

FACTORS AFFECTING THE DISCREPANCY BETWEEN PATIENT AND PHYSICIAN GLOBAL ASSESSMENT OF DISEASE ACTIVITY IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS OVER TIME

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Background:

Rheumatoid Arthritis (RA) is a chronic disease that requires regular follow-ups over time. Physicians make treatment adjustments based on their evaluation of disease status and patients' response to treatment while patients' perception of disease activity may change over time.

Objectives:

We aimed to assess the discrepancy between patient global assessment of disease activity and physician assessment of disease activity at baseline and after one year in patients with early RA. We also evaluated factors affecting this discrepancy at these two time points.

Methods:

Patients enrolled in the Ontario Best Practices Research Initiative (OBRI), a prospective observational cohort of patients with RA who had disease duration of <12 months (early RA) and had visits both at baseline and after one year were included. The discrepancy between patient global assessment of disease activity (PTGA) and physician global assessment of disease activity (MDGA) was calculated by simple subtraction (PTGA-MDGA). The value of ≥ 30 was considered discordant which could be either positive or negative in favor of PTGA or MDGA. Linear regression analysis was used to assess factors affecting PTGA, MDGA, and PTGA-MDGA discrepancy at baseline and one year.

Results:

A total of 460 patients with early RA were analyzed. Majority were female (72.4%) with mean (\pm SD) age of 57 years (± 0.6). The discordance rate was 109 (24%) and 99 (21%) at baseline and one year, respectively. In the majority of the discordant cases, PTGA was higher (98 (90%) at baseline and 85 (86%) at one year). Discordant patients had significantly higher fatigue score, health assessment questionnaire disability index (HAQ-DI), pain score, PTGA, MDGA, tender joint, composite measures of disease activity and higher number of comorbidities at baseline.

Multivariable regression analysis showed that the higher PTGA is significantly associated with higher SJC, TJC and fatigue both at baseline and one year and with higher pain score only at one year. Similar associations were found for MDGA except fatigue which was not significant. Multivariable regression analysis showed that the higher discrepancy between PTGA and MDGA is associated significantly with lower SJC ($\beta = -2.75$), higher TJC ($\beta = 1.17$), and higher fatigue ($\beta = 0.85$) at baseline. At one-year follow-up, higher pain was the strongest factor ($\beta = 4.99$) for affecting the higher PTGA-MDGA discrepancy compared with SJC ($\beta = -1.65$) and fatigue ($\beta = 1.24$).

Conclusions:

Significant discrepancy between PTGA and MDGA exists in about a quarter of patients with early RA at baseline and slightly less after one year. In the majority of these patients PTGA is higher over time. The number of active joints affects both assessments and this effect persists at one year. Clinicians should consider the above associations when making treatment decisions.