# The Effects of Cox® Decompression Technic in the Treatment of Low Back Pain and Sciatica in a Golf <u>Professional</u>

James E. Schantz, D.C.
Leading Edge Sport & Spine
1293 Minhinette Drive
Roswell, GA 30075
(770) 993-9287
schantzchiro@earthlink.net
www.LeadingEdgeAtlanta.com

January 31, 2009

1

### <u>INTRODUCTION</u>

Cox® Decompression Technic has been shown in numerous case studies to be effective in reducing pain in patients with low back pain and sciatica. (1) This case report supports these findings, and also demonstrates an improvement in golf performance following a series of treatments.

### PRESENTATION & EXAM FINDINGS

### <u>History</u>

This 43 year old white male was last well on or about June 25, 2007, when he felt the gradual onset of right sided low back pain radiating into his right buttock and leg. He denied any trauma, but admitted that he had played three two-day competitive golf tournaments in the past three months with little or no training or warm-up. He described his pain as constant, 4-6 on the Visual Analog Scale with numbness in his 4th and 5th toes. The patient noted that his condition was aggravated by sitting, driving, bending and twisting, and no position or activity brought relief. He reported difficulty in performing his daily activities which included driving a mower, practicing golf and exercising. The patient had received no previous treatment for this episode of pain, and was taking NSAID's for pain relief.

# Past Medical History

The patient reported taking a fall off of a roof in 1980 and injuring his back, but did not receive any treatment at that time. He suffered a fractured wrist in high school and had reconstructive surgery 22 years later. He was treated for nephritis in 1984. The patient states that he has a very high tolerance to pain.

## Occupational History

The patient is self-employed as a PGA certified golf instructor of 25 years. He makes his living teaching golf lessons and maintaining a golf

facility. Participation in PGA sponsored golf tournaments is essential to maintaining his credentials and status as a professional. He reported that preceding this episode, he was playing the worst in his professional life.

### **Examination Findings**

The patient stands 5'9" and weighs 209 lbs. His blood pressure reads 130/90. Dorsolumbar range of motion reveals 10% reduction in lumbar flexion with increased pain at the lumbosacral junction, extension is within normal limits and non-painful, lateral flexion is within normal limits and creates lumbosacral pain in both directions, rotation causes pain only to the right. Kemp's test on the left causes L/S pain on the right. Straight Leg Raise test on the right at 70 degrees triggered right L/S pain and buttock pain. Deep tendon reflexes and pinwheel of the lower extremities were unremarkable. Patrick Fabere test were negative bilaterally. Posterior to anterior digital compression over the facet joints of the spine revealed decreased joint play and pain reported by the patient at the L5, T8, T4 and C2 vertebral levels.

## Radiographic Findings

Two x-rays of the lumbar spine (AP and Lat) were obtained. See Figure 1 and Figure 2 following. The lumbar lordosis was within normal limits. Diminished disk height was noted at the L3/L4, L4/L5 and L5/S1 levels. Degenerative disk disease with spondylosis was evident at the L5/S1 level.

The AP projection showed a marked pelvic list with the left ilium elevated and a right lumbar convexity.



Figure 1. AP Lumbosacral View



Figure 2. Lateral Lumbosacral View

# **DIAGNOSIS**

724.3 Sciatica722.52 Lumbar Degenerative Disk Disease

### TREATMENT & OUTCOMES

He was prescribed 12-18 treatments over a 4-6 week period to help reduce pain, restore normal range of motion and return to normal daily activities. Methods employed were Cox® Decompression to the lumbar spine and Diversified adjusting to the vertebral subluxations found in the thoracic and cervical spine. Percussive massage with the Thumper® Professional Massager was used on the paraspinal musculature and muscles of the lower extremities prior to each manipulation session. He received instruction in the Elevated and Rotated Hip Therapeutic Exercise Protocol per GMP Fitness. \* 1,200 mg. of Glucosamine and Chondroitin Sulfate were prescribed daily to aid in cartilage restoration in the lumbar spine.

Cox® Decompression was performed according to Cox® Protocol II. Spinal manipulative therapy to the thoracic spine was performed with a supine anterior adjustment. Cervical spinal manipulation was performed with a modified cervical break maneuver.

Immediately following the initial treatment, the patient reported alleviation of his radicular pain and numbness. His tolerance to physical activity increased progressively and his VAS dropped to 1-2 within three weeks. Per Cox® Technic protocol, we were seeking 50% relief of pain in 30 days. (1) He was practicing his golf swing daily and riding his mower up to 3 hours per day. The following week he had spent several hours using a weed eater and had a flare up of acute, severe low back pain raising his VAS to 8 for a short period of time. A Back Index selfreporting instrument was administered on 4 weeks and following 12 treatments. Back Index Score was 24% with most trouble reported on sitting and forwarding bending positions. Two more treatments were rendered on a weekly basis before he competed in a 5-Day PGA golf tournament. Other than muscle soreness, he suffered no exacerbation of his low back or sciatica symptoms. He even placed in the top half of the players, the best performance he has managed in over five years. After 18 treatments and two months, he completed his active care. Interviewing him in January 2009 found him pain-free and engaging in physically rigorous activities without restrictions or limitations.

### **Conclusion**

The essential elements of Cox® Technic methodology, decompression manipulation and therapeutic exercise help a PGA golf professional recover from low back pain and sciatica. There is also a likelihood that his treatment helped in his ability to play golf. Our initial workup and reassessment were focused on diagnosis and perceived recovery by the patient. We relied on the patient's self-reporting of his golf performance to determine improvement of his tolerance to physical activity. To actually test whether Cox® Technic may play a role in improving golf performance, it would have been helpful to perform a swing analysis, including club head speed, before treatment and upon completion. Further research could be useful to explore the relationship between Cox® Technic and golf performance.

### <u>References</u>

(1) Cox, JM, Feller JA, Cox JA: Distraction Chiropractic Adjusting: Clinical Application, Treatment, Algorithms and Clinical Outcomes of 1,000 Cases Studies. *Topics in Clinical Chiropractic* 1996; (3) 3:45-59, 79-81.

#### \* NOTE:

Figures 3-13

Elevated or Rotated Hip Exercises- GMP Protocol *Due to copyright, the G BALL exercises are not pictured here.* The prescribed exercises are the wall sit, pelvic raise with a squeeze, G ball curl up, kneeling forward roll, alternating leg extensions, inner thigh, standing hip, knee rolls, and lying back press.