

Disease Activity in Moderate Rheumatoid Arthritis Patients - Results from Ontario Best Practice Research Initiative

N Guo, B Jacob, XY Li, S Couto, E Keystone, and C Bombardier. Toronto General Research Institute, Toronto, ON.

Background: The aim of this study was to describe the characteristics of Rheumatoid Arthritis (RA) patients with moderate disease activity, and to examine the proportion of patients that progressed or went into remission at 6 months.

Methods: Data was collected from the Ontario Best Practice Initiative (OBRI), a clinical registry of RA patients. Patients were classified into a moderate group based on the Clinical Disease Activity Index (CDAI) at baseline. These patients were further classified into two subgroups as per their baseline treatment strategies: Disease Modifying Antirheumatic Drugs (DMARDs) or Biologics. Patient characteristics at baseline and the proportions of patients with low, moderate, and severe disease activity at 6 months were compared.

Results: In the OBRI cohort (n=2305), 512 (22%) patients with mean (SD) age 57.3 (13.3) years were found to have moderate CDAI at baseline with follow-up data at 6 months. Among these, 271(53%) attained low activity, 177(35%) stayed in moderate activity, and 64(13%) progressed to high activity at 6 months. The patients in the Biologics group had longer RA duration (11.3 vs 7.2 years), with a higher proportion of females (85% vs 74%). Education, private insurance, income, race, smoking history, comorbidities, tender joint count, swollen joint count, and other baseline disease activities were the same between the two groups. A higher proportion of patients attained low disease activity in the DMARDs group compared to Biologics at 6 months (57% vs 37%, $p < 0.01$), whereas a significantly higher proportion of patients in Biologics remained as moderate or progressed to severe.

Conclusion: A significantly higher proportion of RA patients with moderate disease activity achieved remission at 6 months. It appears that patients on DMARDs were getting better than those on Biologics, however further analysis is required to adjust for the potential confounding effect between the two groups.