JIA Patients Thrive, if They Can Find a Specialist

BY BETSY BATES

esitation on the part of nonpediatric rheumatologists to put children with juvenile idiopathic arthritis on biologics is harming these young patients who have the most to gain from such agents, according to physicians interviewed for this story.

Childrens Hospital Los Angeles stands as an object lesson in the benefits of biologics. For years, its rehabilitation center was filled with children with JIA who were there to receive splints and casts, undergo physical therapy, and recover from hip and knee replacement. In the summer months, even more children with JIA were admitted for what were known as "tune-ups," consisting of rigorous treatments that had to be delayed until the school year ended in June.

Last year, Dr. Andreas Reiff, CHLA's pediatric rheumatology chief, resigned from his post as division head of the rehabilitation center. "Essentially, we had no more [JIA] patients there," he said in a telephone interview. "Nowadays, we don't wait to treat kids until they're wheelchair bound and suffering severe problems with their joints."

Dozens of studies presented at American College of Rheumatology meetings and summarized in a review article by Dr. Murray Passo (Curr. Probl. Pediatr. Adolesc. Health Care 2006;36:97-103) have documented the short- and long-term safety and efficacy of various biologic agents, including etanercept (Enbrel), approved for children with JIA in 1998, and adalimumab (Humira), which received pediatric approval from the Food and Drug Administration in 2008.

Many other biologic therapies are also under study—and are sometimes used off label—for JIA, including infliximab (Remicade), an anti–tumor necrosis factor–alpha chimeric monoclonal antibody; anakinra (Kineret), a recombinant form of human interleukin-1 receptor antagonist; atlizumab, an anti–IL-6 receptor monoclonal antibody; and abatacept (Orencia), which selectively inhibits T-cell activation with the fusion protein CTLA41g.

Pediatric patients' access to biologic therapies for JIA may depend on how close they live to a primary care physician or specialist who is comfortable prescribing the new class of medications, according to pediatric rheumatologists interviewed for this story.

The well-documented critical shortage of pediatric rheumatologists has real consequences in this disease, they say; practical access to biologics is spotty, which means that many children still live with preventable pain and progressive disability. As is the case with rheumatoid arthritis in adults, early diagnosis is imperative and disease-modifying drugs must be initiated early, before irreparable damage occurs.

"There is really a critical timeline here," said Dr. Reiff.
"It depends on the presentation and how quickly radiographic evidence develops, but we would usually start a child on biologics within 3 months of nonresponse or insufficient response or intolerance to traditional treatments."

Although approximately 239 pediatric rheumatologists are licensed in the United States, only about 125 of them treat patients, according to Dr. Reiff. At the same time, the American College of Rheumatology estimates that 300,000 children in this country have JIA. Simple arithmetic points to a level of need that is perhaps even greater than the 75% increase in the number of pediatric rheumatologists that was called for in a Department of Health and Human Services report to Congress in 2007.

At the time of that report, 13 states had no pediatric rheumatologist; 9 still don't, according to Dr. Passo.

On average, families are required to travel 57 miles to see a pediatric rheumatologist. The physicians interviewed for this story said that many face much longer journeys, up to 5-6 hours each way.

"The majority of children with rheumatic conditions are still treated by pediatricians, internists, or adult rheumatologists," said Dr. Reiff in an interview.

"They are often misdiagnosed, or treated with drugs used in adults such as Plaquenil, hydroxychloroquine, sulfasalazine, penicillamine, and steroids, which have been shown in a meta-analysis to be no better than placebo in children."

For Dr. Lawrence K. Jung, chief of the division of rheumatology at Children's National Medical Center in Washington, the disparity in care became personal with his recent move from Omaha, where he felt he had a handle on the close-knit JIA population, to Washington, a metropolitan area with more than 5 million people that happens to be seriously underserved by prac-

ticing pediatric rheumatologists. "I'm seeing so many patients who have not seen a rheumatologist in 2 years and have gone for long periods of time without good care," he said.

He saw one such child before Christmas whose arthritis had profoundly worsened while he was being managed solely with an over-the-counter nonsteroidal anti-inflammatory drug.

"I put him on one of the biologics and within days, he was better," said Dr. Jung.

Some adult rheumatologists, internists, pediatricians, and even orthopedic surgeons treat JIA with great skill and compassion, all of the experts interviewed for this story agreed. But nonpediatric rheumatologists balk when it comes to prescribing biologic therapies, which require finesse in family communication, administration, and monitoring, they said.

"Many adult rheumatologists I work with may be very aggressive in treating arthritis in adults, but are unsure just how aggressive to be in children," agreed Dr. Passo, professor in the division of pediatric rheumatology at the Medical University of South Carolina in Charleston.

"With children, there are long-term side effects to worry about."

So far, the side-effect profile for children with JIA who take biologics has largely been benign. Nevertheless, the drugs are new and their effect on children's health is not fully known.

The FDA is conducting an ongoing safety review of TNF blockers in children and young adults who are being treated for a wide variety of conditions, including Crohn's disease, as well as JIA. The FDA reported in a June 4, 2008, communication that 30 cancers—half of them lymphomas—had been reported in young people who were prescribed biologic therapies.

"Quite honestly, malignancy has not been a big issue" in the JIA population, said Dr. Passo. "The pediatric population does not have the same propensity for lymphoma as [do] adults with rheumatoid arthritis and lupus, at least not that we have been able to prove.

"Having said that, there are a few case reports of malignancy and serious opportunistic infections. These have not been quite as severe, at least in my experience, in kids as they are in adults."

Sleep Disturbances, Diabetes Common in Psoriatic Arthritis

BY BRUCE JANCIN

SAN FRANCISCO — Patients with psoriatic arthritis had significantly greater prevalences of insomnia, restless leg syndrome, and diabetes than did psoriasis patients or controls in a large single-center comparison.

The psoriatic arthritis patients also had a greater mean body mass index than either comparison group, Dr. Kristina Callis Duffin reported at the annual meeting of the American Academy of Dermatology.

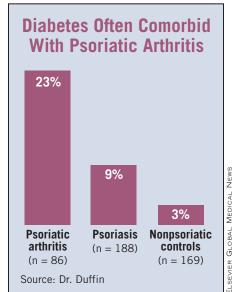
Dr. Duffin of the University of Utah, Salt Lake City, presented the results of a questionnaire survey of 188 patients with psoriasis, 86 others with concomitant psoriatic arthritis and psoriasis, and 169 nonpsoriatic controls who presented to the university's department of dermatology for reasons other than psoriasis.

The psoriatic arthritis patients had a mean age of 57 years, compared with 53 years for the psoriasis patients and 46 years for the dermatologic controls. The psoriatic arthritis patients were heavier, too, with a mean body mass index of $30.6~kg/m^2$, compared with $27.8~kg/m^2$ in the psoriasis patients and $26.0~kg/m^2$ in controls.

The prevalence of diabetes was 23.3% among psoriatic arthritis patients, 9% in psoriasis patients, and 3% in controls. A diagnosis of restless leg syndrome was carried by 15.1% of the psoriatic arthritis cohort, 6.4% of those with psoriasis, and 4.1% of controls.

The psoriatic arthritis group scored significantly worse (9.0) on the Pittsburgh Sleep Quality Index (PSQI) than patients with psoriasis (7.0) or controls (7.1), after adjusting for BMI and age. The PSQI is a validated instrument encompassing seven sleep parameters. The psoriatic arthritis patients scored significantly worse than the other groups on three parameters: sleep quality, latency, and disturbances. Notably, all three groups of dermatology patients had mean PSQIs well in excess of 5, the accepted cutoff for poor sleep, Dr. Duffin noted.

Patients with psoriatic arthritis also had significantly higher scores on the Global Fatigue Scale than the other participants. The psoriasis patients and controls didn't differ significantly in terms of fatigue scores or PSQI ratings, nor did



the three groups differ significantly in rates of sleep apnea or narcolepsy.

The psoriatic arthritis patients and those with psoriasis scored similarly high on itch ratings. The Utah study was conducted free of commercial support. It was undertaken in follow-up to an earlier study Dr. Duffin presented last year at an international investigative dermatology meeting in Kyoto, Japan.

In the earlier study, she surveyed 428 patient members of the National Psoriasis Foundation and found by far the strongest predictor of sleep disturbance in psoriasis patients was concomitant psoriatic arthritis. Lesser predictors were the degree of psoriasis-related itching and pain and the disease's self-reported impact upon emotional well being.

The link between sleep problems and psoriatic arthritis is worthy of further investigation in light of evidence of associations between psoriatic disease and cardiovascular disease and diabetes. The common thread may be underlying systemic inflammation, Dr. Duffin said.