

Tubular Diskectomy Patients Don't Recover Faster

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by Denise Mann Kleinman

THE HAGUE, Netherlands—Sciatica patients who undergo minimally invasive tubular diskectomy do not recover any faster than they would with conventional microdiskectomy, finds a 1-year, double-blind study in the July 8, 2009 issue of the *Journal of the American Medical Association*.¹

"Patients who underwent tubular diskectomy fared worse with regard to leg and back pain and fewer patients reported complete recovery at 1 year."—Mark P. Arts, MD

"The rationale behind replacing the conventional subperiosteal muscle dissection by the muscle-splitting transmuscular approach of tubular

diskectomy is less tissue damage, resulting in a faster rate of recovery but with similar long-term outcomes," wrote researchers who were led by Mark P. Arts, MD, of the Medical Center Haaglanden at the Hague, the Netherlands. But "patients who underwent tubular diskectomy fared worse with regard to leg and back pain and fewer patients reported complete recovery at 1 year."

Pain, recovery rates favor conventional microdiskectomy

In fact, the new study found that recovery rates for the tubular diskectomy and conventional microdiskectomy groups were similar. There were also overall differences in pain intensity and recovery rates favoring the conventional microdiskectomy approach.

In the study, 328 patients age 18 to 70 years who had sciatica for more than 8 weeks due to lumbar disk herniations were randomized to either tubular diskectomy or conventional microdiskectomy. Sixty-nine percent of patients who underwent tubular diskectomy reported a good recovery, compared with 79% of sciatica patients who had the conventional microdiskectomy surgical procedure at 1 year, the researchers report.

"Although the minimally invasive technique of tubular diskectomy seemed to be an attractive surgical method for treating sciatica, our data do not support a higher rate of recovery when compared with conventional microdiskectomy," the study authors conclude.

Translating research into practice: No pain, no gain

Mitchell Yass, PT, of PT2 Physical Therapy and Personal Training in Farmingdale, New York, is not surprised by the new study findings. Yass, the author of *Overpower Pain: The Strength Training Program that Stops Pain without Drugs or Surgery*, does not believe that surgery should ever treat sciatica.

"My prescription for sciatica consists of treating the existing thickening of the piriformis muscle which is impinging on the sciatic nerve with heat and massage," he told MSKreport.com. "This diminishes the thickness of the muscle and should take pressure off the nerve enough to begin to feel the symptoms reduce."

Next, Yass suggests stretching and strengthening of the appropriate muscles including the gluteus maximus, gluteus medius and hamstrings. "This prevents these muscles from overworking and straining," he said. "If these muscles don't overwork, the piriformis will not try to compensate and overwork and strain."

Without straining, the piriformis will not thicken and impinge on the sciatic nerve to create symptoms, he said. "Resolution of sciatica can be achieved in days to weeks utilizing this system."

Other practitioners may not believe that strengthening should be performed until pain is resolved. "If you understand that pain is caused by weakness of specific muscles, the only thing that will resolve the pain is strengthening of these muscles," he said. "I have treated people into their 90s with this method. Appropriate exercises performed correctly with the right resistance is the answer to resolving most pain."

References

1. Arts MP, Brand R, van den Akker ME, et al. Tubular diskectomy vs conventional microdiskectomy for sciatica. A randomized controlled trial. *JAMA*. 2009;302:149-158.