Publication of the Month

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August 08/10: New Classification Criteria for RA

Aletaha D, Neogi T, Silman AJ et al.

2010 Rheumatoid Arthritis Classification Criteria. An American College of Rheumatology/European League Against Rheumatism Collaborative Initiative

Arthritis Rheum 2010; 62: 2569-2581

Over the last decade, the optimal use of disease modifying antirheumatic drugs (DMARDs) and the availability of new biologic agents have dramatically enhanced the success of RA management. Moreover, it has been recognized that early therapeutic intervention improves clinical outcomes and reduces the accrual of joint damage and disability. Undoubtedly, treating patients at a stage at which evolution of joint destruction can still be prevented would be ideal.

The classification criteria set that is in widespread international use to define RA is the 1987 American College of Rheumatology (ACR; formerly the American Rheumatism Association) criteria. These criteria are well accepted as providing the benchmark for disease definition, but are not helpful in identifying patients who would benefit from early effective intervention. Indeed, with modern therapies, the goal is to prevent individuals from reaching the chronic, erosive disease state that is exemplified in the 1987 criteria for RA.

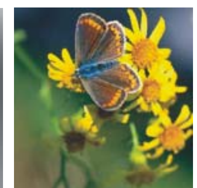
A joint working group of the ACR and the European League Against Rheumatism (EULAR) was therefore formed to develop a new approach for classification of RA. While classification criteria are potentially adopted for use as aids for diagnosis, the focus of this endeavor was not on developing diagnostic criteria or providing a referral tool for primary care physicians. Thus, the specific charge was to develop new classification criteria for RA to facilitate the study of persons at earlier stages of the disease.

The criteria are scored with points, with 10 points being the maximum. Four categories are judged: the number of affected joints, the serology (rheumatoid factor and ACPA), inflammatory markers, and the duration of symptoms. Please find the new criteria and their scoring on the next page.

Discussion: The working group has deliberately labeled these criteria as "classification criteria" as opposed to "diagnostic criteria." Clinicians may be able to diagnose an individual who has not met the classification criteria definition or who has features that are not a component of the classification criteria.

The task for the general practitioners is usually not to classify a joint disease but to suggest a diagnosis and refer the patient to the rheumatologist for a final diagnosis and a treatment which starts as early as possible. Patients may have only 4 or 5 points according to the new classification criteria but still can be diagnosed as having RA and should be treated as early as possible.

ACPA (in most cases anti-CCP) are implemented in these new criteria. However, their role as very early and specific markers seems to be accredited only partly. Rheumatoid factor and anti-CCP are scored equally although many studies have shown the superior performance of anti-CCP. While all proposals for *diagnostic* criteria in recent years give anti-CCP a very high value, the *classification* criteria cannot be improved distinctly by giving anti-CCP a higher score than rheumatoid factor.



The 2010 ACR/EULAR classification criteria for rheumatoid arthritis

Target population (Who should be tested?): Patients who

1) have at least 1 joint with definite clinical synovitis (swelling)
2) with the synovitis not better explained by another disease

Classification criteria for RA (score-based algorithm: add score of categories A–D; a score of _6/10 is needed for classification of a patient as having definite RA)	Score
A. Joint involvement	
1 large joint	0
2 – 10 large joints	1
1 – 3 small joints (with or without involvement of large joints)	2
4 – 10 small joints (with or without involvement of large joints)	3
>10 joints (at least 1 small joint)	5
B. Serology (at least 1 test result is needed for classification)	
Negative RF *and* negative ACPA	0
Low-positive RF *or* low-positive ACPA	2
High-positive RF *or* high-positive ACPA	3
C. Acute-phase reactants (at least 1 test result is needed for classification)	
Normal CRP *and* normal ESR	0
Abnormal CRP *or* abnormal ESR	1
D. Duration of symptoms	
<6 weeks	0
≥6 weeks	1

Scoring: Application of these criteria provides a score of 0–10, with a score of ≥6 being indicative of the presence of definite RA. A patient with a score below 6 cannot be classified as having definite RA, but might fulfill the criteria at a later time point. To classify a patient as having or not having definite RA, a history of symptom duration, a thorough joint evaluation, and at least 1 serologic test (RF or ACPA) and 1 acute-phase response measure (erythrocyte sedimentation rate [ESR] or C-reactive protein [CRP]) must be obtained. It is acknowledged that an individual patient may meet the definition of RA without requiring that all tests be performed. For example, patients with a sufficient number of joints involved and longer duration of symptoms will achieve 6 points regardless of their serologic or acute-phase response status.