Background: Physical activity is important for enhancing health and the World Health Organization (WHO) recommends that adults aged 18-64 engage in at least 150 minutes of moderate-intensity physical activity throughout the week, or 75 minutes of vigorous-intensity physical activity (1). Swedish patients with SLE reported a lower frequency and capacity of exercise than a control group, and in an Italian study, 60% of the SLE patients did not meet WHO’s recommendations for physical activity. Mental health is important for the individual’s level of physical activity, and symptoms of depression have been associated with a lower level of physical activity in SLE patients (2).

Objectives: The aim of this study is to describe the pattern of physical activity in a population of Danish SLE patients, and to investigate the association to depression.

Methods: The study was conducted at the Department of Rheumatology at Odense University Hospital, Denmark, in 2018 and 2019. Two questionnaires were handed out before routine outpatient consultation: self-reported physical activity was evaluated using the International Physical Activity Questionnaire (IPAQ), and a continuous variable on energy requirement in the form of the metabolic equivalent (MET) was calculated, and the Major Depression Inventory (MDI) questionnaire was used to screen for depression. Medicine intake was registered, and disease activity and damage were scored using SLEDAI-2K and SLICC/ACR DI.

Results: Two hundred and fifteen patients completed the IPAQ and MDI. 5 were excluded. The population consist of 89.5% women and the mean age was 51.7 ± 15.2 years. The mean disease duration was 16.1 ± 10.1 years. The SLE patients reported a mean total MET-score of 5319.9 ± 3650 MET-min/week. If divided into categories, 78% reported low level, 21.9% moderate and 70.5% of the patients reported a high level of physical activity and 89.5% fulfilled WHO recommendations. The participants reported 363.7 ± 201 minutes per day in sitting time. Mean MDI score was 12.7 ± 10.1, and if divided into groups, 89.5% were not depressed, 1.9% had a mild depression, 5.3% had a moderate depression and 2.9% had a severe depression. Significantly lower mean MET-scores were observed for the severely depressed patients.

An inverse association was found in the univariate analysis, indication that increasing disease duration and SLICC/ACR DI scores were significantly associated with decreasing total MET-scores. In the multivariate analysis time spent sitting was inversely associated with MET-score. Our results were similar to a Brazilian study, where 68% of the patients reported, that they were “physically active” according to IPAQ. In contrast, only 22% of the patients in an Italian study reported high level physical activity. Our proportion of active patients were high when comparing with studies on patients with rheumatoid arthritis and spondylarthrits, where only 25-50% fulfilled the WHO recommendations compared to our 89.5%.

A Danish study on registered ICD diagnoses found a prevalence of depression in SLE patients to be 4.3%, which was lower than our prevalence. Foreign studies reported very diverse prevalences of depression, e.g. 18.6% in the Netherlands and 51% in Sweden.

Conclusion: A high portion of the SLE patients reported a high level of physical activity and 89.5% fulfilled the WHO recommendations. Significant predictors for a lower level of physical activity were increasing disease duration, higher SLICC/ACR DI score and longer time spent sitting. However, further studies are needed, where more suitable questionnaires could be considered.

References:

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AB0452
PREDICTIVE FACTORS FOR INSUFFICIENT RESPONSE TO INITIAL TREATMENT OR RECURRENCE IN PATIENTS WITH LUPUS ENTERITIS

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Background: Lupus enteritis (LE) is a rare but well-known complication of systemic lupus erythematosus (SLE). However, little knowledge about risk factors for insufficient response to initial treatment or recurrence have been reported.

Objectives: To identify prognostic factors associated with poor response in patients with LE.

Methods: Patients diagnosed as having LE at our hospital were consecutively registered from January 2009 to October 2019. The diagnosis of LE was made according to the criteria of BILAG 2004 which is defined as either vasculitis or inflammation of small or large bowel with supportive imaging and/or biopsy findings. Poor response was defined as insufficient response to initial therapy or relapse. We retrospectively compared clinical characteristics collected from medical records of the patients with good vs. poor response, using a non-parametric Wilcoxon signed-rank test for numerical variables and Fisher’s exact test for categorical variables.

Results: A total of 12 patients (16 episodes) diagnosed with LE were reviewed. The median age was 44.5 years and 11 were females. Six patients had a history of SLE (median disease duration; 3.0 years), of which 4 had a history of LE prior to the study period. And in the remaining 6 patients, LE was the primary symptom (Table 1). The comorbidities were 4 lupus cystitis, 1 biopsy-proven lupus nephritis, 1 pseudo-obstruction and 1 protein-losing enteropathy. Computed Tomography (CT) imaging of all 16 episodes showed small bowel wall thickening. Dilatation of intestine was observed in 81.3%, ascites in 81.3%, comb sign in 80.0% and target sign in 62.5%. When comparing clinical characteristics between the groups revealed that CT findings were similar in both groups, however serum CH50 levels (median (interquartile ranges (IQR)) 37.2 (25.3-46.9) U/mL vs 176 (7.1-214) U/mL, p=0.0095) were significantly lower in poor response group. Furthermore, patients who initiated glucocorticoids (GCs) at a lower dose (less than or equal to 0.6mg/