WHEN SPINE SURGERY PATIENTS KNOW BETTER, THEY DO BETTER
One Simple, Inexpensive Class Can Save Patients Significant Pain, Disability, and Money

LOS ANGELES—When patients know better, they do better after spinal fusion surgery, according to a new study on preoperative patient education reported at the 33rd Annual Meeting of the North American Spine Society (NASS).

“We tend to think of improvements in health care as difficult and costly to achieve,” said Donna M. Eastwood, RN, MN, ONC, the study’s lead author. “However, this study demonstrates that a simple and cost-effective, two-hour group class substantially improves patient satisfaction and outcomes after spinal fusion surgery. Spine surgeons should take note and invest in patient education if they would like to improve outcomes.”

The study, “Improving Spinal Fusion Patient-Reported Outcomes with a Single Preoperative Education Session,” is a retrospective cohort study using Canadian Spine Outcomes and Research Network (CSORN) data. Participants were patients who received elective spinal fusion for 2-5 levels (N = 206). Half of the patients participated in preoperative multidisciplinary education and the other half opted out of the educational session.

Spinal fusion patients were encouraged to attend a one-time, two-hour education session three to six weeks prior to surgery. The education session included interactive discussions with nursing, physiotherapy and occupational therapy staff concentrating on what patients should expect, how to best prepare for surgery and proper care after surgery. Baseline analysis was conducted to ensure cohorts did not significantly differ in any way outside of attendance to the education session. Outcome measures of interest were collected at 12 weeks postoperatively. Continuous variables were compared with analysis of variance (ANOVA), and categorical variables with chi-square analyses. Significance was set at $\alpha<0.05$. Outcome measures included the Oswestry Disability Index (ODI), NRS Scales for Back and Leg Pain (NRS-B/L), CSORN questions pertaining to the patient’s satisfaction with surgery and whether the surgery met a variety of their expectations.

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Patients who took part in the presurgical education sessions were significantly more satisfied with their surgery compared to the control cohort (p = 0.014). Patients who did not participate in the education session failed to have their expectations met in terms of improvement in daily activities (p = 0.03), improvement in walking capacity (p = 0.03), and their expectation of back pain reduction (p = 0.01). There was a statistically significant effect of participation in the educational session reducing post-operative back pain (p = 0.03), though this improvement did not reach clinically significant levels.

The researchers concluded that participation in a single two-hour educational session prior to surgery significantly impacted patient satisfaction, expectations, level of disability, and back pain.

When asked why participating in the class led to so many desirable outcomes, Eastwood said, “The class provided patients with an opportunity to engage with members of their care team in a non-threatening environment and have their specific questions and concerns addressed. By knowing what to expect, patients and families were better able to prepare for their surgery and recovery.”

Follow-up research will focus on whether an education session will have similar results if it is in an online or videoconference format. These options may eliminate the need to travel as a reason some patients are currently unable to attend a preoperative education class.

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This abstract does not discuss or include any applicable devices or drugs. The NASS 2018 Disclosure Index can be found on pages 174-194 of the NASS 33rd Annual Meeting’s final program.

More than 3,000 spine professionals will meet at the NASS 33rd Annual Meeting in Los Angeles, September 26-29, 2018 at the Los Angeles 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.

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