CORRELATION OF FATIGUE AND BODY COMPOSITION, QUALITY OF LIFE, FUNCTIONALITY AND DISEASE ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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BACKGROUND

Rheumatoid arthritis (RA) is a chronic inflammatory disease that can cause impaired body composition, increased cardiovascular risk, reduced functionality and vitality. Fatigue is highly prevalent in RA, even though the relationship between fatigue and body composition and the impact on quality of life has not yet been fully elucidated. The objective was to establish the relationship between fatigue and body composition, quality of life, functionality, and disease activity in RA patients.

METHODS

A cross-sectional study in 100 adult patients with confirmed RA. Disease activity was assessed by clinical disease activity index (CDAI), fatigue by the vitality component of the short-form 36 (SF36) questionnaire, and functionality by healthy assessment questionnaire (HAQ). Body composition by double X-ray absorptiometry (DXA) was performed to provide values of fat mass percentage and the appendicular lean mass index adjusted for fat mass (adj ALM Z-score). Fatigue was measured as the vitality component of SF36.

RESULTS

The vitality component of SF36 showed a mean (SD) value of 52.9 (25.73). Fatigue was positively associated to emotional component SF36 ($p < 0.001$), mental health component SF36 ($p < 0.001$) and negatively associated to HAQ ($p < 0.001$) and CDAI ($p < 0.001$). At the multivariate regression analysis HAQ and mental health SF36 were responsible for 71.85% of fatigue result. Body composition analysis did not show association with fatigue, neither for fat mass percentage ($p = 0.927$) nor for adj ALM Z-score ($p = 0.437$).

CONCLUSION

Fatigue is associated to impaired quality of life, and inversely associated to disease activity and functionality in RA patients. Body composition was not associated to fatigue in our sample.

KEYWORDS

Rheumatoid arthritis, Body composition, Fatigue, Quality of life, Disease activity.