



The Society of Thoracic Surgeons
633 N. St. Clair, Suite 2100
Chicago, IL 60611
www.sts.org

News

Media Contact:
Jennifer Bagley
312-202-5865
jbagley@sts.org

Discharge 3 Days Following Open Heart Surgery Is Safe *Enhanced recovery protocols will help improve the patient-centered experience*

NEW ORLEANS, Louisiana (January 27, 2020) — Patients who undergo open heart surgery and head home 3 days later are not at increased risk for complications, according to a scientific presentation at the 56th Annual Meeting of The Society of Thoracic Surgeons.

“We have shown that long hospital stays after heart surgery are no longer necessary, and patients can go home safely after just a few days in the hospital,” said S. Chris Malaisrie, MD, from Northwestern Medicine in Chicago. “This information helps pave the way for the introduction of a cardiac enhanced recovery after surgery (ERAS) program, proving that the use of such a strategy is feasible.”

Dr. Malaisrie and colleagues identified patients who underwent nonemergency coronary artery bypass grafting (CABG) surgery and valve surgery between July 2004 and June 2017 at Northwestern Memorial Hospital. Researchers examined data from 478 patients. The patients were separated into two groups: 357 patients with a length of stay (LOS) greater than 3 days and 121 patients with a LOS less than 3 days. Aside from postoperative atrial fibrillation rates (2% in the ≤ 3 day LOS group and 19% in the >3 day LOS group), rates of other complications, 30-day readmissions, and mortality rates were comparable.

KEY POINTS

- Heart surgery patients can go home safely after just 3 days in the hospital.
- ERAS protocols may be implemented to speed recovery.
- Care of heart surgery patients is moving toward a more patient-centered experience.

“Patients can go home after a shorter length of stay in the hospital without increased risk of complications and rehospitalizations,” said Dr. Malaisrie. “Because we found no detrimental effect of accelerated discharge, both patients and physicians should not be averse to discharging patients when medically ready.”

ERAS—pronounced E-ras—is a multidisciplinary treatment program designed to achieve quicker recovery for patients undergoing major surgery and offers sustainable improvement in the overall quality of care. First popularized in Denmark in the 1990s, it since has become more accepted. Over the past several years, ERAS programs have been incorporated into many surgical specialties, with general thoracic surgery recently joining the movement and heart surgery following soon after. Research has shown that in other surgical fields that have adopted ERAS, hospital stays have shortened by 30% to 50%, while readmission rates and costs also decreased.

According to Dr. Malaisrie, this recent study prompted his colleagues to develop Northwestern’s first cardiac ERAS program, which will offer standardized approaches for optimizing surgical outcomes. The program—still in development—will include a suite of modern care protocols based on the recently published guidelines from the ERAS Cardiac Society for optimal, evidence-based perioperative care in heart surgery.

“For many years, high-performing institutions have been able to promote safe early recovery from complex cardiac surgical procedures,” said Daniel T. Engelman, MD, from Baystate Medical Center in Massachusetts and president of the ERAS Cardiac Society, who was not directly involved with this study. “It has been shown in the statewide Michigan collaborative that more than 80% of preventable morbidity and mortality following cardiac surgery occurs outside of the operating room. It is now up to all of us to standardize evidence-based best practices in the recovery phase—to not just speed up discharge, but also to improve the patient-centered experience. In addition, this will necessitate better preoperative counseling to guide realistic expectations supporting multimodal pain control, postoperative mobility, and family support, ensuring complete physical and psychological recovery from the stress of surgery.”

The published recommendations describe 22 potential interventions, separated into sections that cover all phases of surgical care—preoperative, intraoperative, and postoperative—and each principle is graded according to strength and level of evidence. Some of the recommendations include the cessation of drinking alcohol and smoking, avoidance of prolonged fasting, the concept of “prehabilitation” (exercise training, nutrition optimization, and anxiety reduction), strategies for reducing opioid use and dependence after surgery, and the use of urinary biomarkers to identify patients at increased risk for acute kidney injury. The guidelines are meant to be flexible and individually tailored for each program.

“Multiple interventions are required for the success of an ERAS program,” said Dr. Malaisrie. “There is no single magic bullet. Instead, it is through cumulative efforts that ERAS is successful for the patient. We would like to see the care of heart surgery patients be focused more on improving outcomes from the patient’s perspective and less from the physician's.”

Dr. Malaisrie anticipates that the Northwestern Medicine cardiac ERAS program will result in faster recoveries, reduced complications, decreased time in the hospital, lower costs, and improved patient/family satisfaction. In the future, the researchers plan to closely examine both traditional clinical endpoints and patient-reported outcomes from the program.

“Expectations for recovery after cardiac surgery are being reset in the current era,” he said. “What does this mean for patients? It means that prolonged or taxing recovery is no longer required. Patients should know that recovery from heart surgery is not only quicker, but also better with ERAS programs.”

###

The other authors of the study were AY Son, PM McCarthy, M Fiehler, A Chadha, M Liu, A Andrei, J Nakano, A Churyla, and D Pham.

Dr. Engelman was the lead author of the “Guidelines for Perioperative Care in Cardiac Surgery: Enhanced Recovery After Surgery Society Recommendations” published in *JAMA Surgery*.

Find comprehensive medical information presented for patients by leading experts in cardiothoracic surgery on the STS Patient Website (ctsurgerypatients.org). For more information, contact Senior Media Relations Manager Jennifer Bagley at 312-202-5865 or jbagley@sts.org.

Founded in 1964, The Society of Thoracic Surgeons is a not-for-profit organization representing more than 7,500 cardiothoracic surgeons, researchers, and allied health care professionals worldwide who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society’s mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.