Background: Fibromyalgia (FM) is the second most frequent disorder in rheumatic patients. Other than widespread pain, fatigue, sleep disturbance and cognitive impairments, patients complain also symptoms of suspected neuropathic origin, like burning pain, thermal sensitive skin, hyperalgesia, pins and needles sensations. Recent studies highlighted the presence of small-fibers pathology (SFP) and/or large-nerve fibers involvement in about 50% of FM patients, which could be the cause of neuropathic pain.

Objectives: The aim of the study was to investigate the prevalence of neuropathic pain and symptoms indicative for the presence of SFP in Italian FM patients, studying the association with clinical variables.

Methods: An on-line survey was designed according to the Checklist for Reporting Results of Internet E-Surveys guidelines (CHERRIES) and Strengthening the Reporting of Observational Studies in Epidemiology (STROBE). The on-line Survey Monkey® platform was adopted to collect data. We calculated a-priori minimum number of 800 responders.

We administered the survey by involving 7 FM patients’ associations distributed nationwide between July and September 2019. We explored demographic and clinical variables including pain and stiffness intensity, symptoms duration, and counting of painful sites. Neuropathic Pain Symptoms Inventory (NPSI) and Fibromyalgia Impact Questionnaire (FIQ) were administered. To study the presence of symptoms indicative of potential SFP we asked for the presence of 8 signs and symptoms reported in literature as characteristics of SFPs. Two groups of FM patients were considered: those positive (FM+) to the Fibromyalgia Research Criteria (FRC) (Wolfe et al., 2011), and those complaining typical FM symptoms but not fulfilling the FRC (FM-).

Results: The survey was correctly completed by 76% of participants (892/1173). A total sample of 854 patients (749 in FM+ and 105 in FM-) was analyzed after the exclusion of subjects with major comorbidities. The mean NPSI score was significantly higher in FM+ (56.3/100) respect to FM- (34.2/100). More than 3 symptoms indicative for SFPs, electromyography and electroneurography were performed in 51% of FM+ patients and in 15.2% of FM-. NPSI score was significantly higher in FM+ patients (p<0.001) for the NPSI score with disability (rho=0.63), and a moderate correlation with stiffness levels (rho=0.33). Symptoms indicative for SFP were significantly correlated (p<0.001) with all clinical variables with low grade of association (Cramer’s V or rho=0.30). Although the higher prevalence of neuropathic pain and symptoms potentially indicative for SFPs, electromyography and electroneurography were performed in 40%-44% of cases, and skin biopsy in 1%-2% of the sample, as well as the assumption of gabapentinoids (12.6% in FM+ and 18% in FM-).

Conclusion: This findings highlight the importance of neuropathic pain symptoms identification, since we found a high prevalence and a strong correlation with clinical variables in our cohort of FM patients. The assessment of the neuropathic dimension of pain through self-administered questionnaire should be part of the routine clinical practice.

References:

Disclosure of Interests: : None declared
DOI: 10.1136/annrheumdis-2020-eular.3547