

A Rheumatologist Managing Patients with Rheumatoid Arthritis: An Artisan But Also An Artist!



In this issue of *The Journal* Lonnie Pyne and colleagues report the results of an analysis aimed at evaluating the respective roles of the patient (patient's global assessment), the physician (physician's global assessment), and a composite index, the Disease Activity Score (DAS)¹ in the decision for indicating and/or reinforcing a disease-modifying drug in rheumatoid arthritis (RA) in daily practice in Canada². For this purpose, they took the opportunity to use data collected in the CATCH study (the Canadian Early Arthritis Cohort). The main conclusion of this elegantly conducted analysis is that the increase of treatment was strongly related to the physician's global assessment, whereas DAS28 was not.

The results have to be interpreted with regard to the following new paradigms in the management of RA, in particular at the early stage of the disease.

1. The current main objective of therapy with a disease-modifying antirheumatic drug (DMARD) in early RA is not only to improve the current symptomatic condition of the patient (e.g., level of pain, functional impairment, fatigue) but also to prevent any subsequent clinical handicap due to structural damage. Inflammation has been shown in different longitudinal epidemiological studies^{3,4,5} to be the major driving factor of such structural damage, whereas the intensity of the patient's symptom is correlated with the level of inflammation, but at a lower magnitude. Therefore, these preliminary remarks suggest that the initiation of DMARD should be based on objective signs of inflammation (number of swollen joints, acute-phase reactants) and not on the level of the patient's symptoms.

2. The current evidence suggests that a treatment decision has to be taken if a predefined threshold in the level of disease activity is not achieved (the treat-to-target concept, T2T)^{6,7,8}.

3. Such evidence was mainly based on data observed in clinical trials in which the "level of disease activity" was evaluated using a composite index (the DAS28-ESR) combining physician-reported outcomes (number of swollen joints and erythrocyte sedimentation rate) and patient-reported out-

come (patient's global assessment) and a mixed measure (number of tender joints). Such a composite index can be calculated by a research nurse prior to the visit of the patient with the rheumatologist⁹.

Therefore, an "artistic" approach can be defined by a decision taken by the rheumatologist integrating all the information available at the time of the visit (level of patient's symptoms and level of objective signs of inflammation but also comorbidities and history of patient's previous treatments) without considering any specific target to be reached.

At variance with this, an "artisan" approach can be defined by a decision by the rheumatologist mainly based on the a priori threshold of the tool permitting definition of an acceptable status from a physician's perspective (for example, a value of DAS28-ESR below 3.2).

In all the clinical trials comparing a "routine" or "artistic" approach versus an "intensive" or "artisan" approach^{10,11,12,13}, the "artisan" approach was superior to the "artistic" approach. Usually, the "artisan" approach is criticized for the following reasons:

1. The tool to evaluate the level of disease activity is not uniformly recognized (e.g., the DAS28-ESR¹, the RAPID-3¹⁴, no swollen joints at ultrasonography¹⁵). For example, in the study reported in this issue of *The Journal*¹, the authors have noticed that the increase in treatments was not only based on the number of swollen joints but also the size of the joints affected by synovitis (larger joint involvement was more likely to influence treatment than number of swollen joints).
2. Such an approach does require perfect information/education of the patient at the initiation of treatment. To clearly understand this last statement we have to remember the different situations observed in daily practice (Table 1).

It is clear that the situations for which there is concordance between the patient and the doctor are easy to address — that is, no treatment in case of acceptable status (condition "a" in Table 1), or initiation of or reinforcing a DMARD in case of nonacceptable status (condition "d"). The 2 other conditions are more challenging.

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Table 1. Definition of acceptable status. Patient's perspective: subjective symptoms (e.g., pain, functional impairment, fatigue). Doctor's perspective: objective signs of inflammation (e.g., synovitis, acute-phase reactants).

	Patient's Perspective	
	Yes	No
Doctor's perspective		
Yes	a	b
No	c	d

Condition "b" is very well known by rheumatologists and can be attributed to either an advanced disease state with structural damage responsible for the patient's symptoms, a comorbidity such as fibromyalgia, or — and more difficult to address — a persistent active disease not recognized by the tools used by the physician, for example, normal C-reactive protein (CRP) and no swollen joints on physical examination.

Condition "c" is less frequent but also more problematic in daily practice. For example, in case of a lack of information/education in early RA, a patient who has dramatically improved after 8 to 12 weeks of treatment combining methotrexate and low-dose corticosteroids will be reluctant to accept initiation of another treatment such as a biologic because of the persistence of 6 swollen joints and a persistent increase in CRP.

Therefore, it seems that we have to reinforce the following points:

1. Accept using an "artisan" approach after "embarking" the patient in this approach via educational programs and with a clear definition of the target.
2. Continue to use an "artistic" approach since the decision to initiate/reinforce a treatment should consider not only the *a priori* defined target but also other variables such as comorbidities and history of previous treatments.
3. Conduct clinical trials evaluating the treatment effect of current DMARD in the 4 situations described in Table 1, and in particular the treatment effect in the population of patients who consider themselves to have a nonacceptable status despite the lack of objective signs of inflammation.

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