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

reduced risk of PUBs. Although the cause and actions of PAO are not well understood it is generally accepted that COX-2 plays an important role.

Methods In a prospective study we compared the results of 25 mg rofecoxib once daily on preventing severe PAO after THR with results of diclofenac out of the literature. Our 137 patients take 25 mg rofecoxib once daily starting on the first or second day after THR. The mean duration of drug administration was 13.8 days. 72 hips could be evaluated after 3 months, further 65 hips after 6 months.

Results The ossification was evaluated on pre- and postoperative x-rays of the pelvis. There was no difference between the results after 3 and 6 months. 96 (70%) of the hips showed no signs of PAO, 40 (29%) hips had Brooker 1 (ossifications up to one cm), only one hip (1%) Brooker 2 and none of the hips had severe bone formation Brooker 3 or 4 (bridging ossification between femur and pelvis). Results of diclofenac or irradiation therapy in the literature show similar results: Brooker 1 and 2: 11–40% and no severe Brooker 3 and 4.

Abstract OP0127 Table 1

	Therapy	n	Brooker 0 %	Brooker 1 +2 %	Brooker 3 +4 %
Eulert <i>et al.</i> 1997 ²	no	317	36,3	41,3	22,4
Sell <i>et al.</i> 1998 ³	3 × 50 mg Diclofenac	77	76,6	23,4	0
Sell <i>et al.</i> 1998 ³	3 × 3,3 Gy post-op	77	97,4	2,6	0
Zacher <i>et al.</i> 2001	1 × 25 mg Rofecoxib	137	70	30	0

Conclusion 25 mg of the COX-2 inhibitor Rofecoxib administered once daily after THR starting one or two days after surgery for 2 weeks can securely prevent the formation of periarticular ossification (PAO) of severe grade (Brooker 3 and 4). Minor ossification without functional impairment (Brooker 1–2) were found in 30%. 70% of the hips showed no signs of postoperative ossification. These findings are comparable to the results of prevention with irradiation therapy or standard NSAIDs like diclofenac (100–150 mg).

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OP0128 FEMORAL NECK FRACTURES IN OSTEOPOROTIC PATIENTS

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Background

Objectives The aim of the study was to evaluate the role of osteoporosis in the treatment of the femoral neck fractures.

Methods One hundred and twelve patients with femoral neck fractures were treated in our department in two years. The average age of the patients was 68.3 years old (47–91 years old). Fractures were classified according Garden classification and the degree of osteoporosis was appreciated for each patient using Singh system of classification. The treatment was related to the age, displacement of the fracture and degree of osteoporosis.

Osteoporosis (Singh I-III) was recorded in 73 patients (65.2%). Most of the fractures of patients with osteoporosis were displaced (Garden III-IV). The undisplaced fractures were treated by internal fixation with three cannulated screws in all cases regardless the degree of osteoporosis (22 patients). We avoided internal fixation in patients with osteoporosis and displaced fractures at whom the arthroplasty was the first choice of treatment:

- hemiarthroplasty with an Austin Moore prosthesis was the indication of choice in patients with a life expectancy less than five years (9 patients);
- the cemented bipolar prosthesis was preferred in patients with a non-affected acetabulum (52 patients);
- the cemented prosthesis was indicated in patients with a marked degree of osteoporosis (Singh I-III) or in those with a preexisting diseased acetabular cartilage affecting the ipsilateral hip (20 patients);
- the uncemented prosthesis was rarely used, in patients under 65 years old with a Singh index IV-VI (8 patients).

Results Following this treatment very good and good results (according Merle d'Aubigne scale) were noted in 68% of cases. We have also to emphasise that in 80% of the cases treated by cemented bipolar prosthesis, the patients could return to their normal prefracture level of physical activity.

Conclusion Osteoporosis must be taken into account when the operative technique for a femoral neck fracture is considered. Singh system seems to be very useful for the prognosis and management of this type of fractures. However from all the prosthesis the bipolar type seems to be the best choice in patients with osteoporosis and a fracture of the femoral neck and the cemented variant is offering the best functionality of the involved hip.

SAT0112 VARIATIONS IN POPULATION'S PYRAMIDS OF PATIENTS WITH CHRONIC LOW BACK PAIN IN A RURAL AREA

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Background

Objectives To analyse the differences in the variables age and sex of patients with chronic low back pain, regarding the general population.

Methods It was carried a longitudinal study out of the patients that they went to the External Consultation of Rheumatology from the Requena Hospital (Valencia), demanding specialised attendance to present a chronic low back pain, sex and age were picked up. A statistical study was realised determining absolute and relative frequencies, and chi2 test with a level of trust of 95%.

Results A total of 483 patients were selected, males 146(30.2%) and women 337(69.8%), with a relationship female/male of 0.43. The mean age was of 55.82 ± st 13,32 and range 16–90. In women it was of 56,90 ± st 13,13 and in males of 53,32 ±