Low Back Pain Linked to Bowel Motility Disorders

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PHILADELPHIA — Patients with low back pain had a significantly greater prevalence of bowel motility disorders, compared with patients with chronic shoulder pain in a study with 98 patients.

"Our findings suggest that nervous pathways involved in relaying pain in the lumbar spine affect the transmission of sensations from the bowels, causing bowel motility disorders" such as diarrhea, constipation, or bloody stools, Sergio A. Mendoza-Lattes, M.D., reported in a poster at the annual meeting of the North American Spine Society.

The findings suggest that patients with low back pain should be assessed for bowel motility disorders, concluded Dr. Mendoza-Lattes and his associates at the University of Iowa in Iowa City.

'Our findings suggest that nervous pathways involved in relaying pain in the lumbar spine affect the transmission of sensations from the bowels.'

A link between low back pain and bowel motility disorders was suspected because many symptoms of gastrointestinal disorders result from altered sensory perception in the bowels.

Somatic afferent neurons firing in the spinal cord can inhibit viscerosomatic neurons in the dorsal horn from responding to stimuli. A prolonged somatic irritant, such as low back pain, that acts on afferent fibers from the gastrointestinal tract might inhibit sensations of visceral pain and lead to bowel motility disorders.

This hypothesis was tested by studying 59 patients with low back pain and 39 patients with shoulder pain who were seen at the orthopedic clinic at the University of Iowa. The study excluded patients with a history of lumbar spine or abdominal surgery.

The average duration of low back pain in these patients was 22 months, and the average duration of shoulder pain was 23 months. The two groups were similar in demographics and comorbid conditions, and in the frequency they used analgesics and muscle relaxants for their pain.

The patients with low back pain were 2.2 times more likely to have bowel motility disorders than the patients with shoulder pain, a statistically significant difference, reported Dr. Mendoza-Lattes, an orthopedic surgeon at the University of Iowa.

The patients with low back pain were also 2.3 times more likely to use antidepressive, antianxiety, or mood-altering medications, but the use of these medications showed no correlation with the prevalence of bowel motility disorders.

Among the patients with low back pain, the use of opiates was linked with a significantly reduced prevalence of bowel motility disorders. Among those using narcotics, 25% had bowel disorders, compared with a 62% prevalence among those not using opiates. This finding suggests that the link between low back pain and bowel disorders is reduced by using opiates. ■

Patients Fare Well 5 Years After Lumbar Discectomy

PHILADELPHIA — Patients do "quite well" both mentally and physically 5 years following lumbar discectomy, based on follow-up of 53 patients.

Lumbar discectomy has become one of the most common spinal, surgical procedures performed in the United States, William C. Welch, M.D., said at the annual meeting of the North American Spine Society.

"Remarkably, this is the first study to show positive, 5-year outcomes on a number of important biopsychosocial variables," said the chief of neurologic surgery and spine services at the University of Pittsburgh.

The study included a sample of patients aged 18 or older who had a first discectomy done at any of eight medical centers in the United States from January 1997 to March 1999. Surveys were designed to assess mental and physical status as well as back pain, functional disability, treatment helpfulness, and satisfaction with the surgery.

Overall, the scores showed that the patients were doing well with little disability and were generally satisfied with their outcomes. None of the questionnaire results were significantly different from normative values, said Dr. Welch, professor of neurologic and orthopedic surgery at the university.

For example, the average physical component scale score on the Short Form–12 questionnaire was 42.5, and the mental component score was 53.5, both in the normal range. The average treatment helpfulness questionnaire score was 49.8 on a scale where 50 indicates good, overall satisfaction. The average Pain Disability Questionnaire score was 21.1, in a range where 0 indicates no problem and 150 indicates the greatest severity.

The rate of repeat surgery at the same disk level was 9.8%. ■

Vest Relieves Discopathy Pain More Effectively Than Back Brace

PHILADELPHIA — A pneumatic vest was more effective than a conventional back brace for relieving back and leg pain in patients with discopathy in a controlled study with 36 patients followed for 1 year.

Patients treated with the Orthotrac pneumatic vest plus conventional, conservative therapy also showed a trend toward improved function, compared with patients treated with conservative therapy and an EZ form brace, John Triano, D.C., Ph.D., said at the annual meeting of the North American Spine Society.

The rationale behind the pneumatic vest is that it creates an axial load that reduces the cross-section dimensions of the spinal canal. "The hypothesis is that if you change the internal pressure [in the spinal canal], you may be able to reduce symptoms," said Dr. Triano, director of the chiropractic division at the Texas Back Institute in Plano.

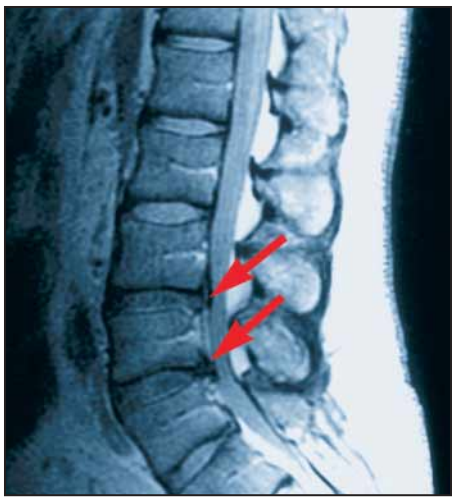
The Orthotrac pneumatic vest has been approved by the Food and Drug Administration and is marketed by Orthofix Inc., which sponsored the study. Neither Dr. Triano nor his associates in the study have a financial relationship with Orthofix Inc.

The study began with 62 eligible patients, aged 21-55 years, who had back pain and radiating leg pain secondary to discopathy despite 4 weeks of standard, conservative treatment. Of these, 21 opted for surgical management and 5 withdrew from the study. The remaining 36 were randomized to treatment with either the pneumatic vest or a form brace. The devices were prescribed for use in 30-minute intervals four times a day.

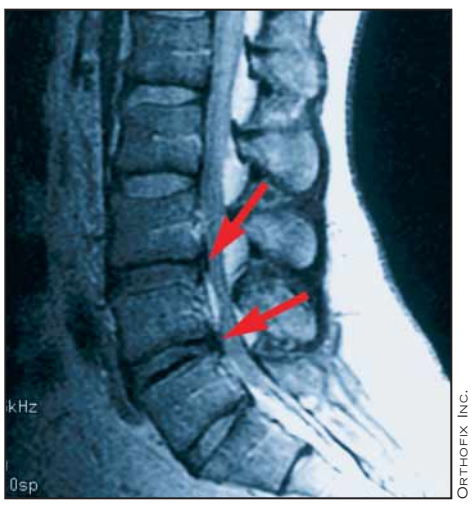
Despite randomization, at baseline patients in the vest group had an average pain score of 59.6 on a visual analog scale, compared with an average score of 42.4 among the patients in the form-brace group.

The biggest change in pain score was seen during the first 12 weeks of treatment. The average score fell by about 39 units in the vest group, compared with an average decline of about 15 units in the brace group.

The difference in pain relief was maintained through a year of follow-up. After a year of treatment, the average pain level had dropped by 40 units, compared with baseline in the vest group, and by 19 units in the brace group, a statistically significant difference, said Dr. Triano. ■



An MRI shows disk herniation without Orthotrac unloading.



ORTHOFIX INC.

With Orthotrac unloading, the difference in space is about 1 mm, usually enough.

Transforaminal Steroid Injections Found Safe for Severe Spinal Stenosis

PHILADELPHIA — Transforaminal epidural steroid injections were safe for treating severe spinal stenosis in a review of 114 patients.

Transforaminal epidural steroid injections (TESI) have traditionally been avoided in patients with severe spinal stenosis because of TESI's theoretical potential to trigger neurologic compromise. But TESI are proven effective for managing radicular pain due to spinal stenosis or herniated disk, making the treatment an attractive option for patients who are either unwilling to undergo decompressive spinal surgery or have medical contraindications for surgery, Rajeev K. Patel, M.D., said at the annual meeting of the North American Spine Society.

Dr. Patel and his associates reviewed the experience using TESI to treat patients with severe spinal stenosis at the University of Rochester (N.Y.) Spine Center.

Severe stenosis was defined as a central canal diameter of 5 mm or less.

The 114 patients treated with TESI ranged in age from 15 to 94 years, with an average age of 66. The average duration of spinal stenosis was 1 year. Patients received 1-6 injections, with most patients receiving 2-4 injections.

Patients had no major neurologic complications secondary to their injections, reported Dr. Patel, a spine rehabilitation physician at the University of Rochester. Five patients had symptomatic complaints following TESI, but these resolved in four patients in 6-8 weeks.

Additional studies are needed to further assess the safety of TESI in patients with severe spinal stenosis, Dr. Patel said. ■