA treatment.

Aims: Our aim was to determine the feasibility of applying ACR-JIA to a real-life paediatric JIA cohort to evaluate their treatment pathway.

Methods: We conducted a retrospective analysis of a single-centre paediatric JIA cohort. This included a review of the patient case notes, radiology and drug monitoring data of all children newly diagnosed with JIA and polyarticular involvement (five or more joints) in the 2 years since ACR-JIA were published. In total, 35 patients fulfilled ILAR criteria for the diagnosis of JIA since 2011: systemic arthritis (5), polyarthritis (25) and extended oligoarthritis (5). Polyarthritis and extended oligoarthritis, groups were analysed together. Patients with systemic arthritis were reviewed separately. To assess feasibility of the treatment pathways in real clinical practice, disease duration from diagnosis to starting MTX and etanercept treatments was calculated, and the frequency of drug monitoring noted.

Results: 25 females and 10 males (median age at onset 13 years, range 1.5–15) were included in the evaluation. Median age at disease onset for poly/extended oligoarthritis was 10 years (1.5–16), with a median of 12 joints (12–38) active at presentation, and for the systemic group median age at onset was 6 years (2–7), with a median number of 6 active joints (2–10). Three polyarthritis patients were RF positive, 22/30 patients with polyarthritis/extended oligoarthritis followed the ACR recommendations for treatment according to their disease severity, commencing MTX therapy within a median of 6 weeks (3–32) of diagnosis. Etaenercept was commenced in a total of nine patients (30%) within a median of 6 months (1.5–24) subsequent to commencing MTX. This was due to intolerance in 5 patients (56%), inefficacy in two cases (22%) and both intolerance and inefficacy in two cases (22%). A total of seven patients did not follow ACR-JIA guidelines due to excessive length of time between diagnosis and commencing MTX or etanercept treatment, most commonly due to delays in funding approval or insufficient regular drug monitoring tests. All patients with systemic arthritis followed the ACR-JIA recommendations.

Conclusion: Overall, 27/35 patients followed the ACR-JIA recommendations. This evaluation highlights the potential influence of the local health economy in achieving rapid commencement of new JIA therapies and the challenges of ensuring regular drug monitoring in all patients.

Disclosure statement: The authors have declared no conflicts of interest.

doi: 10.1093/rheumatology/keu498

PPS. FELTY’S SYNDROME IN RHEUMATOID FACTOR POSITIVE POLYARTICULAR JUVENILE IDIOPATHIC ARTHRITIS: THE ROLE OF RITUXIMAB
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Background: Felty’s syndrome (FS) is characterized by the triad of severe RA, splenomegaly and neutropenia. Patients with FS experience recurrent infections due to severe neutropenia and are unresponsive to first-line DMARDs. Within the English literature, of the eight adult cases of refractory FS treated with rituximab, seven showed improvement of arthritis and five demonstrated a sustained neutrophil response [1]. FS is rare in children, with only three cases described in the literature [2].

Aims: To present an interesting paediatric case of FS, responding to rituximab.

Methods: A 12-year-old girl presented with a 6-month history of lethargy, weight loss of 10 kg, arthralgia of multiple joints and stiffness in her hands and fingers. At presentation there was symmetrical polyarthritis with 20 active joints including wrists, knees, ankles and most MCPs and PIPs. She met ILAR criteria for polyarticular JIA. RF was positive at >2400 IU/ml and anti-CCP antibodies were raised at 291 units/ml. ANA was positive, 1:640 but dsDNA, ENA and ANCA were all negative. She was profoundly neutropenic with a count of 0.38 x 109/l (range 1.4–7.5). X-ray of both wrists and hands was suggestive of widespread inflammation with significant erosive changes and joint space narrowing. Abdominal US revealed an enlarged spleen (17.4 cm) which was echogenic normal. Although FS is rare in children, the presence of erosive RF-positive arthritis, splenomegaly and neutropenia along with weight loss supports the diagnosis in this case.

Results: There has been a marked response to treatment with initial MTX and 4 days of pulsed i.v. methylprednisolone. Two doses of rituximab were given 2 weeks apart. A significant improvement in neutrophil count to 2.68 x 109/l was observed. At follow-up she had regained most of her weight, she was well in herself and all joints were quiet apart from her wrists.

Conclusion: Our case highlights that although rare, FS can occur in childhood. Initial treatment including rituximab led to a significant improvement both in arthritis and with neutrophil recovery.

Disclosure statement: The authors have declared no conflicts of interest.

References

doi: 10.1093/rheumatology/keu499

PP7. CERVICAL-SPINE INVOLVEMENT IN JIA: A SINGLE-CENTRE STUDY
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Background: JIA is a chronic, inflammatory disorder affecting joints as well as ligaments including cervical spine. Chronic synovitis may result in pannus formation, bony erosion and ligamentous problems. Cervical spine involvement may be clinically silent and potentially only present clinically when it is severe and disabling. Clinical manifestations of cervical spine involvement include neck pain and diminished range of movement. MRI enables visualization of the spinal cord and the paraspinal ligaments, allowing detailed assessment of possible cord impingement, inflammatory change in the ligaments and early detection of erosions.

Aims: To evaluate the possible relationship between clinical status and MRI findings in JIA with cervical spine involvement.

Methods: We collected and analysed the retrospective data at our tertiary referral centre from medical notes and our clinical information software system (CISS) including our imaging system (PACS GE).

Results: Using our departmental code, we identified 47 patients on whom cervical spine MRI had been performed in the past 10 years. We excluded four patients due to diagnosis other than JIA, 28/43 patients had abnormal cervical MRI scans. 7/28 patients were totally asymptomatic. The most common facet joint involved was C1/ C2 and the mean thickness for pannus was found to be 5.4 mm (14/43 scans with pannus). The most yielding plane to measure pannus was found to be axial. Neck changes were strongly associated with poly JIA (13/28) and extended oligo JIA (7/28).

Conclusion: Cervical involvement in poly JIA is common and can occur even in the absence of symptoms. Early identification and targeted treatment is key. MRI determines accurately the activity and the extent.