Disc Herniations Don't Come From Lifting

Physical Therapy in Port Townsend for Lower Back

Here's a surprising finding. In the first study of its kind, researchers from five hospital-based spine clinics discovered that most disc herniations don't come from lifting (heavy or light) objects. In fact, the majority (62 per cent) have no known cause. The patients say the back and leg pain (sciatica) just came on without warning.

This idea of a spontaneous disc herniation isn't entirely accurate either. Most experts agree that disc degeneration leading up to disc herniation takes place over a long period of time. Repeated loads on the spine combined with the effects of aging are probably the real culprits. It's likely that there are some hereditary factors involved as well.

This study was done to find out more about the influence of specific inciting events patients associate with disc herniation. Besides looking at possible causes linked with disc herniation, the researchers also compared severity of symptoms with possible causes of symptoms.

The 154 people in the study were all adults (18 years old and older) who had back pain that radiated down the leg. MRIs confirmed the presence of a disc herniation. Pressure from the disc on the spinal nerve root was the source of the back and leg pain.

Only a small number of patients (eight per cent) could identify a specific event that resulted in the symptoms that were caused by disc herniation. Most people started noticing symptoms while doing normal, everyday activities. Examples of non-lifting physical activities as inciting events included vacuuming, bending, reaching, leaning, misstepping, and making the bed.
Golf, skiing, and tennis were the most commonly reported sports and recreational activities believed to be associated with disc herniation. Physical trauma from falls or car accidents was listed as the inciting event in only 1.3 per cent of the people.

This finding supports the idea that in many adults, discs don’t rupture. Instead, the outer covering called the annulus slowly weakens. Weakening in the protective layer of the disc allows the center portion (the nucleus) to poke through.

So even though someone develops pain after sneezing or coughing from what later turns out to be a herniated disc, that final event was like the straw that broke the camel's back. The disc was ready to go and the coughing, sneezing, laughing, or turning one way or the other was just the final physical stress to herniate an already damaged disc structure.

Are the symptoms worse with certain inciting events? Does lifting that leads to disc herniation cause more severe disc-related symptoms than say a sports activity, a fall, or performing some simple household activity? According to the results of this study, no.

Okay, so how about other factors? Does being Caucasian, Black, or Hispanic make a difference in severity of symptoms caused by disc herniation? What about employment status? Does having a job either part-time or full-time make a difference? Are students or retired adults more or less likely to have severe symptoms

with disc herniation? No to all these as well.

The authors conclude that most of the time, disc herniation appear to be spontaneous and occur without any known cause. It's likely that a combination of aging, degenerative, and genetic factors are the real reasons behind disc herniation. The final event is simply that: enough extra force across the disc at the moment of sufficient weakness to result in injury.

The dilemma comes when patients who have disc herniations (that they feel certain were caused by a specific movement or activity) start to avoid those movements. The physician or Physical Therapist working with them may recommend treatment that involves engaging in activities the patient thinks led to the problem in the first place.

The results of this study may help when teaching patients how and why disc herniations occur. Getting them back on track requires their cooperation and understanding that coughing, sneezing, vacuuming, sitting too long (or whatever they think caused the herniation) isn't the real problem.

Reference: Pradeep Suri, MD, et al. Inciting Events Associated with Lumbar Disc Herniation. In The Spine Journal. May 2010. Vol. 10. No. 5. Pp. 388-395.