

# Link Between RA, Carotid Disease Questioned

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 one study of 195 rheumatoid arthritis patients and 198 controls, carotid atherosclerosis was not clearly linked with coronary atherosclerosis in RA patients, but the link existed in control, said Dr. Jon T. Giles, a rheumatologist at Johns Hopkins Medical Center in Baltimore.

Another study, a meta-analysis of 22 prior reports involving a total of 1,384 RA patients and 1,147 controls, showed that the average extent of carotid intima-media thickness was “far less than expected,” with stenosis corresponding to a 10%-

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.

In the meta-analysis by Dr. Nurmohamed and associates, 17 studies showed that the carotid intima-medial thickness

was greater in the RA patients than in the controls. But the average intima-medial thickness in the RA patients was 0.71 mm, an average of 0.09 mm larger than in the controls, corresponding 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 dif-

ference 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, which 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). ■



**In RA patients, the average extent of carotid intima-media thickness was ‘far less than expected.’**

DR. NURMOHAMED

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, “comparable” to the carotid thickness in patients with type 2 diabetes—and enough stenosis to produce “a significantly increased cardiovascular risk,” Dr. Nurmohamed said.

“What is the best way to assess atherosclerosis in RA patients? For now, there is no recommendation on how to measure” subclinical cardiovascular disease, Dr. Giles said in an interview. If an RA patient “does not have carotid atherosclerosis, you can’t be comfortable that nothing is going on,” he said.

The 195 RA patients seen at Johns Hopkins October 2004–May 2008 were enrolled in the ESCAPE-RA (Evaluation of Subclinical Cardiovascular Disease and Predictors of Events in Rheumatoid Arthritis) study.

Enrollment excluded patients with clinically apparent cardiovascular disease. The patients were matched by age, sex, and ethnicity with controls who did not have RA and who had been enrolled in the Baltimore cohort of MESA (Multi-Ethnic Study of Atherosclerosis).

Carotid stenosis was linked to a high level of coronary calcium in both the RA patients and controls. But many RA patients without carotid atherosclerosis nonetheless had an increased prevalence

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