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Title

Multimorbidity in new-onset rheumatoid arthritis and impact on quality of life, disease activity and health assessment

Priority 1 (Research Category)

Musculoskeletal and rheumatology

Presenters

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Abstract

Context: Rheumatoid arthritis (RA) is a chronic autoimmune disease associated with inflammation of the synovial membrane, which can cause pain, joint damage, and result in loss of function, disability and reduced quality of life (QoL). Despite high levels of comorbidity and multimorbidity (≥2 long-term conditions (LTCs)) in people with RA, little is known about how presence of multimorbidity impacts health outcomes in people living with RA over time. Objective: To longitudinally assess the effect of multimorbidity in people with newly diagnosed RA in relation to commonly used RA health assessment metrics. Study Design: A retrospective cohort study. Setting or Dataset: The Scottish Early Rheumatoid Arthritis (SERA) cohort is a national inception cohort of patients with newly diagnosed RA or undifferentiated arthritis. Patients with a new clinical diagnosis of RA or UA, who had at least one swollen joint, were invited to participate. Population studied: 633 RA participants from SERA with data at baseline, month 6 and month 12 and meeting the 2010 ACR/EULAR RA classification criteria at baseline were selected. Participants comorbidities were grouped into: RA only, RA +1 LTC and RA ≥2 LTCs. Mixed-effects models were used to investigate the association between the selected outcome measures. Outcome Measures: DAS28-ESR (disease activity), EQ-5D (QoL), HAQ-DI (function), and HADS (anxiety and depression). Results: There were significant differences between the RA ≥2 LTC and RA only groups at each visit for DAS28-ESR (Baseline: 0.45, 95% CI 0.11-0.79. Month 12: 0.38, 95% CI 0.04-0.72), HAQ-DI (Baseline: 0.35, 95% CI 0.16-0.54. Month 12: 0.26, 95% CI 0.07-0.45) and EQ VAS (Baseline: -6.6, 95% CI -12.5 to -0.8. Month 12: -6.8, 95% CI -12.7 to -1.0). Across all LTC groups, there were significant improvements in all outcomes at month 6 and month 12 relative to baseline. Conclusions: These findings suggest multimorbidity should be taken into account in the management of RA. While measures can be significantly improved, achieving the same level of improvement for patients with two or more additional LTCs as those with only RA may not be possible. This could have implications for the treat-to-target strategy used for the management of RA and raises the prospect of personalised treatment goals that take into consideration multimorbidity.