CHRONIC RECURRENT MULTIFOCAL OSTEOMYELITIS: A PARADOXICAL DISEASE


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Background: Chronic recurrent multifocal osteomyelitis (CRMO) is a rare auto-inflammatory polygenic bone disease characterised by septic bone inflammation in paediatric population. Its management, clinical, radiological findings and treatment have not been yet standardised.

Objectives: Retrospective, descriptive multicentric study of patients diagnosed of CRMO in four tertiary level hospitals’ paediatric rheumatology section. There were 16 patients included. The clinical, radiological characteristics where analysed as well as response to treatment options.

Results: The median age at diagnosis was 10.5 years, female:male ratio 62:5,37:5%. The delay in the diagnosis had a median of 4.5 months, being less than one year in 11 patients. Bone pain was the first symptom in 100% of the patients accompanied by fever in 25% of them. A single patient presented perileukemic signs. A slight-moderate increase on acute fase reactants was observed at the debut of the disease: median ESR 47,5 m/h.

The median number of locations at debut was 2.5 (range 1–14), with multifocal involvement in 75%. The most frequent location wasibia (56%), followed by pelvis (44%) and vertebrae (31,25%). Other locations less frequent were: carpus (12,5%), femur (12,5%) mandible (6%) and sternum (6%).

Biopsy was performed in 14/16 patients and bone scintigraphy with Tc99 in 12/16 patients, with pathological uptake observed in 91.6% of cases. MRI was the radiological test of suspected diagnosis in 15/16 patients. NSAIDs were the initial treatment. 5 patients received different antibiotic therapy regimens, without clinical or radiological improvement. 56.25% of patients required other treatments. Systemic corticosteroids were used in 12.5% of patients and bisphosphonates in 43.75% (100% of patients with axial involvement).

After 6 months of treatment with bisphosphonates, 57.14% had complete remission, 28.57% partial remission and 14.28% worsening. 12.5% of the patients had a torpid evolution, receiving sequential therapies with multiple synthetic or biological DMARDs (Anakinra, Canakinumab, Etanercept), and another 12.5% required surgery.

Conclusions: The diagnosis of CRMO is a challenge in the absence of pathognomonic features which leads to delay in diagnosis and the initiation of treatment. In our centres the bisphosphonates were the treatment strategy used in patients with spinal involvement with 85.67% response at 6 months.

Disclosure of Interest: None declared


THU0562 EVOLUTION OF SERUM CALPROTECTIN IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS IN CLINICAL PRACTICE


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Background: Serum Calprotectin (MPR8/MPR14) is a promising biomaker in the management of juvenile idiopathic arthritids (JIA), mainly as a predictor of flare, especially in treatment de-escalation.

Objectives: To describe the evolution of serum Calprotectin in patients with JIA, their clinical evolution and its impact on therapeutic decisions.
Methods: Demographic, clinical and inflammatory activity data (RCP and ESR) were retrospectively collected in patients with JIA of any subtype in whom serum Calprotectin had been determined at least once

Results: We present the data of 15 children, 7 with Oligoarticular subtype JIA, 1 Systemic, 3 Polyarticular, 1 Psoriatic and 3 Enthesitis Related Arthritis (ERA)

The average age was 11 years, 66% female. The characteristics of each patient can be seen in table 1, together with the first determination of serum Calprotectin, CRP and ESR. It also shows the physician’s decision, and the outcome, obtained from the assessment in the next visit

Considering the cutoff point of serum Calprotectin in our sample of: 2.2 μg/mL (80% sensitivity and 69% specificity), 9 of 15 patients presented high values, 2 of them presented a flare (1 Oligo and 1 Poly), both had maintained the same treatment, because they were considered inactive. There were no flares in patients with negative Calprotectin

The evolution of serum Calprotectin, together with the clinical decisions (based on clinical and analytical assessment) are described in table 1

In most of stable patients in whom serum calprotectin was high, it was decided not to lower treatment, and only in one case it was de-escalated. There were no flares in any of them

Conclusions: Serum Calprotectin is a useful biomarker in routine clinical practice, together with other markers such as CRP and ESR, and our clinical judgment, it helps us to make therapeutic decisions

Disclosure of Interest: None declared


THU0563 ULTRASOUND CHANGES IN JOINTS INDUCED BY INTRA-ARTICULAR CORTICOSTEROID INJECTION IN JUVENILE IDIOPATHIC ARTHRITIS

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Background: Ultrasonography (US) studies carried out on joints of juvenile idiopathic arthritis (JIA) patients in clinical remission demonstrate the presence of subclinical synovitis. The significance of subclinical synovitis and the positive power Doppler (PD) signal on US in JIA.

Objectives: The objectives of this study were to assess whether the changes detected by US induced by intra-articular corticosteroid injection in JIA patients.

Methods: We evaluated 49 joints (47 knees, 1 tibiotalar and 1 elbow) of 32 patients who diagnosed JIA. We used grey-scale US by high frequency transducer (7.5–10 MHz) at study entry and after a therapeutic intervention. Each joint was scored for grey-scale (GS) and power Doppler (PD) abnormalities according to a 4-point semiquantitative scale. Pre- and post-treatment US scores were compared and the sensitivity to change of GSUS and PDUS was estimated. US assessment was performed separately, immediately after the clinical evaluation, by an experienced paediatric rheumatologist (BS) with certification by EULAR. Medical records were reviewed for JIA subtype and state of disease. Clinical examination, including routine joint examination was carried out by an experienced paediatric rheumatologist.

Conclusions: Five patients had polyarthritis, 5 had enthesitis-related arthritis, 22 had oligoarthritis. Nine patients (28%) underwent intra-articular corticosteroid injection (IACI) only. 23 (71.9%) were given IACI and systemic medications. The medication used were methotrexate (22 patients), Sulfasalazine (2 patients), and methotrexate and biologic (5 patients). Synovial hyperplasia, joint effusion, PD signal and tenosynovitis in at least one joint were detected in 77.4%, 100%, 33.3% and 15% of patients, respectively. Both GSUS and PDUS scores improved significantly (p<0.0001) from baseline to follow-up. At the follow-up visit, 18 (49.2%) joints completed resolution among these patients 2 had minimal synovial hyperplasia. Although, 31/49 (63.3%) joints residual US abnormalities were judged in remission on clinical grounds.

Conclusions: US is a sensitive tool to assess therapeutic response in patients with JIA. Subclinical disease on US is common in joints with clinically-defined...