negative patients. Amaurosis was found in 7 patients; complete visual loss developed in one case.

Acute uveitis was seen only among arthritis+enthesitis patients ($n = 6$; 10.7%) and in patients with other arthritis ($n = 2$; 14.3%).

Conclusion Uveitis is relatively common in JIA. Chronic form may occur in several JIA subgroups, with persistent oligoarthritis patients and, surprisingly, with psoriatic arthritis patients being the most frequently affected. Acute uveitis is associated with HLA B27 associated disease forms. It is important to check for asymptomatic uveitis through the entire course of disease, as it may begin well after the onset of arthritis and may lead to severe complications.

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SAT0109 EXPRESSION OF BCL-2 IN JUVENILE CHRONIC ARTHRITIS

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Background The aim of this study was to investigate the relationship between levels of molecules regulating of apoptosis in T lymphocytes and the clinical manifestation of juvenile chronic arthritis (JCA).

Objectives Apoptosis is involved in the regulation of an immune response to foreign and autoantigens. We determined the expression of Bcl-2 mitochondrial oncoprotein, which inhibit apoptosis, in different subtypes of lymphocytes obtained from peripheral blood from healthy children ($n = 14$, age: 12.4 ± 5.4) and JCA patients with pauciarticular onset ($n = 17$, age: 12.2 ± 3.8) and polyarticular onset ($n = 30$, age: 11.8 ± 3.2).

Methods All samples were analysed using monoclonal antibodies and flow cytometry technique.

Results Peripheral blood T lymphocytes from patients with pauciarticular onset JCA expressed a significantly lower amount of the Bcl-2 protein than T lymphocytes from patients with polyarticular onset JCA ($p < 0.01$) and healthy children ($p < 0.05$). This differences concerned both $CD4^+$ and $CD8^+$ T cells but $CD4^+$ lymphocytes expressed significantly ($p < 0.05$) lower level of Bcl-2 protein in comparison with $CD8^+$ cells in patients with polyarticular onset JCA. There were no correlations between the expression of Bcl-2 and the age of children in all subgroup of patients. There was significant positive correlation ($R = 0.562$, $p < 0.05$) between the percentage of T lymphocytes with receptor for IL-2 (CD25) and expression of Bcl-2 protein in T cells in children with pauciarticular onset JCA.

Conclusion Our data supported the notion that disturbances in T cell apoptosis may play a role in the immunopathological processes leading to clinical manifestation of JCA. These data suggest also that both polyarticular onset and pauciarticular onset JCA have different pathogenesis and probably distinct aetiologies.

SAT0110 SOLUBLE ADHESION MOLECULES (ICAM-1, VCAM-1, E-SELECTIN, P-SELECTIN) IN JUVENILE IDIOPATHIC ARTHRITIS AND CHILDHOOD – ONSET SCLERODERMA

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Background The soluble forms of adhesion molecules (sAM) may have a regulatory function in inflammatory responses and may serve as useful markers of both leukocyte and endothelial cells activation in different diseases, including several autoimmune disorders. They have been studied in adults with certain rheumatic diseases while studies in paediatric patients are more limited.

Objectives The aim of this study was to compare the levels of sAM in children with juvenile idiopathic arthritis (JIA) and scleroderma and to correlate serum levels of these molecules with conventional inflammatory parameters and to determine differences in these levels among clinical subtypes of JIA.

Methods Soluble forms of AM ICAM-1, VCAM-1, E-selectin and P-selectin were measured by sandwich ELISA in 47 children with JIA, (24 pauciarticular, 7 polyarticular, 16 systemic) and 11 patients with scleroderma. The levels of sAM according to type of disease, JIA type and some inflammatory parameters (ESR, total white blood cell count-WBC, platelet count) were analysed.

Results Differences in serum levels of sAM have been demonstrated among the 3 subtypes of JIA. The highest values were seen in patients with systemic disease, lower values in patients with polyarthritis and pauciarticular form. The statistically significant higher levels of sICAM-1 ($p < 0.01$) and sE-selectin ($p < 0.05$) were recorded only in JIA patients with systemic symptoms than in children who were pauciarticular. In systemic JIA, positive correlation was found between sICAM-1 as well as sE-selectin levels and ESR and WBC. Levels of sICAM-1 and sE-selectin were significantly higher in children with abnormal values of ESR versus patients with normal values ($p < 0.05$ and $p < 0.05$, respectively). Similarly, significantly higher levels of sICAM-1, sE-selectin and sP-selectin were recorded in cases with higher number of WBC in comparison with others ($p < 0.05$, $p < 0.025$, $p < 0.02$, respectively). In patients with scleroderma sE-selectin level was lower than in polyarticular form ($p < 0.05$) and the concentration of both sICAM-1 and sE-selectin were significantly lower than in systemic JIA ($p < 0.05$ and $p < 0.05$, respectively). In contrast, sVCAM-1 levels were significantly higher only in scleroderma children in comparison with pauciarticular ($p < 0.02$) and higher than in polyarticular and equal to the systemic group.

Conclusion The preliminary results indicate the role of sVCAM-1 in the pathogenesis of childhood-onset scleroderma and confirm the differences between subtypes of JIA and suggest that sICAM-1 and sE-selectin may be another useful tool of monitoring the activity of systemic JIA.

SAT0111 JUVENILE SYSTEMIC LUPUS ERYTHEMATOSUS IN PORTUGUESE CHILDREN

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Background Juvenile Systemic Lupus Erythematosus (JSLE) is a worldwide disease. Several studies have been made characterising the prevalence of clinical and laboratory features. However, differences in the disease pattern among different populations have been previously suggested.

Objectives

Methods We have conducted a retrospective study of JSLE patients followed-up at the Rheumatology Department of Santa Maria Hospital. Clinical records of twenty-five Portuguese patients satisfying the 1982 revised ARA criteria for Systemic Lupus Erythematosus (SLE) were reviewed.

Results Twenty-three (92%) were females and two (8%) were males. The mean age of disease onset was 11.8 ± 3.6 (2.5–16) years and the mean age of diagnosis was 12.9 ± 3.6 (6–19) years. The mean follow up time was 6.5 ± 3.5 (0.5 to 14) years. The most common cumulative clinical features were arthritis in 21 patients (84%), malar rash in 19 (76%), renal involvement in 14 (56%), oral ulcers in 13 (52%), vasculitis in 13 (52%), photosensitivity in 11 (44%), central nervous system involvement in 9 (36%), livedo reticularis in 9 (36%), hypertension in 8 (32%), serositis in 5 (20%), renal failure in 5 (20%) and secondary Sjögren syndrome in 1 (4%). Eighteen patients (76%) had abnormal blood counts and seven (28%) had secondary antiphospholipid antibody syndrome. In the immunology evaluation 25 (100%) patients tested positive for antinuclear antibodies, 20 (80%) patients had hypocomplementemia, 21 (84%) patients had raised antinative dsDNA antibody, 9 (36%) had positive anti-cardiolipin antibodies, 6 (24%) had positive lupus anticoagulant, 5 (20%) patients had positive anti-Sm antibodies, 4 (16%) patients had positive anti-SSA/Ro antibodies, 4 (16%) had positive anti-RNP antibodies and 3 (12%) had positive anti-SSB/La antibodies. All the seven antiphospholipid antibody syndrome patients had positive anticardiolipin antibodies and five had positive lupus anticoagulant. The mean age of SLE onset in patients with central nervous system involvement was 10.3 ± 4.5 (2.5–16) years. The main symptoms were seizures (4 patients), headache (3 patients), organic brain syndrome (2 patients), corea (1 patient) and optic neuritis (1 patient). The mean age of SLE onset in patients with renal involvement was 12.3 ± 3.1 (6–16) years. Five (35.7%) developed renal failure. Currently, 64.7% patients are being treated with corticosteroids, 35.3% are taking antimalarials, 29.4% azathioprine and 5.9% mycophenolate mofetil. 35.3% are not taking any medication.

Conclusion The overall clinical and serological pattern of JSLE involvement was similar to other European studies. However, we found a higher female/male ratio (11.5:1) and a lower incidence of central nervous system and renal involvement than in previous reports. In comparison with the results of a study performed in our adult SLE patients (1), the juvenile patients had more frequently haematological (72/50.2%), renal (56/26.7%) and central nervous system (36/10.6%) involvement. Vasculitis (52/18.8%), antiphospholipid antibody syndrome (28/4.3%) and cutaneous (76/60%) involvement were also more frequent. We observed a lower incidence of articular involvement (84/91%) and secondary Sjögren syndrome (4/11.4%) in our juvenile population.

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Orthopedic surgery, Sports medicine

AB0162 NEW MEASUREMENT TECHNIQUE FOR PLATELET MICROPARTICLES FROM THE PATIENTS WITH TOTAL HIP ARTHROPLASTY AFTER TOTAL

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Background Platelet microparticles (PMPs) including glycoprotein 2b/3a and 1b etc were activated by vascular injury, shear stress and other factors. Mainly PMPs play procoagulant activity which indicate the capability of attachment and thrombophilia. We demonstrated that the increasement for PMPs from the patients after orthopaedic surgery using flowcytometry.

Objectives To compare the new technique of the sandwich immunoassay method using against glycoprotein 1b with conventional flowcytometry (FACS, Becton Dickson) reported by Nomura *et al.*¹ for measurement of PMPs at same time on orthopaedic patients.

Methods Collect the platelet rich plasma for each samples. The levels of PMPs were measured using immunoassay method and flowcytometry from five patients who received cement less type total hip arthroplasty, on before and after 1st and the 7th post-operative day.

Results The levels of PMPs before operation were 4.4–13.1/million platelets (FACS), 6.1–22.7/thousand platelets in immunoassay. Correlation between FACS and immunoassay for measuring the levels of PMPs was demonstrated ($r^2 = 0.457$, $p = 0.046$). The ratio of PMPs increased 130–182% on 1st and 80–311% on 7th operative day.

Conclusion The new measurement technique using immunoassay method (select the platelet glycoprotein 1b) for PMPs is easy, quick and useful for the evaluation of hypercoagulative change from the patients after total hip arthroplasty.

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OP0127 PREVENTION OF PERIARTICULAR OSSIFICATION (PAO) AFTER TOTAL HIP REPLACEMENT (THR) WITH ROFECOXIB 25 MG

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Background Heterotopic periarticular ossification (PAO) is very common (more than 60%) after total hip replacement (THR). Without any prevention severe grades of Brooker 3 and 4 occur in about 20%. Grade 3 and 4 means also loss of function and sometimes pain. Prevention of severe grades (Brooker 3–4) is indicated in all cases of THR and is possible by radiation therapy or oral administration of NSAIDs like indometacin or diclofenac.

Objectives Standard NSAIDs have the potential risk of severe gastrointestinal events (perforation, ulceration and bleeding, PUB). Especially patients with THR are usually old and suffering from many diseases. These patients have an increased risk of GI complications. Rofecoxib is a selective inhibitor of COX-2 with