

Nighttime Device Eases Rotator Cuff Tendinopathy

BY ROBERT FINN
San Francisco Bureau

DENVER — A simple device seems to ease nighttime shoulder pain, according to study findings presented at the annual meeting of the American College of Sports Medicine.

Dr. Michael Carroll, a Traverse City, Mich.-based family physician in private practice, presented independent research on the device, called the NyteTyme Shoulder Immobilizer. The data showed improvement in all of the patients who used the device for 28 days, whereas more than half of the patients who did not use it reported worsening or no improvement in their shoulder pain.

The device consists of a thigh sleeve and a wrist sleeve connected by an elastic strap. Its design is aimed at keeping the arm adducted, limiting abduction to 5 degrees and providing a variable amount of traction.

The controlled study involved 24 patients diagnosed by their primary care physicians with rotator cuff tendinopathy. A randomly selected group of 11 patients wore the device nightly for 28 days, and the remaining 13 patients did not. All

patients continued their regular treatments during the study. Most were taking nonsteroidal anti-inflammatories, and several were also doing physical therapy.

Patients were excluded from the study if they had a recent history of shoulder or neck trauma, a history of deep vein thrombosis, or a history of cancer except for nonmelanoma skin cancer. None of the patients received steroid injections during the course of the study.

Investigators administered the standardized Simple Shoulder Test (SST), a 12-item test that assesses shoulder symptoms, at day 0, day 7, and day 28.

Of the patients using the device, 100% reported improvements on the SST, compared with only 47% of the patients in the control group, a statistically significant difference.

Dr. Carroll owns a patent on the device, as well as the company that manufactures it, but the study was conducted by an independent clinical research organization after approval by an institutional review board based at Munson Medical Center, Traverse City, and the patients were referred by primary care physicians with no financial interest in the device.

Shoulder pain is extremely common, ranking third behind back and neck pain as a cause of dysfunction in the working population, Dr. Carroll noted. One study showed that 30% of the population experiences shoulder pain during any given 12-month period. Another study showed that partial rotator-cuff tears can be found in autopsy in 32%-37% of individuals above the age of 40.

Rotator cuff tendinopathy is typically treated with nonsteroidal anti-inflammatory drugs and physical therapy, but even compliant patients can experience a worsening of their pain and eventually require surgery.

Two nighttime factors contribute to supraspinatus tendon impingement and can therefore lead to further injury of the rotator cuff.

The first factor is that when patients lie down, they lose the traction of the weight of the arm that gravity normally provides when upright. The second factor is that abduction of the arms away from the body can cause the humeral head to move closer to the coracoacromial ligament, further impinging the supraspinatus tendon. Keeping the arm adducted, prevents

additional injury and promotes healing.

Dr. Carroll said the device is available through a single supplier, Teter Orthotics and Prosthetics Inc. (www.teterop.com). It costs about \$50. ■



The sleeves keep the arm adducted and limit abduction to 5 degrees.

Converts Likely

Hip OA from page 1

Misconceptions regarding intraarticular steroid injections for OA abound among both physicians and patients.

Many physicians, overconfident in their manual skills, dismiss the need for imaging guidance of the needle—a big mistake, Dr. Maksymowych noted.

And many patients worry that repeated steroid injections into the hip may be harmful.

However, Dr. Maksymowych stressed that there is no evidence that the injections induce structural joint damage or are otherwise harmful to patients.

“On the other hand, there’s no evidence at this point in time that repeated corticosteroid injections prevent progression of joint damage,” the rheumatologist added at the congress sponsored by the European League Against Rheumatism.

Both EULAR and the American Col-

lege of Rheumatology currently endorse the use of corticosteroid injections as a key recommendation in the management of OA.

But the guidelines also characterize the supporting evidence as weak, which was certainly the case up until this new randomized trial, he said. Some physi-



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DR. MAKSYMOWYCH

cians have declined to offer steroid injections, despite the recommendations, because the practice wasn’t backed by a solid evidence base. The procedure is likely to win converts because of these convincingly positive new data, Dr. Maksymowych predicted. ■

Shoulder Pain Unappreciated In Ankylosing Spondylitis

BY NANCY WALSH
New York Bureau

GLASGOW, SCOTLAND — Shoulder involvement is often overlooked in ankylosing spondylitis, despite patients’ reports that upper body pain interferes with their daily activities, Dr. Charlotte E. Page reported in a poster session at the annual meeting of the British Society for Rheumatology.

Among a group of 31 ankylosing spondylitis (AS) patients attending a 2-week physiotherapy program who responded to questionnaires about their symptoms, 12 reported current shoulder pain, while 10 patients reported experiencing shoulder pain in the past, reported Dr. Page of the rheumatology department of University Hospital of Wales, Cardiff. The patients, aged 17-62 years, had a mean AS duration of 19 years.

Among patients with current shoulder pain, four reported bilateral symptoms, and nine indicated that their daily activities were affected. Among those with previous pain, three study patients reported that their shoulder involvement continued to interfere with their daily activities, noted Dr. Page.

The reported prevalence of shoulder pain among the general population is approximately 12%, and estimates among those with AS range from 7% to 33%, she noted. “Our prevalence of 39% is slightly higher, probably reflecting the type of patients who attend intensive physiotherapy programs.”

Only 10 of the 22 patients who had ei-

ther current or past shoulder pain had undergone one or more radiologic investigations. Eight had been evaluated with plain radiographs, three with ultrasound, and three with MRI arthrograms.

Among the eight patients who had received one or more corticosteroid injections to the shoulder region, five reported still having shoulder pain and six reported still experiencing symptoms that interfered with daily activities. Among the seven who had received physiotherapy directed at their shoulder symptoms, five continued to experience pain.

Specific physiotherapy and corticosteroid injections had therefore been given to only 32% and 36% of patients, respectively, and had not alleviated the symptoms in the majority, Dr. Page noted during her presentation.

Moreover, a total of 26 patients in the study reported peripheral joint involvement other than the shoulder.

Despite this, only six patients received disease-modifying antirheumatic drugs or anti-tumor necrosis factor- α therapy, which suggests an underappreciation of the extent of ankylosing spondylitis patients’ peripheral joint pain, according to Dr. Page.

Much of the shoulder involvement was rotator cuff tendonitis, which can be imaged and treated, Dr. Page said in an interview. Patients should be asked specifically about this, she said.

“We all know about their hip pain but we seem to forget about the top half” of the body, she said. ■

Intraarticular Steroids Bring Big Improvement

	Steroid group	Placebo group
Patients with more than 50% improvement in WOMAC pain scores		
at 1 month	71%	14%
at 2 months	61%	14%
Mean WOMAC stiffness scores (mm)		
at baseline	137	124
at 2 months	76	135
Mean WOMAC physical function scores (mm)		
at baseline	901	914
at 2 months	502	897

Note: Based on a study of 52 patients.
Source: Dr. Maksymowych