AB0513 UTILITY OF RENAL REBIOPSY IN PATIENTS WITH LUPUS NEPHRITIS

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Background: The pathological class of lupus nephritis (LN) may change to a different class during the course of the disease. Renal biopsy is repeated is repeated in many patients during a flare but there is there is no agreement about systematically recommending them because proliferative lesions on their original biopsy rarely switch to a pure nonproliferative nephritis during a flare. However, renal rebiopsy may be useful in some cases to make appropriate adjustments or changes of treatment.

Objectives: To analyze the impact of renal rebiopsy on the therapeutic approach in patients with previous histological diagnosis of LN who experience a worsening in the clinical parameters of renal involvement.

Methods: Retrospective study of patients with histological diagnosis of NL subjected to at least one renal biopsy. We studied the demographic, clinical, histopathological variables of the first and subsequent renal biopsies, received treatment and the therapeutic modifications in relation to the result of the rebiopsies.

Results: We analyzed 35 patients diagnosed with LN between 1978 and 2017. 9 of them had been rebiopsied at least on one occasion and made a total of 11 rebiopsies (7 patients with a rebiopsy and 2 patients with 2 rebiopsies). All patients were female and Caucasian, except for a Hispanic woman, with a mean age at the time of the rebiopsy of 31 ± 12 years (14-55). The mean serum creatinine at the time of the first rebiopsy was 0.8 ± 0.17 mg/dl (0.5-1.06) and in the second, 1.18 ± 0.05 mg/dl (1.15-1.23). The fundamental indication for the rebiopsy was the increase in proteinuria, up to non-nephrotic range in 64% of the patients and within the nephrotic range in 36%. In comparison with the previous biopsy, 3 of the rebiopsies (27%) showed evolution from a non-proliferative to a proliferative form (from II to III, from II to IV and from V to V + IV). 4 of the rebiopsies (36%) started from a proliferative class and changed class but within these forms (3 from IV to III and and 1 from III to IV). The remaining 4 rebiopsies (27%) showed no change in the histological type. Regarding the baseline biopsy, we observed a decrease in the index of activity of the rebiopsies (5.4 ± 2.2 vs 3.4 ± 2.5, p = 0.017) and an increase in the chronicity index (0.8 ± 0.7 vs 2.9 ± 3.2, p = 0.027). In all cases, therapeutic modifications were carried out. In 9 cases (82%) the immunosuppression was increased and in two of them (18%) it was decreased.

Conclusion: The repetition of renal biopsy in cases of LN with clinical data of renal deterioration is relevant. The change of histological class and the evolution of activity and chronicity indexes support the decision to increase immunosuppression and are fundamental to diminish it.

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AB0514 PARATHORMONE BUT NOT VITAMIN D SERUM LEVELS ARE ASSOCIATED WITH SUBCLINICAL ATHEROSCLEROSIS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Growing evidence supports a link between alterations in bone metabolism and cardiovascular (CV) disease in both general and autoimmune populations.

Objectives: In the current study we aimed to explore whether vitamin D deficiency and/or increased parathormone (PTH) levels, as well as impairment of bone mass density, influence CV risk in patients with systemic lupus erythematosus (SLE).

Methods: 138 consecutive SLE patients were enrolled in the study. Clinical features, hematological, serological and immunological profile, as well as therapeutic regimens was recorded in all patients. Classical CV and osteoporosis risk factors were assessed in all participants. Intima-medial thickness scores (IMT) and carotid and/or femoral (C/F) plaque formation were evaluated by ultrasound. Assessment of bone mineral density (BMD) and asymptomatic osteoporotic fractures was also performed by dual X-ray absorptiometry and lateral thoracic and/or lumbar spine X-rays, respectively. Univariate and multivariate models were implemented for statistical analysis.

Results: PTH -but not 25(OH)vitamin D3- serum levels were found to be increased in lupus patients with subclinical atherosclerosis (plaque formation and/or arterial wall thickening) compared to those without (51.1±27.7 vs 37.4±18.4 pg/ml, p= 0.003 and 54±32.7 vs 40±18.3 pg/ml, p= 0.02, respectively). Abnormal PTH serum concentrations (>65 pg/ml) in SLE patients was identified as a risk factor for both plaque formation and high IMT scores (>0.9mm) [OR 95% (CI): 8.2 (1.8-37.4) and OR 95% (CI): 3.9 (1.3-11.8), respectively]. High PTH levels were found to be associated with low 25(OH)vitaminD3 levels, advanced age and increased triglycerides in the lupus cohort. Moreover, SLE patients with plaque formation exhibited increased rates of osteoporosis (based on WHO classification) compared to those without [19.5% vs 5.3%, p= 0.017, OR 95% (CI): 4.4 (1.2-15.9)]. Finally, an inverse correlation between femoral neck BMD values and total IMT scores was observed (r:-0.42, p=0.008).

Conclusion: Subclinical atherosclerosis in patients with lupus is associated with increased serum PTH levels and reduced bone mass density. These findings further support the presence of shared etiopathogenetic mechanisms between atherogenesis and altered bone metabolism.

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AB0515 OBESITY AND WEIGHT LOSS IMPACT IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Background: Obesity is considered a chronic low-grade inflammatory status due to the release of bioactive substances, as pro-inflammatory cytokines, by the adipose tissue, and it is known negatively affecting some autoimmune inflammatory diseases, like Rheumatoid Arthritis. Few data are available on the role of obesity in Systemic Lupus Erythematosus (SLE) disease.

Objectives: To evaluate the distribution of Body Mass Index (BMI) categories in SLE patients and the association between SLE disease activity and BMI groups. Furthermore, to dissect the impact of weight loss in a cohort of overweight/obese SLE patients, evaluated with a multidisciplinary approach.

Methods: Consecutive SLE patients, diagnosed according to the 2012 SLICC criteria, were enrolled. Clinical and demographic characteristics, disease duration, BMI category, laboratory indices and current therapies were collected at baseline and at follow-up visits. A subgroup of SLE patients with BMI ≥ 25 Kg/m² underwent a scheduled diet under a Nutritionist guide (1200 calories/daily) and Psychologist support when necessary, maintaining the SLE therapy unchanged and were evaluated by a rheumatologist and a nutritionist every 3 months and clinical and laboratory data and the ACR/EULAR core data set were registered at each follow-up (FU) visit.

Results: Of the 277 patients (age 42.2±14.4 years, disease duration 8.4 ± 8.0 years, SLEDAI-2K 6.6±7.6, SLICC 1.9±1.5), 47.6% had articular, 32.3% renal, 23.6% neurological and 21.9% had serositis involvement, respectively. Considering the whole cohort, 66 (23.9%) patients had BMI between 25 and 30 Kg/m² and 34 (12.3%) a BMI ≥ 30 Kg/m² [of which 15 (5.4%) with BMI ≥ 35 Kg/m²]. Overweight/obese SLE patients were predominantly male (20.0%) with respect to patients with BMI < 25 Kg/m² (4.5%, p<0.001). Considering the therapeutic regimens, antimalarials treatment was ongoing in 39.4% of overweight SLE patients and in 61.8% of obese SLE patients compared to 28.7% in normal weight SLE patients (p< 0.001 for overweight and p<0.001 for obese patients), without any significant correlation between BMI and cumulative steroid dose during