THU0659 CATASTROPHIZING IN RHEUMATOLOGY

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Background: Rheumatic disorders (RD) provide chronic pain. Catastrophizing is a negative cognitive and affective response resulting in inadequate expression of pain. Catastrophizing in RD patients is suspected to be involved in persistence and amplification of chronic pain.

Objectives: To assess catastrophizing level in RD and to evaluate the association between catastrophizing and physical pain intensity, disease activity, disability, depression and quality of life.

Methods: We performed a systematic review of literature and search in the following databases: MEDLINE, COCHRANE and EMBASE until April 2018. All observational, cross-sectional and randomized control studies investigating catastrophizing in patients with RD (rheumatoid arthritis (RA), low back pain (LBP), osteoarthritis) were included. Statistical analysis defined pooled mean catastrophizing level by using the Pain Catastrophizing Scale (PCS), the latter ranging from 0 to 52. To assess the association between catastrophizing and disease activity (DAS28), pain (Numerical Rating Scale NRS), disability (ODI) and quality of life (SF36, WOMAC) we collected correlation coefficients and pooled them in meta-analysis using the Fisher's z transformation with MedCalc v18.11.3.

Results: From 1494 articles concerning catastrophizing and RD, 51 were selected for a meta-analysis :

- 601 RA patients (mean age 57.4 years, 67.7% female, mean pooled DAS 28 = 3.4 and mean pooled NRS = 3.8) included in 7 studies. The mean pooled catastrophizing level at baseline was 14.7 (SD = 11.4) in RA patients vs 2.7 (SD = 3.0) in control group patients (n= 82 in 2 studies). In one study, a RA sample identified 22% of high catastrophizers (defined by PCS > or = 30).

- 2521 LBP patients (mean age 43.6 years, 57% female, mean pooled NRS = 4.5 and mean pooled ODI = 30.3) included in 27 studies. The mean pooled catastrophizing level at baseline was 19.9 (SD = 11.3).

- 3388 osteoarthritis patients (knee and hip, mean age 67.7 years, 65% female, mean pooled NRS = 5.0) included in 17 studies. The mean pooled catastrophizing level at baseline was 11.2 (SD = 10).

In RA, a significant positive correlation between catastrophizing and DAS 28 was observed: **pooled $r=0.278$ $p<0.001$ (3 studies) (Figure 1)**. Pain level was strongly associated with catastrophizing ($r=0.71$ ($p<0.01$)). Higher PCS scores were significantly associated with higher levels of distress i. e. lower SF-36 Mental Health score ($r= -0.52$ ($p<0.01$)) and significantly associated with reduced physical function ($r=-0.35$ ($p<0.01$)) for SF36 Physical Function).

In LBP, higher PCS scores were significantly associated with higher levels of pain and disability : **pooled $r=0.486$ $p<0.001$ (NRS) and $r=0.465$ $p<0.001$ (ODI)**, respectively. The association between catastrophizing and depression was significant ($r=0.538$ $p<0.01$).

Catastrophizing in osteoarthritis was strongly associated with an increase in functional limitations and pain (i.e. higher WOMAC total score, correlation coefficient: **$r= 0.641$ $p<0.001$**).

Conclusion: Catastrophizing is a common psychological trait clearly associated with disease activity, pain, mental health and physical function. Nevertheless catastrophizing is rarely measured. It might be relevant to detect it earlier in order to adapt pharmacologic and non-pharmacologic treatment in at-risk patients.

Figure 1. Forest plot for correlation coefficient between catastrophizing (PCS) and disease activity (DAS 28) in rheumatoid arthritis

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THU0660 CHARACTERIZATION OF SCLERODERMA PATIENTS ACCORDING TO RO52 AND KU ANTIBODIES

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Background: Systemic Sclerosis (SSc) is an autoimmune disease that is characterized by progressive and severe fibrosis with cutaneous and visceral involvement, fibroproliferative vasculopathy and alterations of cellular and humoral immunity, very heterogenous from the clinical and immunological point of view. There are many types of antibodies related to the disease that are used in the diagnosis and characterization. Antibodies anti-Ku and anti-Ro52 have been found, although they are not specific to the disease, that could play an important role in the prognosis and clinical expression.

Objectives: To evaluate the clinical pattern and prognosis of SSc patients who carry antibodies Anti-Ku and Anti-Ro52.

Methods: A retrospective, multicentric study of SSc patients included in the Spanish Registry of Scleroderma (RESCLE). Clinical, demographic, prevalence, serological, and survival data were analyzed

Results: A total of 401 samples were analyzed for anti-Ku with 12 positive results (3%). For anti-Ro52, 1724 samples were analyzed with 246 positive results (14%). It is observed, from the multivariate analysis, that patients with anti-Ro52 presented, in higher frequency, an association with Sicca syndrome ($p<0.001$) and its coexistence with the antibody anti-La (OR 44.8 with 95% CI and $p<0.001$). Regarding patients with anti-Ku, no clinical association was found with statistical significance.

Conclusion: As opposed to finding SSc specific antinucleolar antibodies such as anti-centromere (ACA), anti-topoisomerase I (ATA), and anti-RNA polymerase III (ARA), the presence of anti-Ku or anti-Ro52 is not conclusive of any distinctive clinical profile.

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