Criteria Narrowed for Spotting Spondyloarthritis

HLA-B27 patients who met 3 criteria had SpA with a sensitivity of 79% and a specificity of 60%.

BY MITCHEL L. ZOLER

PHILADELPHIA — A set of either five or six criteria helped physicians identify patients with back pain who had a high likelihood of having spondyloarthritis in a German study involving 322 patients.

The number of helpful criteria varied depending on whether patients underwent testing for HLA-B27, Annalina Braun said at the annual meeting of the American College of Rheumatology.

When the assessment included testing for HLA-B27 positivity, a total of six assessment criteria proved helpful: back pain that improves with movement but doesn't improve with rest, pain that improves within 48 hours on treatment with a non–steroidal anti-inflammatory drug (NSAID), age of pain onset of 35 or less, alternating buttock pain, a history of enthesitis, and a positive HLA-B27 test.

Patients who met at least three of these six criteria had spondyloarthritis (SpA) with a sensitivity of 79% and a specificity of 60%, and 76% of all SpA cases in the validation cohort of the study had correct classification, said Ms. Braun, who is a researcher at the Rheumazentrum Ruhrgebiet in Herne, Germany.

The study run by Ms. Braun and her associates included 950 patients with back pain seen by 143 orthopedic surgeons during April 2007–June 2009. In Germany, primary care for patients with back pain is usually supplied by orthopedic surgeons, she explained.

When HLA-B27 status wasn't included as part of the primary care assessment, a set of five criteria had the best performance for case identification. Four of those were identical to those in the prior set: back pain that improves with movement but not rest, pain that improves within 48 hours on NSAID treatment, age of onset of 35 or less, and alternating buttock pain.

When the assessment included testing for HLA-B27 positivity, a total of six criteria proved helpful.

DR. BRAUN

Awakening during the second half of the night because of back pain rounded out this list.

In Ms. Braun's study, the presence of at least four of these five criteria identified SpA patients with a sensitivity of 48% and a specificity of 86%, and accounted for 71% of SpA cases in the validation cohort studied.

The surgeons assessed each patient for a series of potential recognition criteria. A group of 36 rheumatologists then performed a follow-up assessment on 322 of these patients a median of 20 days following their initial examination. The average age of the 322 patients was 36, with a range of 17-55. The median duration of back pain was 2.5 years.

The rheumatologists diagnosed axial SpA in 113 of the 322 patients (35%). Ms. Braun and her associates then analyzed which diagnostic criteria initially assessed by the orthopedic surgeons correlated best with the SpA diagnoses rendered by the rheumatologists. These case-ascertainment criteria now need validation in additional patient populations, Ms. Braun said.

The study was supported by an unrestricted grant from Abbott Germany; Ms. Braun said that she and all but one of her associates had no additional disclosures. One of her co-authors is an employee of Abbott Germany. ■

Study Hints at Efficacy of Percutaneous Disc Decompression

BY RICHARD HYER

CHICAGO — Percutaneous disc decompression may resolve back pain and weakness caused by a herniated spinal disc, according to a study that compared the minimally invasive procedure with conservative therapy.

However, audience members who heard the study presented at the annual scientific meeting of the Radiological Society of North America said that several important weaknesses of the trial make it difficult to draw any conclusions about the long-term results of the intervention.

The average pain score after 24 months was about 4 for conservative therapy and 1.61 for disc decompression.

DR. KELEKIS

In patients who had herniation of an intervertebral disc, Dr. Dimitrios Filippiadis and his associates at Attikon University Hospital in Athens followed two groups of patients from January 2005 to January 2008 after they had received either conservative therapy (conservative treatment with analgesics, anti-inflammatory drugs, muscle relaxants, and physiotherapy for 6 weeks) or fluoroscopically guided percutaneous disc decompression.

Each group comprised 17 men and 14 women with a mean age of 36 years and a history of unsuccessful or incomplete medical treatment with conservative therapy. Each patient underwent magnetic resonance imaging to verify the disc herniation.

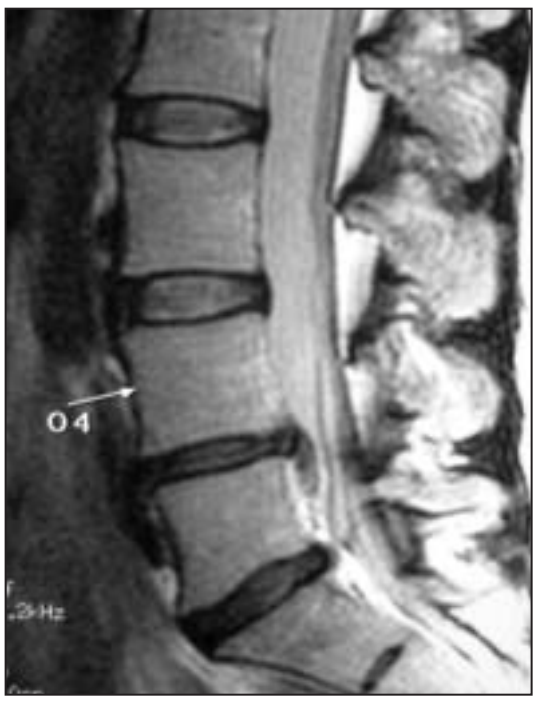
During the procedure, "a needle is inserted into the disc and 2-5 g of tissue are removed, diminishing pressure," study coauthor Dr. Alexios Kelekis said at a press conference during the meeting.

The intervention is not without risk, he pointed out. Potential complications include discitis, epidural abscess, reflex sympathetic dystrophy, nerve root injury, and injury to retroperitoneal structures.

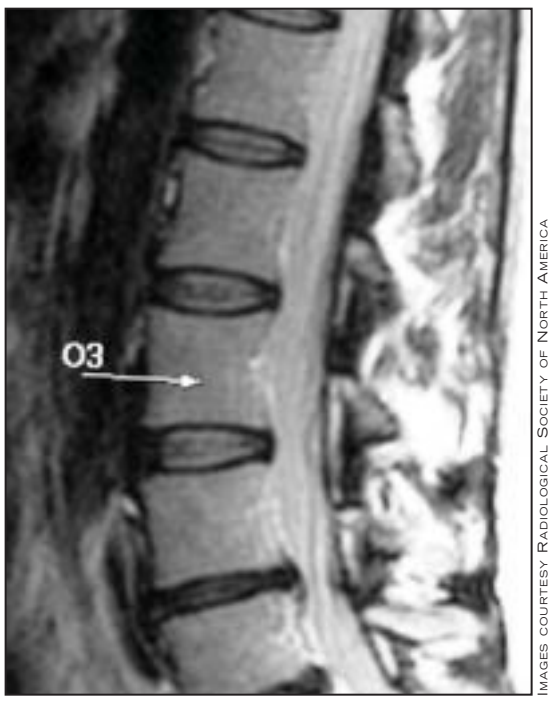
Patients measured their pain with a 0-10 visual analog scale. Members of the conservative therapy group started at a mean of 6.87, and their pain declined to 0.9 within one month. The average pain score returned to about 4 by 12 and 24 months.

The percutaneous intervention group started with pain at a mean of 7.40, which declined to 2.96 at the end of one month. By 12 months, this group's pain was at 1.67, and at 24 months, 1.61.

"Initial effect was noted at 3 weeks, and sustained effect at 12 and 24 months. Only five patients—16%—had less than 4 points of pain relief," said Dr. Kelekis, who is also with Attikon University Hospital.



This MRI shows a patient's spine prior to undergoing treatment for a herniated disc.



In this image, the spine is seen 1 year after the percutaneous disc decompression.

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When audience members asked for more detail about the method of disc decompression, Dr. Filippiadis said that "patients in this study were treated with different instruments available. We believe that all these procedures have similar results. It doesn't matter if you use ablation, laser, ozone, or alcohol gel. All of these procedures accelerate what nature would do in about 4-5 years."

Dr. Nathalie Bureau, one of the session moderators, expressed concerns about the study.

"It's difficult to take out any conclusion [about the study]. There was a lot of bias in patient selection and methods, and the study didn't treat a very homogenous group of patients. The results were very good, but with those selection criteria, it's hard to derive any conclusions," said Dr. Bureau of the University of Montreal. "The method wasn't very sound; there was no randomized controlled trial."

Dr. Bureau also questioned the aggressive intervention. "Are we really proving that we're doing better than conservative treatment? Degenerative disc disease may be accelerated by [surgical intervention].

"It's an interesting study, but there are a lot of questions about the method, so I'm not sure the conclusions are very sound."

Dr. Kelekis is a teaching consultant for ArthroCare Corp. and for DePuy Spine Inc., a Johnson & Johnson company. The other investigators had no relevant conflicts of interest to disclose.

The study was sponsored by the University of Athens. ■