## Smoking Raises the Stakes in Rheumatoid Arthritis

BY NANCY WALSH
New York Bureau

VIENNA — Cigarette smoking confers a clear and significant risk of worse clinical outcomes in patients with rheumatoid arthritis and adds to the overall health care burden because of greater therapeutic requirements—including the need for expensive biologic drugs.

Studies have documented an association between smoking and rheumatoid arthritis (RA), but the linkage with specific clinical manifestations has remained unclear. Data from the Consortium of Rheumatology Researchers of North America (CORRONA) now have confirmed that smokers have increased tender and swollen joint counts compared with nonsmokers, as well as an elevated incidence of subcutaneous nodules, Lori A. Lavalle, M.D., said at the annual European congress of rheumatology.

The CORRONA database includes 8,228 patients, drawn from 63 sites across the United States. These patients have been followed since October 2001, with data collection being done approximately every 5 months. A total of 3,266 reported ever having smoked and 1,082 are current smokers, said Dr. Lavalle, who was affiliated with the Albany (N.Y.) Medical College at the time of the presentation.

Among patients who reported ever having smoked, mean tender and swollen joint counts were 4.08 and 4.60, respectively, compared with 3.59 and 4.22 among nonsmokers. This difference was statistically significant, she said.

Other variables—including rheumatoid factor (RF) positivity (76% smokers vs. 69% nonsmokers) and health assessment questionnaire (HAQ) scores (0.53 smokers vs. 0.48 nonsmokers)—also were worse among patients who had ever smoked.

When previous smokers were compared with those who had never smoked, significant differences were seen in HAQ scores, although not in other variables.

The analysis also revealed that a greater percentage of smokers (43%) than nonsmokers (41%) were on biologic agents. In addition, 32% of smokers and 24% of nonsmokers had subcutaneous nodules.

A second study presented in a poster session further highlighted the increased requirement for drug therapy among RA patients who smoke, and particularly among those who are RF positive. This study included 856 patients recruited from 60 German rheumatology clinics, 198 (23.1%) of whom were smokers.

By 6 months, the proportion of patients requiring disease-modifying antirheumatic drugs (DMARDs) was greater among RF-positive smokers than among RF-positive nonsmokers, Gisela Westhoff reported at the meeting, which was sponsored by the European League Against Rheumatism.

This difference increased throughout the 3-year course of the study, and similar differences were seen among RF-negative smokers and nonsmokers. (See table.)

With regard to drug therapy, RF-positive smokers had taken 2.1 different DMARDs

by the end of the 3-year study, whereas RF-positive nonsmokers had taken only 1.7, said Ms. Westhoff of the German Rheumatism Research Center, Berlin.

Significantly more smokers were classified as "problematic cases" by their physicians because of inadequate response to treatment, she said.

This ongoing inception cohort study is being funded by the German Federal Minister of Research through the Competence Network Rheumatology.

RF-Positive Patients Who Smoke	e Require	More Drug	Therapy
	DMARDs	Biologics	Daily Steroids
RF-positive smokers (n = 143)	92%	16%	60%
RF-positive nonsmokers (n = 372)	83%	8%	60%
RF-negative smokers (n = 55)	78%	11%	51%
RF-negative nonsmokers ( $n = 286$ )	72%	4%	40%
All patients (n = 856)	81%	8%	53%
Source: Ms. Westhoff			

