

# Smoking Delays Development of Psoriatic Arthritis

BY SHERRY BOSCHERT  
San Francisco Bureau

LOS ANGELES — A review of data on 281 psoriasis patients found that those who began smoking after psoriasis onset developed psoriatic arthritis later than did nonsmokers or people who smoked before their psoriasis appeared.

Previous data suggest that psoriatic arthritis typically occurs approximately 10 years after the onset of psoriasis. In this study, the interval between diagnoses of psoriasis and psoriatic arthritis was 13 years in nonsmokers, 8 years in people who smoked before developing psoriasis, and 23 years in people who began smoking after their psoriasis diagnosis, Dr. Tina Rakkhit said.

That “dramatically longer time” to the development of joint disease in people who take up smoking after developing psoriasis “is consistent with the notion that the biology of psoriasis can be modulated by smoking activity,” she said at the annual meeting of the Society for Investigational Dermatology.

Of course, that doesn’t mean that physicians should advocate smoking in patients with psoriasis.

The health hazards of smoking are well known. If the physiologic underpinnings of these findings can be elucidated, how-

ever, this may lead to preventive therapies for psoriatic arthritis without the toxicities of smoking, said Dr. Rakkhit, a dermatologic research fellow at the University of Utah, Salt Lake City.

“Our data support the concept that agents without such detrimental effects could be used to delay and possibly prevent the onset of this significant comorbid state,” Dr. Rakkhit and her associates concluded.

The data came from the 812-person Utah Psoriasis Initiative, a prospective, phenotypic database.

The study excluded patients who developed psoriatic arthritis before being diagnosed with psoriasis, which generally accounts for 15% of people with the joint disease.

Because the Utah Psoriasis Initiative does not collect data on measures of joint disease, the investigators could not tell whether the delayed psoriatic arthritis was less or more severe than earlier-appearing joint disease.

Compared with the general population of Utah, 13% of whom smoke, 36% of the study cohort smoked at the time of their psoriasis diagnosis. In the United States, 20% of the population smokes.

Psoriatic arthritis appeared in nonsmokers at an average age of 26 years and in smokers at age 29 in the current study.

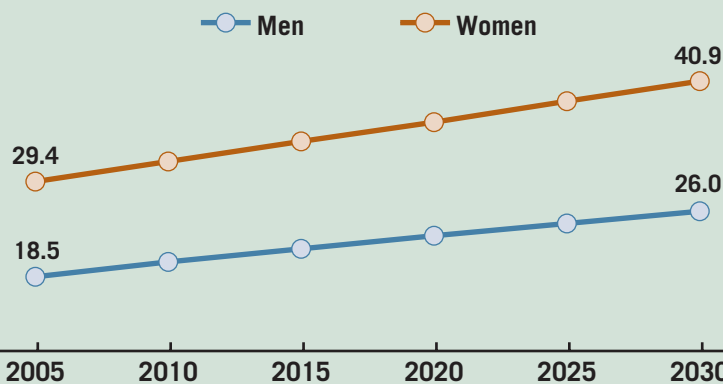
Patients were diagnosed with psoriatic arthritis at an average age of 36 if they never smoked and at age 42 if they ever smoked.

The findings add to the intriguing medical literature on the relationships between smoking and inflammatory diseases. Other studies suggest that heavier smokers develop rheumatoid arthritis later, Dr. Rakkhit noted. Crohn’s disease ap-

pears earlier in smokers, and patients who undergo surgical correction for Crohn’s disease are more likely to have recurrent disease. The opposite is seen with ulcerative colitis, which mainly is a disease of nonsmokers and former smokers. Among patients undergoing immunosuppressive therapies, a shorter duration is more likely to suffice in smokers than in nonsmokers. ■

## DATA WATCH

### Number of Adults With Arthritis Expected to Grow by 2030 (in millions of people)



Note: Based on estimated prevalence data on physician-diagnosed arthritis in adults aged 18 years or older.

Source: National Center for Chronic Disease Prevention and Health Promotion

## Long-Term Steroids Hurt RA Functional Capacity

BARCELONA — Rheumatoid arthritis patients who use corticosteroids frequently over the long term can maintain a low disease activity state but suffer deterioration of their functional capability, Dr. Eiichi Tanaka reported at a poster session at the annual European Congress of Rheumatology.

“A low disease activity state caused by corticosteroid use may not represent a ‘true’ low disease activity state,” explained Dr. Tanaka of Tokyo Women’s Medical University, and his associates.

The investigators followed 224 RA patients with a low disease activity state during 2000-2005. The patients had a mean age of 56 years and a mean disease duration of about 8 years, and were enrolled in the study for at least 3 years. Every 6 months, the investigators collected measurements on the Disease Activity Score-28 (DAS-28) and Japanese version of the Health Assessment Questionnaire (J-HAQ).

DAS-28 scores did not change substantially over the course of the study in 135 patients who never used corticosteroids, 33 who used steroids an average of

less than 9 months per year, and 56 who took steroids an average of more than 9 months per year. None of the patients had a DAS-28 greater than 3.2 at each assessment.

But long-term functional capacity, as measured by the J-HAQ, declined in the heavy corticosteroid users, improved slightly among moderate corticosteroid users, and improved the most in patients who did not use corticosteroids. Corticosteroid use was the most significant factor contributing to the final J-HAQ score, after adjustment of a multiple linear regression analysis for age, gender, disease duration, initial J-HAQ score, and seasonal effects. A little more than 90% of the patients in each group used disease-modifying antirheumatic drugs during the study.

“Along with the achievement of a low disease activity state, long-term efficacy, long-term functional prognosis, and the quality of remission also need to be considered in the strict control of RA activity,” Dr. Tanaka and his colleagues concluded.

—Jeff Evans

## Dipyridamole Plus Low-Dose Prednisone Cut RA Disease Activity, With Fewer Side Effects

BY NANCY WALSH  
New York Bureau

BARCELONA — Combining the anticlotting agent dipyridamole with low-dose prednisone led to a rapid decrease in rheumatoid arthritis disease activity, according to Dr. John R. Kirwan, speaking at the annual European Congress of Rheumatology.

The effects of glucocorticoids on inflammatory cells in rheumatoid arthritis (RA) include alterations in the expression of certain genes and intracellular metabolic

pathways, said Dr. Kirwan, professor of rheumatic diseases at the Bristol Royal Infirmary (England).

“However, they do not affect all the genes involved in inflammation, they do not work completely, and they also upregulate some genes that cause side effects,” Dr. Kirwan explained in an interview.

This weak interaction becomes stronger in the presence of dipyridamole, amplifying the anti-inflammatory effects. Because the prednisone dose is low, fewer side effects would be expected, he said.

The double-blind study included 59 patients with Disease Activity Scores (DAS28) greater than 4.5 and C-reactive protein (CRP) levels of 2.2 mg/L or higher. Participants’ mean age was 59 years, three-quarters were women, and almost all were white. Stable background methotrexate and nonsteroidal anti-inflammatory drugs were allowed, but no oral glucocorticoids were allowed for at least a month prior to enrollment.

Patients were randomized to receive the combination, known as CRx-102, or placebo for 6

weeks. The combination regimen is 2 mg prednisone with 200 mg dipyridamole at 8 a.m. and 1 mg prednisone plus 200 mg dipyridamole at 1 p.m. At day 42, 63% of patients receiving CRx-102 achieved an American College of Rheumatology (ACR) 20 response rate, as did 30% of patients receiving placebo. The difference was statistically significant.

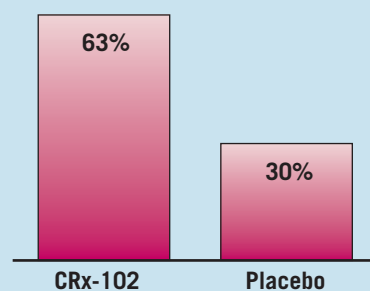
Significant differences between the groups also were seen on DAS28, patient and physician global assessments, pain, and Health Assessment Questionnaire score, Dr. Kirwan wrote in a poster.

CRP levels fell significantly, decreasing by 50% by day seven. The most common adverse events, headache and gastrointestinal disturbances, were reported by 15% of patients receiving the active therapy.

“CRx-102 produced a clinically meaningful and rapid decrease in disease activity as assessed by DAS28, ACR 20, and CRP. These data suggest that this is a well-tolerated oral therapy that can be safely added to disease-modifying antirheumatic drugs in RA,” he concluded.

Dr. Kirwan was principal investigator on this study, which was sponsored by CombinatoRx Inc., Cambridge, Mass. ■

### Patients Who Achieved an ACR 20 Response By Day 42



Note: Based on a randomized study of 59 patients with DAS28 >4.5 and CRP levels of ≥2.2 mg/L.

Source: Dr. Kirwan