AB0173

FACTORS ASSOCIATED WITH FATIGUE AND PERSISTENT FATIGUE IN RHEUMATOID ARTHRITIS

A. Fazaa¹, H. Boussaa¹, K. Ouenniche¹, S. Miladi¹, M. Sellami¹, L. Souabni¹, S. Chekili¹, S. Kassab¹, K. Ben Abdelghani¹, A. Laatar¹. ¹Mongi Slim University Hospital, Rheumatology, Sidi Daoud, Tunisia

Background: Fatigue is a common and debilitating symptom in patients with rheumatoid arthritis (RA). Fatigue in RA is poorly understood and appears to be multifactorial. Interactions between three factors were suggested: 'personal', 'disease processes', and 'cognitive, behavioural'.

Objectives: The aim of this study was to determine factors associated with fatigue and persistent fatigue in RA.

Methods: We conducted a longitudinal study including patients with RA (ACR/EULAR 2010). Patients with other acute or chronic diseases that may induce fatigue (such as cancer, infection or depression) were excluded. Patients were evaluated at inclusion (T0) and 12 months later (T12). Demographic and disease-related data were collected: age, gender, professional status, physical activity, disease duration, Rheumatoid Factor (RF), Anti-citrullinated peptides antibodies (ACPA), pain Visual Analog Scale (VAS), Erythrocyte Sedimentation Rate (ESR), C Protein Reactive (CRP), Disease Activity Score 28 (DAS28), and Health Assessment Questionnaire (HAQ). Fatigue was assessed using the Functional Assessment of Chronic Illness Therapy – Fatigue (FACIT-F) which is a short 13-item questionnaire validated in RA. The score FACIT-F ranges between 0 and 52. Fatigue was considered mild if the FACIT-F score was ≥ 40 , moderate if $20 \leq \text{FACIT-F} < 40$ and severe if $0 \leq \text{FACIT-F} < 20$. We defined 'persistent fatigue' as reported fatigue at T0 and T12. A p value inferior to 0.05 was considered significant.

Results: We included 100 patients (84 women and 16 men) with a mean age of 49.5 $\pm$ 10 years old [18-65]. Among them, 25% were professionally active and 15% had a regular physical activity. At inclusion, the mean disease duration was 87.3 months [1-360]. RF and ACPA were positive in 75% and 72.6% of cases respectively. The mean pain VAS was 49 cm [0-100]. The mean levels of ESR and CRP were 38.1 mm [10-120] and 10.8 mg/l [2-61] respectively. The mean DAS28 ESR was 3.68 [1.90-8.33] and the mean HAQ score was 0.90 [0-2.75].

The mean FACIT-F score was 27.1 [0-51] at T0. Fifty-seven percent of patients had moderate fatigue and 26% had severe fatigue. At T12, the mean FACIT-F score was 33.4 [5-50]. Persistent severe fatigue was noted in 17% of patients. A significant negative correlation was noted between FACIT-F score at T0 and the following variables: age ($r=-0.258$, $p=0.01$), pain VAS ($r=-0.605$, $p<0.001$), ESR ($r=-0.621$, $p<0.001$), DAS28 ESR ($r=-0.744$, $p<0.001$), and HAQ ($r=-0.634$, $p<0.001$).

A significant negative correlation was noted between FACIT-F score at T12 and the following variables: age ($r=-0.229$, $p=0.022$), disease duration ($r=-0.296$, $p=0.003$), pain VAS ($r=-0.754$, $p<0.001$), ESR ($r=-0.405$, $p<0.001$), CRP ($r=-0.468$, $p<0.001$), DAS28 ESR ($r=-0.744$, $p<0.001$), and HAQ ($r=-0.678$, $p<0.001$). Fatigue and persistent fatigue were not associated with gender, professional status, physical activity, and immunological profile.

Multivariable analysis showed that DAS28 ESR (OR=-0.157, 95% CI [-4.614;-0.153], $p=0.036$) and HAQ (OR=-0.563, 95% CI [-6.916;-2.995], $p<0.001$) were independently associated with persistent fatigue.

Conclusion: Fatigue is a frequent and complex symptom in RA. Higher disease activity and greater disability are suggested as predictors of persistent fatigue.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3329

AB0174

FATIGUE IN RHEUMATOID ARTHRITIS: A CASE-CONTROL STUDY

A. Fazaa¹, H. Boussaa¹, K. Ouenniche¹, S. Miladi¹, M. Sellami¹, L. Souabni¹, S. Kassab¹, S. Chekili¹, K. Ben Abdelghani¹, A. Laatar¹. ¹Mongi Slim University Hospital, Rheumatology, Sidi Daoud, Tunisia

Background: Fatigue is a common symptom in many chronic inflammatory diseases, including rheumatoid arthritis (RA). It is considered one of the most frustrating, uncontrollable, and overwhelming symptoms. However, most of rheumatologists do not assess fatigue despite its clinical significance and its impact on patients' lives.

Objectives: The aims of this study were to determine whether RA patients express more fatigue than healthy controls, and to analyze its correlation with disease activity.

Methods: We conducted a cross-sectional study including patients with RA (ACR/EULAR 2010) and healthy controls matched for sex and age. Patients with other acute or chronic diseases that may induce fatigue (such as cancer, infection or depression) were excluded. Demographic data and the following clinical parameters were collected: pain Visual Analog Scale (VAS), Global Patient

Assessment (GPA), tender joint count (TJC) and swollen joint count (SJC), Erythrocyte Sedimentation Rate (ESR), C Protein Reactive (CRP), Disease Activity Score 28 (DAS28), and Health Assessment Questionnaire (HAQ). Fatigue was assessed using the Functional Assessment of Chronic Illness Therapy – Fatigue (FACIT-F) which is a short 13-item questionnaire validated in RA. The score FACIT-F ranges between 0 and 52. Fatigue was considered mild if the FACIT-F score was ≥ 40 , moderate if $20 \leq \text{FACIT-F} < 40$ and severe if $0 \leq \text{FACIT-F} < 20$. A p value inferior to 0.05 was considered significant.

Results: We included 100 RA patients (84 women and 16 men) with a mean age of 49.5 $\pm$ 10 years old [18-65]. The mean disease duration was 87.3 months [1-360]. The mean pain VAS was 49 cm [0-100] and the mean GPA was 47.8 cm [0-100]. The mean TJC and SJC were 5.3 [0-36] and 1 [0-9] respectively. The mean levels of ESR and CRP were 38.1 mm [10-120] and 10.8 mg/l [2-61] respectively. The mean DAS28 ESR was 3.68 [1.90-8.33] and the mean HAQ score was 0.90 [0-2.75]. Thirty-nine healthy controls were enrolled including 35 women and 4 men with a mean age of 51.2 years old [30-64].

The mean FACIT-F score was 27.1 [0-51] in RA patients versus 46.2 [0-52] in healthy controls ($p<0.001$). Among RA patients, 57% had moderate fatigue and 26% had severe fatigue.

A significant negative correlation was noted between the FACIT-F score and the following parameters in RA patients: TJC ($r=-0.568$, $p<0.001$), SJC ($r=-0.274$, $p<0.001$), pain VAS ($r=-0.605$, $p<0.001$), GPA ($r=-0.658$, $p<0.001$), ESR ($r=-0.405$, $p<0.001$), CRP ($r=-0.149$, $p<0.001$), DAS28 ($r=-0.837$, $p<0.001$) and HAQ ($r=-0.634$, $p<0.001$).

Conclusion: Fatigue was significantly more observed in RA patients. This symptom was correlated with disease activity and disability. It is important to recognize and manage fatigue in order to improve patients' quality of life.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3339

AB0175

OPTIMAL ASSESSMENT OF FATIGUE IN RHEUMATOID ARTHRITIS: VISUAL ANALOG SCALE VERSUS FUNCTIONAL ASSESSMENT OF CHRONIC ILLNESS THERAPY – FATIGUE

A. Fazaa¹, H. Boussaa¹, K. Ouenniche¹, S. Miladi¹, M. Sellami¹, L. Souabni¹, S. Kassab¹, S. Chekili¹, K. Ben Abdelghani¹, A. Laatar¹. ¹Mongi Slim University Hospital, Rheumatology, Sidi Daoud, Tunisia

Background: Fatigue is an important outcome for patients with rheumatoid arthritis (RA). As recommended by the European League Against Rheumatism (EULAR)/American College of Rheumatology (ACR) task force in 2008, fatigue should be measured in all RA clinical trials whenever possible. Despite these recommendations, it is largely ignored and rarely assessed in clinical practice.

Objectives: The aim of this study was to compare the scales being used to measure fatigue in RA.

Methods: We conducted a cross-sectional study including patients with RA (ACR/EULAR 2010). Patients with other acute or chronic diseases that may induce fatigue (such as cancer, infection or depression) were excluded. Demographic and disease-related data were collected. Fatigue was assessed using two scores. The fatigue Visual Analog Scale (VAS) ranging between 0 and 100 cm. Fatigue was considered mild if the fatigue VAS was < 20 cm, moderate if $20 \leq \text{VAS} < 50$ and severe if $\text{VAS} \geq 50$ cm. The Functional Assessment of Chronic Illness Therapy – Fatigue (FACIT-F) which is a short 13-item questionnaire validated in RA. The score FACIT-F ranges between 0 and 52. Fatigue was considered mild if the FACIT-F score was ≥ 40 , moderate if $20 \leq \text{FACIT-F} < 40$ and severe if $0 \leq \text{FACIT-F} < 20$. We used Cohen's kappa (κ) to determine the agreement between fatigue VAS and FACIT-F. The κ result was interpreted as follows: values ≤ 0 as indicating no agreement and 0.01–0.20 as none to slight, 0.21–0.40 as fair, 0.41–0.60 as moderate, 0.61–0.80 as substantial, and 0.81–1.00 as almost perfect agreement. A p value inferior to 0.05 was considered significant.

Results: We included 100 RA patients (84 women and 16 men) with a mean age of 49.5 $\pm$ 10 years old [18-65]. The mean disease duration was 87.3 months [1-360]. RF and ACPA were positive in 75% and 72.6% of cases respectively. The mean pain VAS was 49 cm [0-100]. The mean numbers of tender and swollen joints were 5.3 [0-36] and 1 [0-9] respectively. The mean levels of ESR and CRP were 38.1 mm [10-120] and 10.8 mg/l [2-61] respectively. The mean DAS28 ESR was 3.68 [1.90-8.33].

The mean fatigue VAS was 49.1 cm [5-100]. Fatigue was mild in 9% of patients, moderate in 31% of patients, and severe in 60% of patients.

The mean FACIT-F score was 27.1 [0-51]. Fatigue was mild in 26% of patients, moderate in 57% of patients and severe in 17% of patients.

A fair agreement was noted between the two scores ($\kappa=0.303$, $p<0.001$).

The fatigue VAS and FACIT-F were both correlated with the following variables: pain VAS ($r=0.685$, $p<0.001$ and $r=-0.605$, $p<0.001$), ESR ($r=0.384$, $p<0.001$ and $r=-0.405$, $p<0.001$), and DAS28 ESR ($r=0.684$, $p<0.001$ and $r=-0.744$, $p<0.001$).