**OLD AGE AT ONSET AND NOT DISEASE ACTIVITY IS ASSOCIATED WITH FUNCTIONAL DISABILITY AT RA DIAGNOSIS: RESULTS FROM AN EARLY ARTHRITIS COHORT**

A. R. Prata1, M. Sousa1, H. Assunção1, L. Saravia1, M. Luis1, L. Brites1, F. Campos Costa1, J. Dinis de Freitas1, T. Santiago1, J. A. P. Da Silva1, M. Nuño1, C. Plasencia1, M. Juarez4, D. Peiteado1, A. Villalva1, M. Novella-Navarro1, J. L. Cabrera-Alarcón2, A. Martínez-Feito3, A. G. L. Paz1

**Background:** Rheumatoid Arthritis (RA) is a chronic inflammatory arthropathy that potentially leads to loss of function and disability early in the disease course.  
(1) Optimizing physical function is one of the primary goals of RA treatment. Several demographic, psychosocial and clinical factors may influence the impact of RA upon physical capacity, and understanding their relative contribution to disability at disease diagnosis is key to an effective treatment approach.  
**Objectives:** To evaluate functional disability at the time of disease diagnosis and identify its demographic and clinical correlates in an early RA cohort.  
**Methods:** We conducted a cross-sectional study based on a Rheumatology centre early arthritis cohort. Consecutive patients with early RA – less than 12 months diagnosis – fulfilling ACR/EULAR 2010 and/or ACR 1987 RA classification criteria, were included. Variables were collected from patients’ registries at the first rheumatology appointment after symptom onset. Functional disability was assessed using the Health Assessment Questionnaire- Disability Index (HAQ-DI) (range 0 to 3, higher values indicating greater disability). Independent t-test, one way-ANOVA and Pearson’s correlation coefficient were performed to evaluate differences between groups. Variables with p<0.1 were included in a stepwise linear regression analysis to assess the independent association of variables with the HAQ-DI at baseline.  
**Results:** We included 71 patients (63.4% female, mean age 57.2 ±2.01 years). Mean HAQ-DI score was 1.42±0.08. Socio-demographic and clinical variables are described in Table 1. There was a significant difference in HAQ-DI scores between rheumatoid factor (RF) positive (mean 1.24±0.11) and RF negative (1.61±0.113) patients. HAQ-DI was positively weakly correlated with age (r=0.48; p<0.001), CDAI (r=0.43; p=0.038), SDAI (r=0.49; p=0.015), and moderately with DAS28-3V (r=0.60; p<0.001) and SDA28-3CRP (r=0.60; p=0.001). The number of tender (r=0.35; p=0.024) and swollen joints (r=0.42; p=0.005), ESR (r=0.46; p<0.001), CRP (r=0.35; p=0.018), HADS-depression (r=0.46; p=0.023) and educational level (r =-0.48; p=0.002) were also associated with HAQ-DI in univariate analyses. After multivariate regression analysis, age at disease diagnosis (p= 0.022 [95 CI 0.010 to 0.034]; p = 0.001) was the only independent predictor of HAQ-DI (R²=0.46, p<0.001).

**Conclusion:** Older age at disease onset is associated with greater functional impairment at diagnosis, assessed by HAQ-DI, in this cohort of early RA patients, irrespective of disease activity and other clinical variables. This result suggests that older newly diagnosed RA patients may deserve special attention regarding physical function.