

December 12/08: Anti-CCP in Revised Classification Criteria for RA

The classification of rheumatoid arthritis (RA) is increasingly important as new therapies can halt the disease in its early stages. Antibodies to cyclic citrullinated peptides (anti-CCP) are widely used for RA diagnosis, but are not in the 1987 American College of Rheumatology (ACR) Criteria for RA Classification.

Rheumatologists at the Brigham and Women's Hospital in Boston developed and tested the performance characteristics of new criteria for RA classification, incorporating anti-CCP:

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Anti-cyclic citrullinated peptide revised criteria for the classification of rheumatoid arthritis

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A total of 292 subjects were included in this analysis. 42 subjects (14%) had definite RA according to their rheumatologists at the baseline visit. 100 were diagnosed with possible/probable RA and 150 were told they didn't have RA. At the next visit, a mean of 2.8 months later, the diagnosis was changed from RA to non-RA in 2 cases and from non-RA to RA in 12 cases.

Diagnosis at baseline, n=292	Diagnosis at next follow-up, n=292	n	Anti-CCP+, n (%)	RF+, n (%)
RA, n = 42	RA	39	16 (41)	18 (46)
	Possible/probable	1	0	0
	Not RA	2	0	0
Possible/probable RA, n = 100	RA	18	6 (33)	8 (44)
	Possible/probable	52	6 (12)	7 (13)
	Not RA	30	0	2 (7)
Not RA, n = 150	RA	12	5 (42)	4 (33)
	Possible/probable	11	2 (18)	2 (18)
	Not RA	127	7 (6)	9 (7)

17% were RF positive and 14% were anti-CCP positive at the initial testing. 78 had definite RA according to the treating rheumatologist at the last follow-up. The authors revised the ACR criteria in 2 ways: (a) adding anti-CCP, and (b) replacing rheumatoid nodules and erosions with anti-CCP (CCP 6 criteria). Sensitivity and specificity of the different criteria are shown in the table:

Criteria	Sensitivity (%)	Specificity (%)
1987 ACR criteria	51	91
1987 ACR criteria + anti-CCP	55	91
CCP 6 criteria (ACR criteria + anti-CCP without rheumatoid nodules and without radiographic changes)	74	81

The authors concluded that the CCP 6 criteria improved upon the sensitivity of the ACR criteria, most remarkably for subjects with symptoms shorter than 6 months and could be used for the classification of subjects for RA in clinical studies.

