Gout Prevalence Rises to Physicians' Chagrin

Several reports seem to suggest that the epidemic is due in part to longstanding undertreatment.

BY BRUCE JANCIN
Denver Bureau

VIENNA — The rising prevalence of gout being reported in the United States and many other parts of the world constitutes in part an indictment of suboptimal physician management of the disease, Michael Doherty, M.D., said at the annual European congress of rheumatology.

"One of the suggestions from several reports in the literature is that part of the increasing epidemic is due, shamefully, to relative undertreatment of gout," according to Dr. Doherty, professor of rheumatology at the University of Nottingham, England.

The goal of gout treatment is cure. It is a realistic, achievable goal with the drugs that are available today. And if this were occurring consistently, the small and sporadic increases in the incidence of gout documented during the 1990s would have little impact on the prevalence of active gout.

"If you have a chronic disorder—for example, osteoarthritis, or badly treated gout—then the disease tends to be present for a long time, and a small increase in incidence will have a very large effect upon prevalence by the end of the time studied," he observed at the meeting sponsored by the European League Against Rheumatism.

One persuasive piece of epidemiologic evidence that this is in fact what has been happening with gout comes from the U.K. General Practice Research Database, a highly regarded national project in which participating primary care physicians directly enter detailed computerized health data on close to 2 million patients in the United Kingdom.

Dr. Doherty noted that, in a recent report analyzing gout trends in the database for 1990-1999, investigators concluded that the overall annual incidence of gout in the United Kingdom remained relatively stable throughout the decade.

In contrast, the prevalence of gout in 1999—estimated at 1.4%, climbing to a peak of 7.3% among men aged 75-84—was nearly threefold greater than in a similar national study conducted in the mid-1970s (Ann. Rheum. Dis. 2005; 64:267-72).

Particularly disturbing to Dr. Doherty was the investigators' observation that, consistently during the 1990s, only about 30% of U.K. patients diagnosed with gout were on allopurinol or other hypouricemic therapy aimed at preventing recurrent attacks.

This indicates that effective treatment strategies are markedly underused.

Moreover, this epidemiologic observation also is supported by everyday clinical experience, which shows that despite a correct diagnosis of gout, many patients continue to have gouty attacks and a progression of their disease, he said.

Levels of known gout risk factors are climbing, including some that are related to lifestyle. These include hypertension and obesity, among others.

A rising prevalence of gout has been documented in the United States as well.

In a 10-year study of a managed care population with more than 4 million enrollees, investigators concluded that among those patients who were at least 75 years old, the disease prevalence increased from 21/1,000 in 1990 to 41/1,000 during 1999.

Among the 65-74 age group, the prevalence rose less dramatically, from 21-24 cases/1,000 in 1990-1992 to more than 31/1,000 in 1997-1999 (J. Rheumatol. 2004;31:1582-7).

While epidemiologic studies have not consistently shown an increase in gout incidence in the 1990s, that's likely to change in the future.

Levels of many known gout risk factors are increasing, including some that are related to lifestyle. Such risk factors include hypertension, obesity, insulin resistance, and dyslipidemia, each an independent risk factor for gout as well as a component of the metabolic syndrome, which has reached epidemic levels in western societies.

Two-thirds of the body's circulating uric acid pool is cleared by the kidneys. Hence the growing incidence and prevalence of renal impairment constitute another rising risk factor for gout.

Advanced age is a powerful gout risk factor. It has been suggested, but is as yet unproved, that part of the explanation lies in the age-related increase in osteoarthritis, since osteoarthritic joint inflammation encourages the deposit of crystals.

On the other hand, Dr. Doherty said, there is some evidence to suggest a negative correlation between rheumatoid arthritis and gout. ■

Desensitization Offers Hope to Gout Patients Allergic to Allopurinol

BY KERRI WACHTER
Senior Writer

DESTIN, FLA. — Oral desensitization appears to be a safe and effective alternative for patients who are allergic to allopurinol and who cannot take other urate-lowering drugs for gout, Adel G. Fam, M.D., reported at a rheumatology meeting sponsored by Virginia Commonwealth University.

Although 1%-3% of patients experience a pruritic maculopapular rash in response to allopurinol, severe allopurinol hypersensitivity syndrome (AHS) occurs in only about 0.4% of patients, said Dr. Fam, a professor of rheumatology at the University of Toronto.

In a retrospective study of 32 patients, 78% were able to tolerate long-term allopurinol therapy following desensitization.

Dr. Fam suggested that allopurinol desensitization be considered in gout patients with any of the following circumstances:

- Renal impairment, which renders uricosuric drugs ineffective.
- Underexcretion hyperuricemia; and allergy, intolerance, or contraindications to both probenecid and sulfinpyrazone.
- Overproduction/overexcretion hyperuricemia, which—when coupled with uricosurics—can increase the risk of renal stones.
- History of transplantation, renal insufficiency, and severe and debilitating gout.
- The patient requires prevention of malignancy-associated hyperuricemia and tumor lysis syndrome due to cytolytic therapy for hematologic malignancies; the resulting massive uricosuria precludes the use of uricosuric drugs.

The standard allopurinol desensitization protocol starts patients at a 50-mcg dose of allopurinol in suspension. The dose is gradually increased at 3-day intervals up to a target dose of 50-100 mg/day (in tablet form). The dosage can be adjusted if a rash occurs, Dr. Fam said at the meeting, also sponsored by the International Society for Clinical Densitometry.

For high-risk patients, such as the elderly, who have multiple concomitant medical conditions, more severe rash, or eosinophilia, a modified protocol is recommended. This protocol begins with allopurinol, 10 mcg or 25 mcg, in suspension. The dosage is titrated every 5-10 days.

In a retrospective study of 32 patients, 78% were able to tolerate long-term allopurinol therapy following desensitization (Arthritis Rheum. 2001;44:231-8).

The diagnostic criteria for AHS includes a definite history of exposure to allopurinol, lack of exposure to another drug that may have caused similar symptoms, and the fulfillment of either two major criteria or one major and one minor criterion. Major criteria include worsening renal function, acute hepatocellular injury, and rash (toxic epidermal necrosis, erythema multiforme, diffuse maculopapular rash, or exfoliative dermatitis). Minor criteria include fever, eosinophilia, and leukocytosis. ■

Weight Gain, Body Fat Are Linked With Gout Risk in Men

BY PATRICE WENDLING
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Greater adiposity and weight gain are strong risk factors for gout in men, while weight loss is protective, according to the largest study to date of verified gout cases.

Investigators for the Health Professionals Follow-Up Study prospectively analyzed body mass index (BMI) measured at age 21 years, baseline, and updated every 2 years in a population of mostly (91%) white men with no previous history of gout. The participants were aged 40 through 75 years at baseline in 1986.

During the 12-year follow-up, there were 730 confirmed incident cases of gout in 47,150 men (Arch. Intern. Med. 2005;165:742-8).

Weight gain since young adulthood was strongly associated with the risk of gout, even after adjustment for initial weight and other risk factors, according to lead author Hyon K. Choi, M.D., Massachusetts General Hospital, Boston.

The relative risk of gout for men who had gained 30 pounds or more since age 21 was 2.47 compared with men who maintained their weight.

The relative risk of gout was 1.57 for those men who gained 20-29 pounds.

Weight gain since baseline and increasing waist-to-hip ratio also were significantly associated with increased risk of gout.

After adjustment for age, the relative risk of developing gout among men in the highest waist-to-hip ratio quintile (0.98-1.39) compared with those in the lowest quintile (0.70-0.88) was 2.39.

In contrast, men who had lost 10 pounds or more since the study's baseline had a 39% lower risk of gout compared with men who had maintained weight.

"To our knowledge, our study is the first to document this important potential benefit of weight loss," Dr. Choi wrote.

The investigators also found that the presence of hypertension was strongly associated with the incidence of gout, independent of diuretic use and chronic renal failure.

The relative risks of gout were 2.31 for the presence of hypertension and 1.77 for diuretic use.

"Since more than half of the gout cases in our cohort occurred among those with hypertension, the potential impact of the prevention of hypertension on the incidence of gout is substantial," he wrote. ■