



Physical Therapy Update

The clinical staff at Frederick Sport and Spine Clinic regularly reviews articles, discusses the content and implements the information into our patient treatments. As a service to the local medical community, we are offering a summary of these articles to Physicians and Medical Practitioners. It is our intention to provide only the most pertinent info in these ½ page summaries. Further info is available at the clinic. Please take a moment to peruse the information below and contact us if you have any questions about the subject matter. Enjoy!

“Multiple Independent, Sequential, and Spontaneously Resolving Lumbar Intervertebral Disc Herniations: A Case Report.”

Reyentovich, Alex BS, Abdu, William A MD,MS
Dartmouth-Hitchcock Medical Center, Section of Orthopaedic Surgery.
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The debate continues about disc herniations and their ability/inability to reduce once the nucleus pulposus has breached the annular wall. Some practitioners believe that once a herniation occurs, nothing will reduce the nucleus except surgical intervention. Other practitioners feel that the nucleus can reduce with medication and/or physical therapy intervention. This article is a case study report supporting the theory that discs, once herniated, can relocate centrally and completely resolve without surgery.

The patient in this case study was a 44 year old male physician who originally presented with back pain and L posterior thigh pain in 1996. An MRI revealed a large L posterolateral disc herniation at L4-L5. Treatment consisted oral steroids and NSAIDS. “Over the next several weeks, the patient’s pain, spasms, and weakness completely resolved” (Reyentovich et al, 2001). In September of 1996, the patient presented with LBP and R leg pain in the L4 dermatome. The L leg was asymptomatic. An MRI revealed a large R posterolateral herniation at L3-L4. However, the MRI also showed that the previous L herniation seen at L4-L5 had completely resolved. After several more weeks of medical management, the L4 symptoms completely resolved. In September of 1998, the patients presented with LBP with R leg symptoms in the R foot and decreased gastrocnemius strength. An MRI revealed a large posterolateral disc herniation at the L4-L5 interspace with distal migration causing the S1 radiculopathy. The MRI also revealed that the previous R herniation seen at L3-L4 had completely resolved. After several more weeks of medical management the LBP and radiculopathy completely resolved (Reyentovich et al, 2001).

A follow up MRI was obtained in October of 1999 while the patient remained asymptomatic. The test showed complete resolution of the most recent herniation at L4-L5 and “there was no evidence of nerve root compression by intervertebral disc material at any level of the lumbar spine” (Reyentovich et al. 2001).

This article demonstrates two points. First, disc material can reduce once herniated. Second, all patients with disc herniations need physical therapy. The second point may seem contradictory to the results of the article, however, it is certainly true. Robin McKenzie states that specific movements in the appropriate directions can reduce herniations very rapidly and postural correction can help maintain the reduction (McKenzie RA, *The Lumbar Spine*, 1998). McKenzie (1998) also states that the incidence of recurrence of herniations, if not appropriately treated with physical therapy, is 90%. However, if the patient attends physical therapy and is given an appropriate and progressive exercise program, the patient’s chance of recurrence decreases dramatically. This case study is an unfortunate example of high recurrence. If this patient had attended physical therapy and remained compliant with his home exercises and functional training instructions, it is probable that the second and third incidents of new herniations would not have occurred. Hopefully, follow up research will include case studies of recurrence rates for patients who attend physical therapy versus those who do not attend physical therapy.

Reviewer: Ron Swanson, M.S., PT

‘Physical Therapists for the Frederick Keys’

84 Thomas Johnson Court, Suite B, Frederick, MD 21702 301-662-8541 fax 301-662-8762