

Can RA Patients Self Monitor Their Disease Activity?

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ABSTRACT:

Background:

In rheumatoid arthritis (RA) the target for treatment is clinical remission or minimal disease activity. Active involvement of patients in monitoring their own disease activity could enhance treatment by providing an early warning when targets are not met.

Objective:

To determine if patients can self-monitor their RA disease activity and accurately identify whether they have reached the target of low disease activity or remission.

Methods:

All consecutive RA patients presenting for follow-up to seven participating rheumatologists were invited. Consenting patients filled out a questionnaire and performed a self-report joint count. Rheumatologist joint count and lab values (CRP) were obtained from rheumatologists' charts.

RA disease activity indices (CDAI, SDAI and RAPID-4) were used to calculate disease activity, categorized into remission, low, moderate or high, according to published cut points. Because change in treatment is recommended with moderate or high disease activity, we created two categories: remission or low vs. moderate or high. Patient-derived and rheumatologist-derived scores were compared.

Results:

We recruited forty-nine RA patients [mean(SD) age: 57.7(15.4) years, 76% female].

Comparison	Percent perfect agreement	Cohen's Kappa (95% CI)
Patient vs. rheumatologist CDAI	75.5%	0.51* (0.27;0.75)
Patient vs. rheumatologist SDAI	79.6%	0.59* (0.36;0.82)
RAPID4 vs. rheumatologist CDAI	79.6%	0.59* (0.36;0.82)
RAPID4 vs. rheumatologist SDAI	79.6%	0.59* (0.36;0.82)

*values in 0.5-0.6 interval represent moderate agreement, all $p < 0.001$.

Conclusion:

There is moderate agreement between patient self-assessment and rheumatologist assessment of disease activity, with little difference between instruments used. These results suggest that patients are able to assess their own disease activity, which may be helpful in guiding the need for physician visit and medication adjustments.