AB0513
UTILITY OF RENAL REBIOPSY IN PATIENTS WITH PARATHORMONE BUT NOT VITAMIN D SERUM LEVELS

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Mentions of bone mass density, influence CV risk in patients with systemic deficiency and/or increased parathormone (PTH) levels, as well as impairments of the renal function, are well recognized in patients with primary hyperparathyroidism. The role of renal biopsy in the management of these patients is not well defined.

Methods: In the current study we aimed to explore whether vitamin D deficiency as assessed by serum 25(OH)D levels could predict the occurrence of changes in the pathological class of renal biopsy in patients with primary hyperparathyroidism. All patients have been previously rebiopsied and their original and subsequent biopsy results have been evaluated.

Results: PTH -but not 25(OH)D- serum levels were not found to be associated with bone histology of rebiopsies (odds ratio 0.95, CI : 0.8-1.1). However, we observed a significant correlation between BMI and cumulative steroid dose during follow up (r=0.39, p<0.01). Stronger correlation was found in high BMI patients with BMI >30 Kg/m2 (r=0.51). Considering the whole cohort, 66 (23.9%) patients were rebiopsied at least on one occasion and in 90% of the cases (82%) the immunosuppression was increased and in two of them (18%) it was decreased.

Conclusion: The rebiopsy of renal cases in patients with clinical subclinical atherosclerosis (plaque formation and/or arterial wall thickening) compared to those without (51.1±27.7 vs 37.4±18.4 pm/1, p= 0.003 and 54±32.7 vs 40±18.3 pm/1, p= 0.02, respectively). Plasma PTH serum concentrations (55±67.6 pm/1) 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)D serum 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).

Disclosure of Interests: None declared


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 Nutri- tionist 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 laborator y data and the ACR/EULAR core data set were registered at each fol low-up (FU) visit.

Results: Of the 277 patients (age 42.2±14.4 years, disease duration 8.4±8.0 years, SLEDAI2K 6.6±7.6, SLICC 1.9±5.1), 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). The weight loss was ongoing in 39.4% of overweight SLE patients and in 61.8% of 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

Methods: 138 consecutive SLE patients were enrolled in the study. Clinical features, hematological, serological and immunological profile, as well as therapeutic regimens, were recorded in all patients. Classical atherosclerotic and osteoporosis risk factors were assessed in all participants. Intima- media 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)D-vitamin D3- serum levels were found to be increased in SLE patients with subclinical atherosclerosis (plaque formation and/or arterial wall thickening) compared to those without (51.1±27.7 vs 37.4±18.4 pm/1, p= 0.003 and 54±32.7 vs 40±18.3 pm/1, p= 0.02, respectively). Plasma PTH serum concentrations (55±67.6 pm/1) 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)D serum 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 epigenetic mechanisms between atherogenesis and altered bone metabolism.

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