Many Patients Dogged by Extra-Articular RA

BY SHARON WORCESTER

FROM A SYMPOSIUM SPONSORED BY THE AMERICAN COLLEGE OF RHEUMATOLOGY

CHICAGO – Extra-articular manifestations of rheumatoid arthritis still affect more than 40% of patients, and although the incidence of some severe manifestations, such as vasculitis, has declined over time, the incidence of others has increased, and many of these manifestations can adversely affect prognosis and increase mortality.

The 10-year cumulative incidence for all extra-articular manifestations of RA was nearly 50% in a cohort of 463 patients with incident RA in 1995-2007 who were followed through the end of 2008, which is similar to the 46% incidence in a similar cohort of 197 patients who were followed from 1985 to 1994. However, severe manifestations – including ocular disease and vasculitis – occurred in about 7% and 9% of patients in the cohorts, respectively, reported Dr. Eric L. Matteson at the symposium.

The findings are from a follow-up of a retrospective, longitudinal, population-based study involving the first cohort. Both cohorts included residents from a single county in Minnesota who were at least 18 years of age and who met at least four of the American College of Rheumatology criteria for RA (J. Rheumatol. 2011 April 1 [doi:10.3899/jrheum.101133]).

The most striking finding was the reduction in the incidence of vasculitis, which affected 3.6% of patients in the earlier cohort, but only 0.6% in the recent cohort, said Dr. Matteson, professor of medicine and chair of rheumatology at the Mayo Clinic, Rochester, Minn.

Episcleritis, neuropathy, xerostomia, cervical myelopathy, pulmonary fibrosis, Sjögren's syndrome, and keratoconjunctivitis sicca (KCS) also occurred less often in the later cohort, whereas subcutaneous nodules, pleuritis, pericarditis, and bronchiolitis obliterans-organizing pneumonia (BOOP) all occurred slightly more often in the later cohort.

The study also showed that the occurrence of a second extra-articular manifestation was reduced significantly in the second cohort (hazard ratio, 0.5), and that having any extra-articular manifestation was significantly associated with an increased risk of mortality (HR, 2.0). No additional increase in mortality risk was seen with severe or second extra-articular manifestations, Dr. Matteson noted.

The reasons for the decline in severe manifestations and second manifestations likely include more aggressive treatment strategies – and perhaps the use of biologics – in recent years; more vigorous disease control throughout the course of disease; and possibly secular trends, such as reduced smoking and other as-yet unidentified factors, he said.

Predictors of extra-articular manifestations include smoking, erosive severe joint disease, the need for disease-modifying antirheumatic drugs or biologic response modifiers, and seropositivity for ANA (antinuclear antibodies) or pANCA (perinuclear antineutrophil cytoplasmic antibody). Other genetic or environmental factors that are not yet fully understood might also contribute, he said.

Management of extra-articular manifestations should be guided by the organ system involved, but steroids are a mainstay of treatment. Treatments that control synovitis, including NSAIDs, are often effective as well.

For severe manifestations, treatment with glucocorticoids is often needed for at least 2 months. The role of pulse glucocorticoids, although popular, has not been established by randomized, controlled studies, he said.

There are few data on treatment of these manifestations in general, he said, noting that cytotoxic drugs are sometimes used in patients with vasculitis or inflammatory eye disease, and that the role of newer agents – such as anti–B-cell therapy, abatacept, and tumor necrosis factor antagonists – is unclear, as there is anecdotal evidence of both successful and detrimental effects.

Dr. Matteson disclosed that he has received grant support from, and/or served as an investigator or consultant for Amgen, Biogen-IDEC, Centocor, Genentech, Hoffmann-La Roche, Human Genome Sciences, Mayo Foundation, National Institutes of Health, Novartis, Pfizer, and UCB. ■

RA Ups Risk for Interstitial, Obstructive Lung Diseases

BY SHARON WORCESTER

FROM A SYMPOSIUM SPONSORED BY THE AMERICAN COLLEGE OF RHEUMATOLOGY

CHICAGO – The risk of both interstitial and obstructive lung disease is increased in patients with rheumatoid arthritis, as is mortality in affected, compared with unaffected, arthritis patients.

In a cohort of rheumatoid arthritis (RA) patients from a single county in Minnesota who have been followed since 1955, the risk of developing interstitial lung disease is about 8%, compared with less than 1% in the general population, Dr. Eric L. Matteson reported.

"The hazard ratio for developing interstitial lung disease, compared to non-RA patients, is about a ninefold increase, so this is an enormous difference," said Dr. Matteson, professor of medicine and chair of rheumatology at the Mayo Clinic, Rochester, Minn.

Furthermore, these patients with interstitial lung disease have much higher mortality than RA patients who do not have interstitial lung disease (hazard ratio, 2.14), he said.

The findings compare well with those from a recently completed survey, which used National Center for Health Statistics data and suggested that, while mortality in RA in general has declined, the rates of interstitial lung disease are increasing.

"We're probably seeing more [interstitial lung disease in RA patients] today than we did maybe 10, 20, and certainly 30 years ago," Dr. Matteson said.

Declines in RA mortality overall may be outpacing those from interstitial lung disease. Although biologics being used to treat RA are helping joint disease and other extra-articular manifestations of RA, there is no evidence that they influence the development of interstitial lung disease, he said.

Obstructive lung disease is also a concern in RA patients, and although the difference in incidence between RA patients and the general population is smaller than with interstitial lung disease, this finding may be more surprising, Dr. Matteson said, noting that this information from the Minnesota cohort was new to him.

"It appears that rheumatoid arthritis is a risk factor for obstructive lung disease," he said. After correcting for age, sex, and smoking status, there is about a 50% increase in the incidence of obstructive lung disease in RA patients, compared with the general population.

The reason for this is unclear, but "intriguing new data" suggest that the cystic fibrosis genes and some related genes are risk factors for developing bronchiolitis and other forms of obstructive disease in RA, so that may be part of the biologic answer, he said.

Like interstitial lung disease, obstructive lung disease also adversely affects mortality in RA patients (hazard ratio of 1.87 for affected vs. nonaffected RA patients), he noted.

Dr. Matteson had no financial conflicts of interest to disclose. ■

Smoking Worsens Ankylosing Spondylitis Disease Activity

BY SARA FREEMAN

FROM THE ANNUAL MEETING OF THE BRITISH SOCIETY FOR RHEUMATOLOGY

BRIGHTON, ENGLAND – Patients with ankylosing spondylitis who currently smoke are likely to be headed for increased disease activity and worse quality of life outcomes.

The results of a cross-sectional, postal survey found that, compared with never smoking, current smoking is associated with higher levels of disease activity, worse functional status, greater pain, and overall poorer quality of life.

This is the largest study to date to look at the effects of smoking on disease activity and severity and associated quality of life in ankylosing spondylitis (AS), according to the study's authors.

"The influence of smoking in AS is a lot less clear, however, and [until now] there have been no studies beyond susceptibility and very few studies on smoking as a risk for more severe disease," added Dr. Derek Mattey of Keele University and the University Hospital of North Staffordshire, England.

Questionnaires were sent to 1,000 patients with AS registered at 10 secondary-care rheumatology practices in England.

The questionnaire asked about smoking history and used several patient-reported outcome measures. These included the Bath AS disease activity and functional indices (BASDAI/BASFI); pain numeric rating scale (NRS); the AS quality of life questionnaire (ASQoL); and the evaluation of AS quality of life (EASi-QoL).

Data were looked at in terms of smoking status and in relation to the pack-year history. A pack-year is a means to quantify how much a person has smoked over a long time period. It is calculated by multiplying the number of packs smoked per day by the number of years smoked. The higher the pack-year, the longer the person has smoked.

Of 612 patients who responded to the questionnaire, 606 provided information about their smoking history. The mean age of respondents was 50.8 years, 72% were male, and the mean disease duration was 17.2 years (standard deviation = 11.7 years). Around half of the cohort had never smoked, with approximately 28% reporting that they were past smokers and 21% saying that they were current smokers.

Mean BASDAI, BASFI, pain NRS, ASQoL, and EASi-QoL scores were all higher, indicating a worse outcome, in patients that had ever smoked, compared with never smokers.

Significant, dose-dependent, correlations were also found between the number of pack-years and these disease outcome measures, with worse outcomes the higher the number of pack-years.

"High disease activity and more severe pain are most strongly associated with current smoking, while decreased function and poor quality of life are associated more closely with pack-year history," Dr. Mattey said.

Dr. Mattey said that he had no conflicts of interest but noted that a coinvestigator, Dr. Jonathan Packham, had received an educational grant from Wyeth UK. ■