

Figure 1



Figure 2



Figure 3



Figure 4

## Pre and Post MRI Study of a Large HNP @ C-5/6 Utilizing Only Cox® Decompression/Manipulation: Case Report

Background: A 50-year-old captain of a city of approximately 90,000 was seen at an ambulatory care center for right neck and shoulder pain with tingling of the right arm on 10-16-03. The pain had worsened in the last 3-4 days. He was a prior patient of Dr. Rosenthal for his lower back, but went to the ambulatory clinic since Dr. Rosenthal was on vacation. No history of injury was noted. PMH: Reflux, increase in B/P & cholesterol, left knee surgery. He also c/o rt. neck pain. Examination: ROM was flexion 20 degrees, extension 0 degrees, right rotation 15 degrees, left rotation 30 deg., right lateral flexion 5 deg., left lateral flexion 10 deg., equal shoulder shrug, DTR's 2+ globally. Plain x-rays were taken at the center showing a normal right shoulder x-ray study, and the cervical study showing minor disc space narrowing and spondylosis at the C5-C6 level with slight right sided foraminal stenosis. The impression at the center was cervical and thoracic spine strain, muscle spasm acute right shoulder tenosynovitis. Treatment recommended was heat, ROM exercises, Celebrex, and see a physical therapist or orthopedist for follow up if not better.

Dr. Stuart Rosenthal, D.C., saw this patient on 11-04-03, agreed with the examination findings performed at the center, and ordered an MRI of the cervical spine. The initial MRI of the cervical spine was performed 11-4-03 shown in Figures 1 & 2. Figure 1 is the axial pre manipulation reduction MRI showing the large right sided C5-C6 posterolateral herniated disc compressing the spinal cord. Figure 2 is the sagittal pre reduction MRI of the C5-C6 large herniated disc as it compresses the spinal cord.

**Methods**: The case of a man with a large right C5-C6 HNP with compression of the spinal cord. Treatment was instituted consisting of interferential electrical stimulation for approximately 10 minutes to the right lower neck. Decompression of the C5-C6 disc using no occipital restraint, only hand control, on The Cox® Table was administered via protocol I. The hand contact was the lamina-pedicle junction of C5, with slightly more pressure on the right side with the right hand. A superior movement in addition to a slight posteroanterior force was given, protocol I. Approximately 31 treatments were given and with progressive relief of symptoms with centralization of the right arm pain and tingling, a repeat MRI of the cervical spine was done on 1-4-04 (8 weeks following institution of Cox® decompression manipulation of the C5-C6 herniated disc, shown in Figures 3 & 4.

Figure 3 is the axial post reduction MRI of the right posterolateral C5-C6 herniated disc showing marked reduction in the size of the disc herniation seen in Figure 1. Adjacent slices to this one shown in Figure 3 showed the same reduction in size. Figure 4 is the sagittal MRI following reduction treatment showing reduction of the C5-C6 disc herniation size although it is still seen.

After the new MRI findings, slightly altered care was instituted using the occipital head restraints to apply long y axis decompression with additional motion of flexion.

**Conclusions**: The subjective relief and objective pre and post treatment MRI evidence show that Cox® Decompression Manipulation is an effective treatment with clinical outcome comparable to single-level diskectomy. Patients with posterolateral disc herniation and definitive radiculopathy, even with osseous degenerative changes at the same level as shown in this case, can have an excellent non surgical outcome and quality of life when compared with those patients having surgery. Dr. Rosenthal plans a follow up MRI in the near future for further documentation.

Respectfully submitted,

Stuart Rosenthal, DC 50 GAR Hgwy. Swansea, Ma 02777 508-677-1500

Patseab@yahoo.com