Criteria Use a 10-Point Scale

Arthritis *from page 1*

the University of Manchester (England). "Satisfying the 1987 criteria is bad news." The goal, he said, was a set of criteria that would meet current consensus on which patients with inflammatory arthritis should immediately start treatment with a disease-modifying antirheumatic drug.

The new criteria "mirror what we are doing in practice, or what we think should be done in practice," said Dr. Eric M. Ruderman, a rheumatologist at Northwestern University in Chicago, who was not involved in creating the new criteria.

"At Northwestern, most of these patients are getting treated, but I'm not sure what goes on in the community," Dr. Ruderman said in an interview. "The leading edge says, 'treat all patients who meet the new criteria.' Will the rest of rheumatology follow that? It would probably have happened anyway, but [the new criteria] may help drive that" more quickly.

"We have patients with persistent, inflammatory arthritis who do not meet the current classification criteria. [The new criteria] set the stage for us to treat patients earlier," said Dr. Michael E. Weinblatt, professor of medicine at Harvard Medical School and codirector of clinical rheumatology at Brigham and Women's Hospital, both in Boston.

The new criteria "will allow more rapid institution of disease-modifying therapy," he noted.

The new criteria rate patients on a scale of 0-10 points, with points assigned in four separate domains of signs and symptoms: joint involvement, serology, duration of symptoms, and acute phase reactants. (See box.) Patients who tally 6 or more points are considered to have definite RA, said Dr. Gillian A. Hawker, a rheumatologist and chief of medicine at Women's College Hospital in Toronto. The joint ACR/EULAR panel is still working on what score should distinguish patients with probable RA from those in whom RA is unlikely, but this cut point will probably be set at 3 or 4 points. The panel also wants to prospectively validate the scoring system in future studies, Dr. Hawker said.

During the session, Dr. Hawker and Dr. Daniel Aletaha, a rheumatologist at the Medical University of Vienna, detailed the 3-year, multiphase process that led to creation of the new criteria. In phase I, Dr. Aletaha and a team of rheumatology experts used a database of more than 3,000 patients with early, inflammatory arthritis submitted by nine centers worldwide to identify a short list of key variables that seemed to define RA patients on the cusp of needing DMARD treatment.

The second phase relied on a panel of 22 RA experts, with the membership nominated by ACR (11 people) and EULAR (11 people). The central part of this phase was a meeting of the 22 experts in Chicago last May 30-31, when they sifted through 30 cases to distill the key elements in the identification of early RA. The variables identified in phase I were supplied to the expert panel to aid in their decisions.

Following this, a draft scoring system was presented at the annual European Congress of Rheumatology in Copenhagen last June. Feedback from that session led to further refinements and the final system that was presented at the ACR meeting.

In addition to setting a new standard for diagnosing and treating RA, the new criteria will help standardize the enrollment criteria for new clinical studies, and in some cases may ease insurance coverage of treatment for patients.

"I don't get a lot of pushback from insurers about [RA] diagnoses right now," Dr. Ruderman said in an interview, although he admitted not knowing what goes on in states other than Illinois. If physicians are having problems with coverage of expensive biologic therapies for patients with early RA, "this will get ahead of that curve," he said.

The only reservation with the new scoring system that Dr. Weinblatt reported having was its potential misapplication by nonrheumatologists. "I know that all [rheumatologists] can distinguish [proximal interphalangeal osteoarthritis] and inflammatory arthritis, but I'm not comfortable that all our colleagues who are not rheumatologists are skilled at that," he said. ■

The New ACR/EULAR RA Criteria

Patients are definitively diagnosed with RA if they score 6 or more points according to the following criteria, according to Dr. Hawker:

Joint Involvement

- ► 1 medium-large joint (0 points)
- ► 2-10 medium-large joints (1 point)
- ► 1-3 small joints (2 points)
- ► 4-10 small joints (3 points)
- ► More than 10 small joints (5 points)

Serology

- ► Not positive for either rheumatoid factor or anti–cyclic citrullinated protein antibody (0 points)
- ► At least one of these two tests are positive at low titer (2 points)
- ► At least one test is positive at high titer (3 points)

Duration of Synovitis

- ► Less than 6 weeks (0 points)
- ► 6 weeks or longer (1 point)

Acute Phase Reactants

- ► Neither C-reactive protein nor erythrocyte sedimentation rate is abnormal (0 points)
- ► Abnormal CRP or abnormal ESR (1 point)

Note: Patients receive the highest point level they fulfill within each domain. For example, a patient with five small joints involved and four large joints involved scores 3 points.

Doubts Cast on Tight Link Between RA and Carotid Disease

BY MITCHEL L. ZOLER

PHILADELPHIA — The increased atherosclerotic disease that generally accompanies rheumatoid arthritis may not consistently involve carotid artery stenosis, according to two reports at the annual meeting of the American College of Rheumatology.

In a study with 195 RA patients and a nearly equal number of controls, carotid atherosclerosis was not clearly linked with coronary atherosclerosis in RA patients, although the link existed in controls, said Dr. Jon T. Giles, a rheumatologist at Johns Hopkins Medical Center in Baltimore.

Results from a second study, a meta-analysis of 22 prior reports in a total of 1,384 RA patients, showed that the average extent of carotid intima-media thickness was "far less than expected." Patients' average carotid stenosis corresponded to about a 10%-15% increase in cardiovascular risk, compared with similar people without RA, said Dr. Michael T. Nurmohamed, a rheumatologist at the Free University Medical Center in Amsterdam.

But the relationship between RA and carotid disease is more complex, according to a second set of results reported by Dr. Nurmohamed. Preliminary results from measurement of carotid intima-media thickness in 100 patients with RA showed a mean thickness of 0.83 mm, which is "comparable" to the carotid thickness in patients with type 2 diabetes—and enough stenosis to produce "a significantly increased cardiovascular risk," Dr. Nurmohamed said.

"For now, there is no recommendation on how to measure" subclinical cardiovascular disease, Dr. Giles said in an interview. No one can say whether measuring coronary disease is better or worse than measuring carotid atherosclerosis. If an RA patient "does not have carotid atherosclerosis, you can't be comfortable that nothing is going on," he said.

The study he reported included 195 RA patients who were seen at the arthritis center at Johns Hopkins during October 2004–May 2008 and were enrolled in the ESCAPE-RA (Evaluation of Subclinical Cardiovascular Disease and Predictors of Events in Rheumatoid Arthritis) study. Patients were 45-84 years old at enrollment and met the 1987 ACR classification criteria for RA.

RA patients' carotid stenosis corresponded with 'a significantly increased cardiovascular risk.'

DR. NURMOHAMED

Enrollment excluded patients with clinically apparent cardiovascular disease, including those with a history of MI, heart failure, stroke, and peripheral vascular disease. For this analysis, RA patients were matched by age, sex, and ethnicity with 198 controls who did not have RA and who had been enrolled in the Baltimore cohort of MESA (Multi-Ethnic Study of Atherosclerosis). Carotid intima-media thickness was measured by B-mode ultrasound, and coronary calcium was measured by multidetector row CT. The results showed that carotid stenosis was linked to a high level of coronary calcium in both RA patients and controls. But many RA patients without carotid atherosclerosis nonetheless had an increased prevalence of coronary calcium, an incongruous combination that was not seen in the controls.

"The absence of carotid atherosclerosis cannot rule out coronary atherosclerosis in RA patients in the same way that it does in the general population," Dr. Giles said. The implication is that "using subclinical carotid atherosclerosis as a surrogate for coronary atherosclerosis in studies of RA patients may be inaccurate."

The meta-analysis of 22 studies by Dr. Nurmohamed and his associates involved a total of 1,147 controls and more than 1,300 RA patients. In 17 of the studies, the carotid intima-media thickness was greater in the RA patients than in the controls. But the average intima-media thickness in the RA patients was 0.71 mm, an average of 0.09 mm larger than in the controls, a difference that corresponds to a modest 10%-15% higher rate of cardiovascular risk. The low risk level may have occurred because the studies excluded people with cardiovascular disease or risk factors at baseline, a step that may have led to an underestimate of the difference in carotid intima-media thickness between the RA patients and controls.

The carotid data collected directly by Dr. Nurmohamed and his associates came from the CARRÉ (Cardiovascular Research and Rheumatoid Arthritis) study. A report from CARRÉ showed the substantially higher level of cardiovascular disease events in 294 patients with RA (13%), compared with 258 controls (5%) (Ann. Rheum. Dis. 2009;68:1395-400). So far, Dr. Nurmohamed and his associates have measured the carotid intima-media thickness in 100 of these RA patients. In this preliminary assessment, the average intima-media thickness in RA patients was 0.83 mm, a level high enough to produce a significant risk for cardiovascular events. The carotid atherosclerosis in RA patients showed no link with inflammatory parameters or with disease duration, Dr. Nurmohamed said. Additional prospective, controlled studies are needed to further define the cardiovascular disease risk in RA patients, he added.

Neither Dr. Giles nor Dr. Nurmohamed has any disclosures relevant to their research to report. ■