Decompression noninferior for degenerative spondylolisthesis

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(HealthDay)—For patients undergoing surgery for degenerative lumbar spondylolisthesis, decompression alone is noninferior to decompression with instrumented fusion during a period of two years, according to a study published in the Aug. 5 issue of the New England Journal of Medicine.

Ivar M. Austevoll, M.D., Ph.D., from the Kysthospital in Hagevik in Bergen, Norway, and colleagues conducted an open-label, noninferiority trial among patients with symptomatic lumbar stenosis who had not responded to conservative management and who had single-level spondylolisthesis of 3 mm or more. Patients were randomly assigned to undergo decompression surgery alone or decompression surgery with instrumented fusion.

The researchers found that from baseline to two years, the mean change in the Oswestry Disability Index (ODI) score was ?20.6 and ?21.3 in the decompression-alone and fusion groups, respectively (mean difference, 0.7; 95 percent confidence interval, ?2.8 to 4.3). In the modified intention-to-treat analysis, 71.4 percent of 133 patients in the decompression-alone group and 72.9 percent of 129 patients in the fusion group had a reduction of at least 30 percent in the ODI score (difference, ?1.4 percentage points; 95 percent confidence interval, ?12.2 to 9.4), demonstrating noninferiority. In the per-protocol analysis, 75.5 percent in each group had a reduction of at least 30 percent in the ODI score (difference, 0.0 percentage points; 95 percent confidence interval, ?11.4 to 11.4), showing noninferiority. Reoperation occurred in 12.5 and 9.1 percent of the decompression-alone and fusion groups, respectively.

"Decompression alone was noninferior to decompression with instrumented fusion at two years of follow-up," the authors write. "Reoperation occurred somewhat more often in the decompression-alone group."

More information: Abstract/Full Text (subscription or payment may be required)

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