

NORTH AMERICAN SPINE SOCIETY 32ND ANNUAL MEETING

NASS2017
ORLANDO, FL | OCT. 25-28

EMBARGOED FOR RELEASE
October 25, 2017 at 10:00 a.m. EDT

Contact: **Nicolle Heller, NASS**
(773) 682-8137 or nheller@spine.org

GREAT EXPECTATIONS VS. GREATER EXPECTATIONS

New Study Compares Patient and Surgeon Predictions Before and Two Years after Lumbar Surgery

ORLANDO, FL—Eighty-six percent of lumbar spine surgery patients had greater expectations for their own improvement after lumbar surgery than their surgeons had, according to new research reported at the 32nd Annual Meeting of the North American Spine Society (NASS). Two years and a post-surgery survey later, it turned out the surgeons were much better at predicting actual improvement than their patients.

“While it is hardly surprising that spine surgeons are better able to accurately predict surgical outcomes, it is the degree to which the predictions diverged that is significant,” said Carol A. Mancuso MD, Senior Scientist, Hospital for Special Surgery, and the lead author of the study. “Evidently, surgeons and patients need to do a better job of working together to candidly communicate realistic expectations throughout the pre-operative and post-operative processes.”

The study, “Surgeons’ Preoperative Expectations Predict Fulfillment of Patients’ Expectations Two Years After Lumbar Surgery,” is a prospective two-year longitudinal study of 164 lumbar surgery patients and their surgeons at a tertiary spine center.

***Surgeons’ Preoperative
Expectations Predict
Fulfillment of Patients’
Expectations Two Years
After Lumbar Surgery***

***Wednesday October 25
10:41 to 10:47 a.m.
Room W230CD***

Patients of five spine surgeons were interviewed preoperatively with the Expectations Survey, a valid 20-item survey addressing symptoms, physical function, and psychological well-being. The survey asks how much improvement is expected for each item with response options of complete to no improvement and a total score is generated (range 0-100, higher=greater expectations). Surgeons completed an identical survey asking them to rate expected improvement for each item for each patient, yielding a similar 0-100 score. Concordance within the patient-surgeon pair was measured with the intraclass correlation coefficient (ICC) (range 0=agreement no better than chance to 1=perfect agreement). Two years postoperatively, patients completed the survey again asking how much improvement they actually received for each item with options ranging from complete to no improvement. A “patient proportion” reflecting expectations fulfilled was calculated as the total improvement received (numerator) divided by the total improvement expected (denominator); range 0 (no improvement for any item) to 1 (improved as expected) to >1 (improved more than expected); the minimum clinically important (MCI) proportion was previously shown to be .60. A similar “surgeon proportion” was calculated using surgeons’ improvement expected as the denominator. Proportions were then compared using paired t-tests.

(more)

Page 2—Great Expectations VS. Greater Expectations

The mean age was 54, 52% were men, 84% had degenerative conditions. Patients and surgeons independently completed the survey within 10 days preoperatively; patients completed the postoperative survey after 2.1 years. The mean preoperative survey score was 74 for patients and 58 for surgeons ($p<.0001$), and the ICC was .36 (i.e. fair agreement). 86% of patients had higher scores (i.e. greater expectations) than their surgeons. The postoperative version of the survey measured patients' reports of actual improvement received for each item. The proportion of expectations fulfilled (actual divided by expected improvement) was $.75\pm.37$ for patients and $.94\pm.41$ for surgeons ($p<.0001$). The proportion was perfect (≥ 1) for 27% of patients' and 53% of surgeons' ratings, and was greater than an MCI (i.e. $\geq .60$) for 67% and 79%, respectively ($p<.0001$ for both comparisons).

The researchers concluded that most patients had greater expectations than their surgeons did and two thirds met an MCI for fulfillment of expectations. Surgeons' expectations more closely approximated actual improvement with surgeons successfully predicting two-year fulfillment of expectations more often. These findings have potential implications for clinical practice including: ensuring patients retain surgeons' counsel about expectations throughout the preoperative process; deciding whether an MCI is sufficient success; and considering whether surgeons' accurate predictions of patient-reported outcomes are potential measures of quality of care.

The study authors are: Carol A. Mancuso, MD; Roland Duculan, MD; Frank P. Cammisa, MD; Andrew A. Sama, MD; Alexander P. Hughes, MD; Darren R. Lebl, MD; and Federico P. Girardi, MD from the Hospital for Special Surgery, New York, NY.

FDA Device/Drug Status: This abstract does not discuss or include any applicable devices or drugs. The NASS 2017 Disclosure Index can be found on pages 168-188 of the [final program](#).

More than 3,000 spine professionals will meet at the NASS 32nd Annual Meeting in Orlando, October 25-28, 2017 at the Orange County Convention Center to share the latest information, innovative techniques and procedures, best practices and new technologies in the spine field. NASS is a multidisciplinary medical organization dedicated to fostering the highest quality, evidenced-based and ethical spine care by promoting education, research and advocacy. NASS is comprised of more than 8,000 members from several disciplines, including orthopedic surgery, neurosurgery, physiatry, neurology, radiology, anesthesiology, research and physical therapy. For more information, visit www.spine.org, [NASS Facebook](#) and [NASS Twitter](#).

###