Recent studies suggest the overall disease burden of gout is substantial, particularly in an aging population, increasing rates of obesity and hypertension, the rising use of thiazide diuretics, and lifestyle changes. These factors have all been shown to complicate gout management—particularly the diagnosis and treatment of acute gout-like arthritis in the emergency setting. “Many patients who present with acute gout attacks have multiple comorbidities, such as metabolic syndrome, hypertension, type 2 diabetes mellitus, or chronic kidney disease—all of which can compromise safe and effective acute management,” said Dr. Kenneth Saag, director of the Center for Education and Research on Therapeutics of Musculoskeletal Disorders at the University of Alabama at Birmingham.

“A acute gout is frequently misdiagnosed in both emergency departments and primary care settings,” said Saag, who offers his insight in this month’s column.

Rheumatology News: Are patients who present with acute gout being properly diagnosed?

Dr. Saag: Often they are not. Several years ago, we developed 10 indicators for quality of gout care covering three domains of gout therapy—the use of uric acid–lowering agents, behavior modifications, and the use of anti-inflammatory agents—based on a systematic literature review and expert consensus (Arthritis Rheum. 2004;50:937-43). To circumvent the various factors influencing patient-level outcomes in gout, such as comorbidities, concurrent therapies, and patient compliance, the process indicators identified health care provider behaviors that should affect outcome. The American College of Rheumatology adopted the minimal acceptable standards of care in gout management as part of a starter set of quality indicators. Despite the availability of these indicators, as well as guidelines for the diagnosis and management of gout from the European League Against Rheumatism, there has been relatively low adherence at the national and international level. Patients who present with acute or chronic gout are not receiving the minimal acceptable standard of care.

RN: Why is the minimum standard of care not being delivered?

Dr. Saag: Given time constraints, doctors finding it hard to manage all the conditions with which a patient with multiple comorbidities may present. If the painful, swollen joint is the chief presenting complaint, it might not make it to the top of the list for a 15-minute visit and get overlooked. There are also knowledge barriers. A definitive diagnosis cannot be made by inspecting an inflamed joint and identifying the characteristic monosodium urate crystals. But this is not always done, particularly in an acute care setting, possibly because of a lack of trained personnel. Physicians too often rely on clinical characteristics. Although there are guidelines for clinical diagnosis without joint aspiration, patients might not meet these criteria when they first present. As a result, patients with gout arthritis are frequently misdiagnosed with rheumatoid or another type of arthritis. Finally, the comorbidities with which patients with gout present may lead to undertreatment of the acute gout.

RN: Given the multiple perceived barriers, how can quality of care be improved?

Dr. Saag: Physicians must change their attitudes about the disease. The condition can be diagnosed with certainty using joint aspiration and crystal analysis. There is also a range of therapeutic options for treating the acute symptoms and, potentially, eradicating the chronic condition by minimizing the excess urate from the body. Rheumatologists must educate primary and emergency care providers about the standards of care for acute disease management and should encourage specialty referral for patients with difficult chronic conditions. They must also stay abreast of research into the epidemiology of the disease, particularly with respect to the identification of modifiable risk factors, as well as new evidence-based treatment options.

RN: In terms of acute gout patients, what is the optimal management approached?

Dr. Saag: Early treatment of acute gout is associated with a decreased attack duration and reduced pain and disability, and should be the goal of management. Once a diagnosis is established and septic arthritis ruled out, therapy depends on the balance of risks and benefits for the individual patient. First-line treatment involves high-dose nonsteroidal anti-inflammatory agents, like indomethacin, or systemic or local glucocorticoids. There are adverse effects associated with both treatments, particularly in patients with chronic kidney disease, peptic ulcer disease, or congestive heart failure, so that must be taken into account. A recent randomized controlled study of acute gout therapies in the emergency setting showed short courses of moderate-dose oral prednisolone supplemented with paracetamol was as effective as indomethacin in combination with paracetamol, with fewer adverse events (Ann. Emerg. Med. 2007;49:670-7). In patients at risk for gastrointestinal or other problems with NSAIDs, this may be an appropriate treatment strategy as long as they are at low risk for infection.

Dr. SAAG is a rheumatologist, a professor of medicine and epidemiology, and the director of the Center for Education and Research on Therapeutics of Musculoskeletal Disorders at the University of Alabama at Birmingham.

By Diana Mahoney, New England Bureau

Both True and Sham Acupuncture Effective for Low-Back Pain

BY MARY ANN MOON Contributing Writer

True acupuncture and sham acupuncture both were much more effective against chronic low-back pain than was conventional treatment in a large clinical trial comparing the three approaches.

Almost half the subjects who received real or sham acupuncture for 6 months showed clinically relevant improvement in pain intensity or back-specific disability, versus one-fourth of the subjects who received a variety of conventional therapies, investigators in the German Acupuncture (GERAC) Trials reported. (See box.)

“To our knowledge, [this] study is the largest and most rigorous trial to investigate the efficacy of verum acupuncture for chronic low-back pain compared with sham acupuncture and guideline-based conventional therapy. The study yielded several surprising results,” said Dr. Michael Haake of Flegenburger Bad Abbach, Germany, and his associates.

The study subjects were 1,162 adults with chronic low-back pain who were randomized to conventional treatment or real or sham acupuncture administered by physicians at 340 outpatient practices. The study physicians belonged to various medical specialties, had at least 140 hours of acupuncture training, and had practiced acupuncture for a median of 8 years.

Both types of acupuncture involved at least ten 30-minute sessions, usually twice per week, plus additional sessions if the subjects experienced a 10%-10% reduction in pain intensity. The two treatments were identical, except that the sham procedure avoided all known acupuncture points or meridians and involved only superficial insertion of the needles, without any manual stimulation. Subjects were unable to distinguish any difference.

Conventional therapies included at least 10 30-minute sessions with a physician or physiotherapist. Treating physicians were free to administer any combination of techniques, including physiotherapy, massage, physical therapy, electrotherapy, exercise, analgesics, anti-inflammatory agents, yoga, hydrojet treatment, exercise, and patient education about managing back pain.

True acupuncture and sham acupuncture were found to be equally effective, as well as more effective than conventional therapies, in relieving pain, improving function, and improving quality of life. All the improvements were significant and persisted long after treatment was completed.

“While all randomized trials and meta-analyses to date have failed to show a clear advantage of acupuncture over conventional therapy for chronic low-back pain, our findings demonstrate significant superiority,” the investigators said (Arch. Intern. Med. 2007;167:1892-9). Largely on the basis of these results, the German Federal Joint Committee of Physicians and Health Insurance Plans—an agency like the U.S. National Institutes of Health—made acupuncture for low-back pain an insured benefit in that country.

The investigators’ finding “forces us to question the underlying action mechanism of acupuncture and to ask whether the emphasis placed on learning the traditional Chinese acupuncture points may be superfluous,” Dr. Haake added.

“The superiority of both forms of acupuncture suggests a common underlying mechanism that may act on pain generation, transmission of pain signals, or processing of pain signals by the central nervous system and that is stronger than the action mechanism of conventional therapy,” they said.