Lifestyle Factors Fuel Burgeoning Gout Population

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DESTIN, FLA. — The incidence of gout is on the rise, and lifestyle factors are largely to blame, Dr. N. Lawrence Edwards said at the annual Rheumatology on the Beach.

For example, one study showed that between 1977-1978 and 1995-1996, the annual rate of primary gout more than doubled, from about 16 cases/100,000 population to nearly 42 cases/100,000 population. Factors that appear to play a role in this incidence spike are greater longevity, widespread diuretic and aspirin use, hypertension incidence, obesity, metabolic syndrome, and dietary trends, said Dr. Edwards, professor and vice chairman of the department of medicine at the University of Florida, Gainesville.

Certain dietary factors affect the risk for gout (high consumption of meat, seafood, and beer increase risk, and high intake of dairy is protective, for example); other risk factors are modifiable (such as obesity and hypertension). However, despite the association between lifestyle factors and risk, their modification will not eliminate existing gout. Weight reduction, decreased alcohol consumption, and reduced intake of purine-rich foods will reduce urate levels only by about 1 mg/dL. Medical treatment should be considered early in patients presenting with acute attacks, he said.

Urate-lowering therapy, which 15 years ago was reserved for use only in patients with chronic gout, now is considered warranted following the first one or two acute attacks, he noted.

Treatment goals for gout include termination of the attack as rapidly as possible, prevention of future attacks by reducing the chance of crystal-induced inflammation, and long-term correction of metabolic problems with a goal of lowering serum urate to below 6 mg/dL to allow depletion of the total body uric acid pool.

Uricosuric agents, such a probenecid, and the xanthine oxidase inhibitor allopurinol are used for this purpose.

These agents are used for reducing urate levels but uricosuric agents increase the risk of uric acid crystallization in the urine and associated stone formation. A number of other agents, such as ampicillin, penicillin, cephradine, heparin, and rifampicin, can potentially affect the action of uricosuric agents, Dr. Edwards said.

Allopurinol, which is a purine analog that is both a substrate and inhibitor of xanthine oxidase, is effective both for people who over produce and for those who underexcrete xanthine oxidase. The drug also has the convenience of single daily dosing, and it can be efficacious in patients with renal insufficiency.

However, allopurinol isn't always effective for achieving target serum urate levels. In one study of patients treated daily with a 300-mg dose, only about half achieved a serum urate level of 6 mg/dL, and in a large observational study of nearly 6,000 patients, median serum urate levels decreased from 8.7 mg/dL to 7.1 mg/dL. Although dosing up to 800 mg/day is acceptable, concerns about intolerance based on reports of severe hypersensitivity syndrome, rash, gastrointestinal problems, increases in liver enzymes, and rare bone marrow suppression tend to scare physicians away from prescribing higher doses, he noted. As with uricosuric agents, drug-drug interactions also are a problem with allopurinol.

Keys to effective treatment with this drug include dosing allopurinol to achieve a serum urate level between 5.0 and 6.0 mg/dL, which allows reduction of total body urate pool and mobilization of deposited crystals, Dr. Edwards said, stressing the need to start at a low dose of 50-100 mg/day, with close monitoring of escalation.

If the target serum urate level is reached, therapy should be ongoing; intermittent therapy or withdrawal will lead to recurrence of acute attacks within 6 months, and development of tophi within a few years.

Allopurinol shouldn't be started during an acute gouty attack and shouldn't be stopped in those already on treatment, he added. Also keep in mind that these medications will not control the pain of gout, and pain medications will do nothing to reduce serum urate, he advised.

New urate-lowering agents that improve compliance and are useful in those with allopurinol intolerance and renal failure, and who require treatment with other drugs that interact with allopurinol and uricosuric agents are needed, he concluded. ■