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PREDICTORS OF FATIGUE AND SEVERE FATIGUE IN A LARGE MULTICENTER INTERNATIONAL COHORT OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: THE FATILUP STUDY

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Background: Fatigue is an important issue in systemic lupus and has a major impact on quality of life of the patients. Data are controversial about the factors associated with this complex symptom.¹

Objectives: To identify the factors associated with fatigue and severe fatigue in patients with systemic lupus erythematosus (SLE) in a large cohort using a multivariate model to precise the importance of each parameter in this multidimensional symptom.

Methods: We used the LBBR data base, a German French data base of SLE patients. All patients fulfilled the 1997 ACR criteria for SLE. The Fatigue Scale for Motor and Cognitive Functions (FSMC) was used to assess fatigue and severe fatigue. The depression and anxiety were measured with Hospital Anxiety and Depression Scale (HADS). Tests were performed at sampling.

Results: A total of 570 patients were included (89.1% female). The median age was 42 years (QR25–75: 34–52). The median value of the SELENA-SLEDAI was 2 (QR25–75: 0–4) and 136 patients had a SELENA-SLEDAI score >6. Fatigue was reported by 386 patients (67.7%) including severe fatigue by 209 (36.7%). In univariate analysis among the individual components of the SLEDAI arthritis (p=0.003) and oral ulcers (p=0.002) were associated with severe fatigue.

In multivariate analysis fatigue was strongly associated with anxiety (OR: 4.49 [95%CI: 2.60-7.77], p<0.0001) and depression (OR: 4.72 [95%CI: 1.39-16.05, p=0.01]. It was also associated with age at sampling (OR: 1.01 [95%CI: 1.00-1.03, p=0.03] per 1 year increase), SLEDAI (OR: 1.05 [95%CI: 1.00-1.12, p=0.043] per 1 SLEDAI point increase) and glucocorticoids treatment (OR: 1.54 [95%CI: 1.00-2.38, p=0.04]). It was not associated with physical activity.

Severe fatigue was strongly associated with depression (OR:6.87 [95%CI: 3.12-15.11], p<0.0001) and anxiety (OR: 3.80 [95%CI: 2.46-5.87], p<0.0001) but not with SLEDAI or physical activity.

Conclusions: Fatigue is a common symptom in SLE patients and is strongly associated with anxiety and depression. While remission remains an important therapeutic target, these manifestations should also be taken care of with psychological counselling and pharmacological intervention, when needed.

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PREVALENCE OF FRAGILITY FRACTURES IN WOMEN WITH SLE, THEIR CONNEXIONWITH THE COURSE OF THE DISEASE AND THE NATURE OF PHARMACOTHERAPY

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Background: Patients with rheumatic diseases are known to have the risk of osteoporosis and fragility fractures, which is significantly higher than in the healthy population. Recent studies demonstrate that age, sex, postmenopausal status, inactivity, glucocorticoid use, nutrition etc. play an important role in the reduction of bone mineral density (BMD) in systemic lupus erythematosus (SLE) patients. The role of the disease severity and the activity of the inflammatory process in the reduction BMD and the incidence of fractures in SLE patients is discursive.

Objectives: The aim of the study was to determine the frequency of osteoporosis and fragility fractures in the Ukrainian SLE patients and to establish their connexion with the course of the disease.

Methods: The main study group involved 91 women with a diagnosis of SLE according to the American College of Rheumatology criteria. The disease activity was determined using the SLE Disease Activity Index (SLEDAI), and organ damage was measured using the Systemic Lupus International Collaborating Clinics American College of Rheumatology (SLICC/ACR) Damage Index. In all patients the cumulative dose of glucocorticoids was calculated. Serum CRP and IL-6 levels were determined by immunoassay. BMD at the lumbar spine (L1–L4) and femoral neck were measured using dual-energy X-ray absorptiometry. For premenopausal SLE patients BMD by Z-score <-2,0 SD was defined as «below expected range for age». For post-menopausal women osteoporosis was defined by T-score≤-2,5 SD, and osteopenia – between -1,0 and -2,5 SD. To determine fractures female SLE patients were examined with x-ray.

Results: In pre-menopausal SLE patients the abnormal BMD of the lumbar spine was found in 9,8%, at the level of the femoral neck it was in 11,1%, in postmenopausal SLE patients – 18,4 and 13,6%, respectively. In the control group there was any premenopausal woman with low bone mass at both sites, whereas among postmenopausal individuals, these were 12,5 and 6,2%, respectively.

Osteoporotic fractures were detected in 13 (14,2%) SLE patients, of which 30,7% had hip fractures and 69,3% had vertebral fractures. The reduction of bone strength and fractures were associated with a high damage index. In particular, in persons with fractures it equaled to 4,85±0,65 points, and in persons without fractures $-3,09\pm0,22$ points. A similar tendency was detected by the disease activity SLEDAI. Glucocorticoid use also had a negative effect on the bone strength in patients with SLE. Thus, in women with fractures, the cumulative dose of glucocorticoids defined 60,9±6,63 g, and was by 37,1% higher than in patients without fractures.

Conclusions: In patients with SLE the prevalence of low BMD and fragility fractures is high. Progressive loss of the BMD and the occurrence of osteoporotic fractures are closely associated with the severity of organ damage and glucocorticoid use

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ANTIPHOSPHOLIPID SYNDROME (HUGHES SYNDROME) IS A DISEASE WITH PROTEAN FACES: MULTIDISCIPLINARY APPROACHES ON SERBIAN COHORT OF APS PATIENTS

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Background: Antiphospholipid syndrome (APS) is a systemic autoimmune disease characterised by thrombophilic state and circulating antiphospholipid antibodies (aPL) including anti beta2-GPI.

Objectives: Since than it became one of the most systemic conditions. In the last three and half decades, a variety of clinical manifestations involving almost all organs and tissues (cardiac, pulmonary, neurological, renal, cutaneous, hematologic, gastrointestinal, ocular, skeletal and endocrinology), have been described associated with antiphospholipid antibodies (aPL).

Methods: Our study comprises a total of 608 patients: 420 primary APS (PAPS) patients and 188 SLE patients with secondary APS (SAPS). aPL analysis included detection of aCL, aβ2GPI, and LA.

Results: Thrombosis was diagnosed in 46.5% patients, with higher prevalence in PAPS compared to SAPS patients: 51.2% and 38.3%, respectively, p=0.045. Pseudoinfective endocarditis was observed in 12.8% secondary APS patients and 3.1% in primary APS patients (p=0.004). 30% of the patients with high levels of aCL IgG antibodies had valve thickening and dysfunction, as compared to 4.1% without valve abnormalities (p=0.002). Presence of ß2GPI IgG was significantly related to stroke, and overall ß2GPI (IgG and IgM) positivity was significantly related to TIA in SAPS patients. Valvular manifestations were significantly related to TIA in both groups of patients and were independent risk factors for TIA in PAPS (OR 3.790 Cl 1.597–8.998 p=0.003: table 2). In PAPS, epilepsy correlated with B_2 GPI-IgM, migraine with aCL-IgM, thrombocytopenia with aCL-IgM, aCLIgG, anti B_2 GPI-IgG and LA. Livedo reticularis was more prominent in PAPS with high levels of aCL-IgG. Skin ulcerations were more prevalent in aCL-IgM positive SAPS patients and epilepsy more frequently had high levels of anti B_2 GPI-IgG in SAPS.

Conclusions: In this cross-section analysis of a large cohort of APS patients we analysed that APS patients can be presented with a wide variety of thrombotic