

CONTACT:

Emily Oehler 703-460-5572
Diane Shnitzler 703-460-5582
February 28, Deanna Bartsch, 212- 453-2264
March 1 – March 6, 206-219-4655

Embargoed for Release, Monday, March 5, 2007, 6:00 a.m. PT

**Study Shows Nonsurgical Treatment Reduces Neck Pain
Without Significant Risk of Paralysis**
*Largest Series to Date of Interventional Radiology Cervical Steroid Injection
Treatment*

Seattle, Washington (March 5, 2007) – In the largest series of patients to date, recent research shows that the translaminar approach to cervical spinal steroid injections can reduce neck pain in eighty-three percent of those treated. In addition to being an effective treatment, the translaminar approach was found to be safer than an alternative method or surgery, as no major complications were observed. In the alternative approach, steroids are injected in close proximity to nerve bundles and small blood vessels in the spine, which can result in nerve damage or paralysis. The translaminar technique in the study avoids this risk by injecting the steroids into the epidural space in the neck, allowing the drug to spread up and down the spine to reduce the inflammation and subsequently reduce pain. This safer translaminar approach is an outpatient treatment, requiring only a small amount of local anesthesia. Although the injection does not treat the underlying cause of the pain, such as arthritis or herniated disc, it does treat the immediate pain flare-up, allowing patients to get back to their normal routines. The research was presented today at the Society of Interventional Radiology's 32nd Annual Scientific Meeting in Seattle.

“Although the other approach offers pain relief, there is increased risk of major complications such as paralysis. This study shows the translaminar approach is just as effective, but without the risk,” explained lead researcher William M. Strub, M.D., of the University of Cincinnati, who completed the study with interventional radiologists based at The Christ Hospital. “This procedure can help provide pain relief in patients with neck pain from bulging discs, arthritis, and even in patients who continue to have pain after cervical spine surgery. It's well tolerated, outpatient, nonsurgical, safe and effective, and as such, we expect this approach to become the gold standard for reducing patients' neck pain.”

The neck pain treated by these steroid injections was due to aging of the spine. This includes degenerative changes such as osteoarthritis of the spine, bone spurs, disc degeneration and narrowing of the spinal canal. Additional alternative treatments for neck pain are physical therapy, traction, narcotic and non-narcotic pain medication and, in some cases, surgery.

During the procedure, an interventional radiologist utilizes real-time, continuous X-ray imaging to guide a small needle into the base of the neck between the C7 and T1 vertebrae, the largest epidural space in the neck, and injects a small amount of

medication. The medication then spreads up and down the spine to reduce the inflammation in the spine, reducing pain. The patient is kept awake to enable communication with the physician, but the skin is numbed. After a brief observation period, the patient is released the same day. Patients receive between one and three injection treatments with approximately three to four weeks between the procedures. Typically, patients who will be the most responsive to the translaminar injection will notice the greatest amount of pain reduction after the first treatment. The translaminar steroid injection is ideal for patients who are not receiving adequate relief from over-the-counter pain medications, but who are not ready for spine surgery.

About the Study

The study's patient population consisted of 161 patients, 69 males and 92 females, with an average age of 53. Patients experienced pain, on average, for four months before undergoing their first injection. 119 patients had multiple injections—87 had two and 32 had three. The average length between procedures was four weeks. There were no major complications. Of those treated, only five percent had minor complications, primarily side effects from steroids such as weight gain and hot flashes. The treatment resulted in pain relief in eighty-three percent of patients. Additionally, the research showed that patients with radiating pain to the hands and fingers, as opposed to more localized pain, had higher odds of improved pain relief. Abstract 206 can be found at www.SIRmeeting.org.

“This research was performed by five interventional radiologists at three institutions on 161 patients, all with outstanding results and no major complications, showing that these results are reproducible,” added Strub. “It is important for patients to find a physician who is well-trained in these procedures and image-guided treatments, as well as one who has an intricate understanding of spinal anatomy before having steroid injections performed.”

About the Neck

The cervical portion of the spine (neck) is made up of seven bones (C1-C7 vertebrae). Intervertebral discs separate each vertebra and act as shock absorbers for the spine. Bony knobs, called facets, extend from each vertebra and stack on top of each other creating a chain-like effect, known as a facet joint, which allows the neck to bend and turn. Additionally, thick rubber band-like ligaments connect to each vertebra to provide stability. The ligaments also provide support for the head and allow for range of motion. All the nerves to the rest of the body (arms, chest, abdomen and legs) pass down through the spinal canal in the neck before making their way to the rest of the body—making a cervical spinal cord injury a serious condition that can affect a patient's quality of life. The neck can be vulnerable to injury resulting in pain and restricted motion because it is less protected than the other parts of the spine that are partially protected by the chest and abdomen.

About the Society of Interventional Radiology

Interventional radiologists are board-certified physicians who specialize in minimally invasive, targeted treatments. They offer the most in-depth knowledge of the least invasive treatments available coupled with diagnostic and clinical experience across all specialties. They use X-rays, MRI and other imaging to advance a catheter in the body, usually in an artery, to treat at the source of the disease nonsurgically. As the inventors

of peripheral angioplasty and the catheter-delivered stent, interventional radiologists pioneered minimally invasive modern medicine, and provide treatments that offer less risk, less pain and less recovery time compared to open surgery. More information can be found at www.SIRweb.org.

***Local interviews, medical illustrations and broadcast quality video footage are
available by contacting SIR's Communications Department at
Emily@SIRweb.org or (703) 691-1805.
#***