Prednisone in RA: Low Dose Found Optimal

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COPENHAGEN — Prednisone in initial dosages lower than 5 mg/day is as effective as higher doses in rheumatoid arthritis patients, a study has shown.

Although the use of glucocorticoids in RA remains controversial, the drugs continue to play a major role in the treatment of the disease, Dr. Theodore Pincus, 62, presented the results of studies conducted in Europe and the United States at the annual European Congress of Rheumatology. “Textbooks suggest that glucocorticoids should be used in rheumatoid arthritis only for patients with life-threatening complications, or as a bridge therapy until [disease-modifying antirheumatic drug] treatment begins to work, yet estimates suggest that they are used by 20%-80% of patients in usual clinical practice,” therefore, he noted, determining the lowest effective dosage is important.

Toward this end, Dr. Pincus, clinical professor of medicine at New York University and the Hospital for Joint Diseases, New York, and his colleagues retrospectively analyzed the efficacy of prednisone in the usual care of 308 RA patients treated over a 25-year period. Using a database of all patient visits to a weekly academic clinic during 1980-2004, the investigators analyzed all initial prednisone prescriptions and classified patients into those treated with an initial prednisone dosage of 5 mg/day or higher and those treated with an initial dose lower than 5 mg/day. The 5-mg threshold was used because the efficacy of prednisone at 5 mg daily in RA has been documented, according to Dr. Pincus.

Of the 308 patients, 195 were treated with an initial prednisone dose of 5 mg or higher and 113 were treated with an initial dose lower than 5 mg. Nearly all of the patients taking prednisone also took DMARDs, primarily methotrexate.

All of the patients in the study completed the MD-HAQ-FN (Multidimensional Health Assessment Questionnaire including physical function measures), and a VAS (Visual Analog Scale) pain measure at each visit. The investigators compared the baseline, 12-month, and 24-month follow-up scores of patients in both dosage groups and used the change in scores from baseline to 12 and 24 months as outcome measures. They also analyzed the data based on 5-year subgroups to account for changes in prescribing practices over time. At baseline, patients in the higher-dose group had higher function and pain scores than did those in the lower-dose group, Dr. Pincus noted in a poster presentation.

The mean improvements in MD-HAQ-FN scores were statistically similar between both groups, said Dr. Pincus. At 12 and 24 months, the mean MD-HAQ-FN improvement from baseline was 40% and 31% in patients in the higher-dose group vs. 34% and 24% in patients in the lower-dose group. The mean improvements in pain scores were also similar between both groups. At 12 and 24 months, the mean improvement in pain from baseline was 37% and 42% in the higher-dose group and 37% and 35% in the lower-dose group, he said.

When analyzed by 5-year periods, the initial prednisone dose fell from a mean of 10.3 mg in 1980-1984 to 6.5 mg (in 1985-89), 5.1 mg (in 1990-1994), 4.1 mg (in 1995-1999), and 3.6 mg (in 2000-2004). From 1980 to 2004, the median dosage fell from 5 mg/day to 3 mg/day. Before 1990, there were some differences in the pain and function scores between the lower- and higher-dose groups, but the differences were not maintained in the analysis of the 25-year period, he said.

“The findings suggest that many [RA] patients can be treated effectively with initial prednisone doses of less than 5 mg/day, achieving pain and function improvements comparable to those seen at higher doses,” said Dr. Pincus. Dr. Pincus reported having no financial conflicts of interest to disclose.