related arthritis. Uveitis and ANA were only observed in 4 (11.4%) children with oligoarthritis: 3 with persistent oligoarthritis (11.5%, 27.3% of the ANA positive patients) and 1 with extended oligoarthritis (11.1%, 25% of the ANA positive patients). No case of severe uveitis was detected. Erosions were present in 4 (5.5%) children: 2 (33.3%) with polyarthritis, 1 (38.4%) with persistent oligoarthritis and 1 (11.1%) with extended oligoarthritis. 17 (23.6%) patients were treated with methotrexate (MTX): 5 (55.5%) with extended oligoarthritis; 3 (11.5%) with persistent oligoarthritis; 6 (37.5%) with systemic arthritis; 2 (33.3%) with polyarthritis and 1 (50%) with psoriatic arthritis. 106 intraarticular (i.a.) injections of steroids were administered in 36 (50%) children: knee in 25 (69.6%) cases, ankle in 9 (25%) cases, elbow in 4 (11.1%) cases and hand small joints in 4 (11.1%) cases. The i.a. injections were administered in 16 patients with persistent oligoarthritis, 8 with extended oligoarthritis, 5 with systemic JIA and 7 in the other subtypes.

Conclusion The pattern of joint involvement is similar to previous published results. Although, uveitis was less clearly associated with the presence of antinuclear antibodies and also appeared to be milder in comparison to other series. I.a. injections were the mainstay of therapy in the persistent oligoarthritis subtype, but MTX had to be used in 55.5% of the extended oligoarthritis group, stressing the importance of differentiating this 2 patterns of involvement.

OP0088 CHILDHOOD SARCOIDOSIS: EXPERIENCE IN A PAEDIATRIC RHEUMATOLOGY CENTRE

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Background Sarcoidosis is a multisystemic granulomatous disease of unknown aetiology, most commonly affecting young and middle-aged adults. It is relatively uncommon in children.

Objectives To report our experience on the diagnosis, management and outcome of childhood sarcoidosis in a Paediatric Rheumatology settings.

Methods A retrospective chart review to detect patients with sarcoidosis seen by the Rheumatology Service from 1993 to 1998. All patients had initial evaluation that included a complete history and physical examination and an eye evaluation by an Ophthalmologist. Laboratory evaluation at initial and follow-up visits included CBC, ESR, renal and liver function tests, urinalysis, serum calcium, serum immunoglobulins, and Angiotensin converting enzyme (ACE) and chest radiograph. Clinical response to therapy was measured by clinical severity score that we devised. These data were analysed at diagnosis and follow-up visits.

Results Sixteen patients with sarcoidosis were identified. Thirteen were African-Americans. There were nine females and seven males with mean age at onset of 8 (range, 1–15) years; mean age at diagnosis of 10 (range, 2–16) years. Four patients had onset before age 4 years and were classified as early-onset sarcoidosis. Common manifestations included uveitis (69%), pulmonary disease (44%), hilar adenopathy (44%), arthritis (31%), generalised lymphadenopathy (25%), and skin rash (25%). Unusual associated features included abdominal aortic aneurysm (1 case), nephrocalcinosis (1), membranous nephropathy (1), and marrow disease (3). The diagnosis was confirmed by demonstration of noncaseating granuloma on a biopsy specimen associated with negative stains for mycobacteria and fungi in 12 patients. The

tissue biopsy sites included peripheral lymph node (1), skin (1), kidney (1), lung (3), conjunctival nodule (1), lacrimal gland (1), bone (2), bone marrow (1), and tonsil (1). Laboratory abnormalities included elevated ACE serum levels (82%), hyper IgG (82%), anaemia (75%), elevated ESR (70%), and hypercalcemia (12%). Treatment with oral prednisone (1–2 mg/kg/day) was initiated in all 15 symptomatic patients with significant improvement. Prednisone was tapered and successfully discontinued within a mean duration of one year in four patients. Low-dose methotrexate (MTX) in oral dose of 10–15 mg/m²/week was administered in 11 patients. On oral MTX therapy steroid dose was successfully tapered and discontinued within a mean duration of 2.6 years in 6 patients, and was tapered from 1.2 mg/kg/day to 0.2 mg/kg/day within 3.5 years in four. One patient received cytoxan. Two patients relapsed 6 months after discontinuation of MTX. No deaths were noted. Morbidity included persistent iritis (3 patients), restrictive lung disease (1) and joint sequelae (1).

Conclusion Childhood sarcoidosis is prevalent in the State of Louisiana. This enigmatic disorder may involve a broad spectrum of body systems and may present in unusual ways in children. Low-dose MTX seems to be effective, steroid-sparing, and safe adjunct to treat sarcoidosis with multisystem involvement. Long-term follow-up is critical for better understanding of the guide of therapy and prognosis in this disease.

OP0090 SOLUBLE ADHESION MOLECULES ICAM-1 AND E-SELECTIN IN JUVENILE ARTHRITIS – CLINICAL AND LABORATORY CORRELATIONS

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Background Raised concentrations of soluble intercellular adhesion molecule-1 (ICAM-1) and E-selectin (E-sel) are believed to reflect processes of their up-regulation and endothelial cell (EC) activation by various inflammatory stimuli. Resulting enhancement of cell infiltration is a pre-requisite of tissue damage.

Objectives To evaluate serum and synovial fluid (SF) concentrations of ICAM-1 and E-sel in patients with juvenile idiopathic arthritis (JIA) and in paediatric controls and to correlate them with clinical and laboratory variables.

Methods Total of 33 JIA patients (mean age 10 y) were evaluated: 18 with polyarthritis (JIAPoly) disease course (mean active joint count 9) and 15 with oligoarthritis (JIAoligo). Paediatric age-matched control groups consisted of 11 Henoch-Schönlein purpura (HSP) and 10 febrile (FC) patients and 28 healthy children. Current medication, ESR, CRP and FBC were recorded. Soluble ICAM-1 and E-sel in serum and SF were measured by commercially available sandwich ELISA kits.

Results Significant negative correlation with age was observed for the whole group (ICAM-1: $p < 0.01$, E-sel: $p < 0.001$), E-sel correlated with leucocyte and thrombocyte counts ($p < 0.01$), both molecules with CRP ($p < 0.05$) and with each other ($p < 0.01$). For JIA group as a whole no correlation was found with disease duration or therapy used. JIAoligo did not differ from controls, in JIAPoly levels of both molecules were higher than in healthy ($p < 0.001$ for ICAM-1, $p < 0.06$ for E-sel), but not febrile controls. Both molecules correlated with active joint count ($p < 0.01$). In 13 JIA patients (9 oligo, 4 polyarthritis) no correlation was found of SF ICAM-1 and E-sel concentrations