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FATIGUE AND PAIN PERCEPTIONS ARE INVERSELY CORRELATED TO PHYSICAL ACTIVITY LEVELS IN PATIENTS WITH SYSTEMIC AUTOIMMUNE MYOPATHIES

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BACKGROUND

Patients with systemic autoimmune myopathies (SAMs) have elevated fatigue and pain perceptions, which are not necessarily related to the diseases status. However, no studies have assessed the potential correlation between these perceptions and physical activity levels in patients with SAMs.

MATERIALS AND METHODS

A cross-sectional study conducted from 2019 to 2020, in which 30 patients with SAMs were as follows: 13 patients with antisynthetase syndrome; 13 patients with dermatomyositis (DM) and 4 patients with immune-mediated necrotizing myopathy (IMNM) (EULAR/ACR 2017 classification criteria). Disease status were evaluated according the International Myositis Assessment & Clinical Groups Studies (IMACS) set scores: MMT-8, HAQ, physician's VAS, patients' VAS, MYOACT, serum levels of creatine phosphokinase. The fatigue and pain perceptions were assessed by the VAS (0.0–10.0), whereas physical activity levels were measured by International Physical Activity Questionnaire (IPAQ). The comparison of features among the patients was conducted by one-way ANOVA according to the data distribution. The biserial point correlation was applied for association with pain and fatigue perception and physical activity levels.

RESULTS

The mean age of patients was 44.3 ± 12.4 years, with disease duration of 5.0 (1.0–8.0) years. All patients had relatively stable clinical and laboratory history, according to the IMACS set scores (Table 1). The fatigue and pain perceptions were 6.0 (0.0–10.0) and 5.5 (0.0–10.0), respectively; 24 (80%) patients had low, 5 (16.7%) patients had moderate, and 1 (3.3%) patient had high physical activity levels. Fatigue ($\rho = -0.39$, $p = 0.030$) and pain ($\rho = -0.45$, $p = 0.013$) were inversely associated with physical activity levels (Fig. 1). However, there were no correlations between pain or fatigue perceptions and disease-status or drug therapy schemes.

Figure 1. Correlation between visual analog scale for fatigue and pain, and physical activity levels.

CONCLUSIONS

Fatigue and pain perceptions correlate inversely to physical activity levels, but they do not correlate with the disease status or drug therapy schemes. Future intervention studies are necessary to evaluate the possible impact of prospective exercise programs as a tool to reduce fatigue and pain perceptions in patients with SAMs.

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