A Fifth of American Adults Are at Risk for Gout

The surging rate of obesity and metabolic syndrome may contribute to gout's prevalence.

BY HEIDI SPLETE

FROM THE ANNUAL MEETING OF THE AMERICAN COLLEGE OF RHEUMATOLOGY

ATLANTA – An estimated 32 million adults in the United States have hyperuricemia, which often precedes gout, based on data from the National Health and Nutrition Examination Survey.

The results were presented during a press conference at the annual meeting.

Previous studies have suggested that the prevalence of gout and hyperuricemia are on the rise in the United States, possibly because of factors including obesity, the metabolic syndrome, and hypertension, said Yanyan Zhu, Ph.D., of Boston University.

Dr. Zhu and colleagues reviewed National Health and Nutrition Examination Survey (NHANES) data from 1999 through 2008 on 24,693 individuals aged 20 years and older.

The group included 11,816 men and 12,877 women. The data were compared with U.S. population estimates from the U.S. Census Bureau.

Hyperuricemia was defined using the standard NHANES definition of serum urate levels greater than 7.0 mg/dL for men, and greater than 5.7 mg/dL for women.

The results suggest a substantial potential burden from gout, especially in older adults, said Dr. Zhu. The prevalence of hyperuricemia was 31% in adults aged 65 years and older, vs. 18% in those aged 20-64 years.

Overall, the prevalence of hyperuricemia increased with age, ranging from 16% in individuals aged 20-29 years to 37% among those aged 80 years and older.

The estimates for hyperuricemia were similar for men and women (16.1 million vs. 15.8 million, respectively).

Gout rates in U.S. adults are rising, based on data from a related study also presented at the meeting. Dr. Zhu and her colleagues used NHANES data to estimate 8.3 million cases of gout in U.S. adults aged 20 years and older during 2007-2008.

In this study, the researchers compared NHANES data from 1988 through 1994 with NHANES data from 2007 through 2008. They found a 1.2% increase in gout among U.S. adults, from 2.7% during 1988-1994 to 3.9% during 2007-2008.

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To watch an interview with Dr. Yanyan Zhu about the NHANES data, please visit www.rheumatologynews.com.

The increase was largely due to the significant rise in gout among men and older adults, the researchers noted. The prevalence of gout in men increased from 3.8% to 5.9% between the two time periods, and the prevalence in adults aged 80 years and older increased from 5.9% to 12.6%.

The NHANES data in the second study included 18,825 individuals from 1988 through 1994 and 5,707 from 2007 through 2008.

These numbers also were compared with U.S. Census Bureau data.

Most physicians in the United States don't regularly check patients' uric acid levels, and fewer than 5% of adults with gout receive treatment, noted Dr. John Sundy of Duke University Medical Center, Durham, N.C. Dr. Sundy served as moderator when the study findings were presented at the press conference. More education is needed for doctors and patients so the available therapies can be used more effectively, he said.

Dr. Zhu said she had no financial conflicts to disclose. Her study coauthors are employed by or have received consulting fees from Takeda Pharmaceuticals International. Dr. Sundy has served as a consultant for multiple companies including Array Biopharma, Savient Pharmaceuticals, and Takeda Pharmaceuticals. ■

No Data Found on Tai Chi

OA *from page 1*

As such, the panel proposes to recommend these treatments, said Dr. Oatis, a physical therapist and professor of physical therapy at Arcadia University in Glenside, Pa., and a member of the technical expert panel.

This was the only time the panel deemed supporting evidence to be "strong." They did so based on the GRADE methodology used in developing the revised recommendations. GRADE (grades of recommendations, assessment, development, and evaluation) allows for rating of the available evidence as "strong," "weak," or "none." The GRADE working group developed the system for evaluating data supporting recommendation in health care in 2000.

Strong evidence is of high quality with a large gradient between benefits and risks, and little uncertainty or variability in values and preferences; weak evidence has moderate quality with a small gradient between benefits and risks, and moderate uncertainty or variability in values and preferences; and "none" means the evidence was of low or very low quality with no difference between benefits and risks.

The panel "recommends" modalities with strong evidence, "suggests" those with weak evidence, and provides "no guidance" for those in the "none" category.

Weak evidence of benefit in hip OA was found for manual therapy in combination with supervised exercise programs, therefore the panel suggests – but does not recommend – that this modality be considered for patients with hip OA, Dr. Oatis said.

No strong evidence was found in support of any nonpharmacologic therapy for hand OA. Weak data were found to support thermal modalities, assistive devices, and thumb splinting.

No evidence was found either in support of or against balance exercises or tai chi, so the panel provided no guidance for these approaches, Dr. Oatis said.

The panel also considered the evidence for hand OA, and for various specific nonpharmacologic approaches to treating OA.

For hand OA, weak evidence was found for:

► Evaluating patients regarding activities of daily living.

► Providing instruction on joint protection techniques.

► Providing assistive devices as needed.

► Instructing patients regarding the use of thermal modalities.

► Using splints for the trapeziometacarpal joint (CMC joint at the base of the thumb).

Thus, the panel "suggests" use of these modalities, said Catherine Backman, Ph.D., an occupational therapist and faculty member at the University of British Columbia, Vancouver, and a panel member.

When it comes to suggestions based on weak evidence, patient preference comes into play, because this generally means there is no evidence against – and there is some evidence in favor of – use of these modalities, she said.

"Clinicians may want to discuss [these modalities] with patients, and discuss the evidence with patients in relation to their values and preferences," she said. No other recommendations or suggestions were made for hand OA.

As for specific treatment modalities, weak evidence was found for:

►Medial wedge shoe insoles for lateral compartment knee OA.

► Subtalar strapping and lateral wedge insoles for medial compartment knee OA.

► Medial patellar femoral taping.

► Transcutaneous electrical nerve stimulation (TENS) for knee OA with chronic moderate-to-severe pain.

► Traditional Chinese acupuncture for knee OA with moderate to severe pain.

► Thermal modalities.

► Walking aids.

No evidence was found for or against valgus bracing for knee OA, or lateral patellar-femoral taping, therefore the panel chose not to provide guidance on these, said G. Kelley Fitzgerald, Ph.D., a physical therapist at the University of Pittsburgh, and a panel member.

The panel, which reviewed existing English-language studies and existing guidelines from the ACR and other organizations, based its evidence strength determinations on the quality of the evidence and the extent to which the evidence demonstrated pain relief and improved physical functionality.

The panel did not determine that any of the reviewed modalities should not be used.

"The lack of 'do not do' recommendations or suggestions means that there was no definitive evidence of harm or lack of efficacy for the interventions examined, Dr. Oatis explained.

These proposed revisions to the current ACR recommendations, which were last revised in 2000, with an update in 2005 following the withdrawal of rofecoxib from the market, are currently under review by the journal Arthritis Care and Research, and have been submitted to the ACR Committee on Quality of Care for review before they are sent the ACR board of directors for final approval, said Dr. Marc C. Hochberg, professor and head of the division of rheumatology and clinical immunology at the University of Maryland, Baltimore.

The ACR awarded the contract for the project to the University of Maryland with Dr. Hochberg as the principal investigator. He is also a member of the project steering committee.

"Hopefully, these will come to the point where the ACR board of directors will be satisfied, and we'll have a publication in 2011," he said.

Dr. Hochberg disclosed that he has received research support from the National Institutes of Health, and has served as a consultant or on an advisory board or data safety monitoring board for numerous pharmaceutical companies. The other presenters had no disclosures. ■