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SURGERY CARE

Enhanced Recovery After Surgery (ERAS) Program

Licking Memorial Hospital (LMH) recently implemented the Enhanced Recovery After Surgery (ERAS) program, which combines simple evidencebased interventions aimed at improving post-operative recovery for patients undergoing major surgery. The ERAS program focuses on education, nutritional management, lifestyle changes to decrease smoking and alcohol intake, and utilizing alternate pain management strategies to minimize opioid use. The program also is designed to reduce stress responses during and after surgery. A recent U.S. National Library of Medicine study reports that patients who were 50 to 90 percent compliant with the program reduced the risk of complications by at least 20 percent during and after surgery.

ERAS utilizes recommended protocols for surgical procedures to create optimal outcomes for patients. These protocols are enacted when the surgeon or physician determines the need for surgery. The physician provides the patient with crucial pre-operative instructions that include the importance of tobacco and alcohol cessation, exercise, and consuming nutritious foods that will help boost the immune system. Additional protocols are completed during a preadmission testing clinic visit before the surgery date. These protocols help determine the best plan for the patient.

Preadmission testing may include:

- Blood work to evaluate blood-related disorders
- Electrocardiogram (EKG) to measure the electrical activity of the heart
- Stoma nurse evaluation

The patient is encouraged to follow the ERAS program instructions prior to surgery for the best results. As another pre-operative aspect of the ERAS program, the patient is given a high-carbohydrate beverage to drink the night before and two hours before surgery to maintain an appropriate blood sugar level and reduce the risk of nausea and vomiting after surgery.

The surgeon and nursing staff also follow ERAS protocol when preparing and performing surgery. To help decrease the need for opioid medications and decrease post-operative pain, the anesthesia provider may administer a nerve block or low-dose spinal narcotic. The patient is monitored constantly throughout and after surgery to ensure pain levels are managed and vital signs remain stable. Patients who require pain management can receive a prescription for non-opioid pain medications, including Celebrex, Tylenol and Gabapentin. Opioids, such as tramadol and oxycodone, may be prescribed in extreme cases following an assessment. However, ERAS focuses

on pain management without the use of opioids because of the danger of addiction as well as the increase of constipation with opioid consumption.

After surgery, ERAS emphasizes increased ambulation, which is a technique for patients to participate in light activity to help assess progress and aid in recovery. Patients are given IV fluids immediately after surgery and continued for 24 hours to maintain hydration. The focus of the methods used during and after surgery is to increase comfort, reduce stresslevels, and deter use of medications or anesthesia that can cause nausea, constipation, discomfort or disorientation. Ultimately, ERAS program protocols help reduce the length of an inpatient stay, shorten recovery time, and lead to the best overall health outcome for the patient. The program currently is implemented for elective colorectal surgeries and will be utilized for other surgeries in the future.

BERCHTOLD



In May, just days before he was scheduled to receive a kidney transplant, Mark Mitchell, M.D., contracted a case of diverticulitis – inflammation or infection of small pouches called diverticula that develop in the walls of the intestines. The transplant had to be postponed, and it was recommended that Dr. Mitchell

take action to remove the diverticula to

prevent the condition from recurring.

Diverticula usually develop when naturally weak areas in the colon stretch under pressure and cause marble-sized pouches to protrude through the colon wall. It is a common occurrence, especially after the age of 40, and seldom causes problems. However, diverticulitis occurs when one or more of the pouches become inflamed and cause symptoms including severe abdominal pain, fever and nausea.

Dr. Mitchell was diagnosed with uncomplicated diverticulitis which, typically, can be treated with rest, changes in diet and antibiotics. Surgery to treat diverticulitis is suggested for those who experience an abscess or perforation - which Dr. Mitchell did not experience. However, to receive the kidney transplant, he would be required to take an immunosuppressant – a medication that inhibits or prevents activity of the immune system in order to lower the body's ability to reject the transplanted organ. If diverticulitis reoccurred while Dr. Mitchell was taking the medication, he would be at a much higher risk of emergency surgery, complications or possibly even death. He contacted Victor

Patient Story – Mark Mitchell, M.D.

F. Ferrini, M.D., of Licking Memorial Surgical Services, to discuss treatment options.

To treat complicated diverticulitis, surgeons can perform a primary bowel resection, a procedure in which the diseased segments of the intestine are removed and the healthy segments are reconnected. "Dr. Ferrini and I had a great discussion about whether or not bowel resection should be considered. I was very impressed that he did his research about the immunosuppressant," said Dr. Mitchell. "In the end, we decided surgery would be the best option."

Before the surgery could be performed, Dr. Mitchell had to wait until the diverticulitis had been treated and was no longer a health concern. With a willing donor already prepared for the transplant surgery, Dr. Mitchell wanted to proceed with the bowel resection as soon as possible, and the procedure was scheduled in June.

"Everyone, from registration to the preoperation staff, was so supportive and friendly from the moment I checked in for surgery," Dr. Mitchell said. He retired from Licking Memorial Health Systems (LMHS) as an internal medicine physician after 40 years of service to the community and now serves on the Licking Memorial Hospital Board (LMH) of Directors. "Everyone who cared for me treated me with the utmost respect and kindness, and I do not believe they knew I was a member of the Board," he said.

When Dr. Mitchell was working for LMHS, he was asked to help a newly hired physician learn how to use the electronic medical records. That was the first time he had met Dr. Ferrini. "I spent the day with him, getting to know him," said Dr. Mitchell. "I thought highly of him including his experience and knowledge. That is why I chose him to be my surgeon."

Dr. Mitchell spent five days at LMH. Staff members were quick to respond to his needs and assist when he was feeling uncomfortable. He was impressed with the quality of care and grateful for the nurses and the point of care technician who performed her duties with a cheerful attitude. "The manager on the floor, Shannon Capitano, also was very gracious. My IV was not functioning properly, and she corrected the problem, which was above and beyond her managerial duties," Dr. Mitchell said. After his release from LMH, Dr. Mitchell experienced a wound infection, and was quickly scheduled for a follow-up appointment with Dr. Ferrini. The office staff made certain he received rapid attention for the issue which was easily managed and again treated him with kindness.

After six weeks of recovery from the bowel resection surgery, Dr. Mitchell was told he could proceed with the kidney transplant. It had been 10 years since his primary care physician informed him that he would need the transplant. He donated one of his own kidneys 43 years ago, and the remaining kidney was weakening. When news spread that Dr. Mitchell needed a transplant, eight people came forward offering to go through the testing to donate a kidney and one was found to be a good match. During Dr. Mitchell's recovery from the bowel resection, the donor developed a medical issue as well; however, another five volunteers came forward. "I actually was grateful for the extra time to recover from the first surgery. It took about eight weeks to fully feel like myself, with energy to do the things I enjoy," said Dr. Mitchell. "I have found that it is much better to be the physician than it is to be the patient," he joked.

As he waits for a new date for the kidney transplant surgery, Dr. Mitchell is staying active, walking 2.5 miles in the woods behind his house three times a week and using his elliptical machine as well. He

Surgery Care - How do we compare?

At Licking Memorial Health Systems (LMHS), we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare to benchmark measures. Then, we publish the information so you can draw your own conclusions regarding your healthcare choices.

Moderate sedation allows patients to tolerate procedures while maintaining adequate breathing and the ability to respond to stimulation. Most drugs used in moderate sedation can be reversed fully or partially, if necessary. However, careful patient assessment and monitoring reduce the need for reversal agents and improve patient outcomes. Therefore, minimal use of reversal agents is a good indicator of quality in moderate sedation.

	LMH 2016	LMH 2017	LMH 2018	LMH Goal
Use of reversal agent for GI procedures	0.00%	0.00%	0.00%	Less than 0.90%

The healthcare team at Licking Memorial Hospital (LMH) follows a multiple-step process to prevent wrong-patient, wrong-procedure or wrong-site surgery (e.g., surgery performed on the left foot instead of the right foot). This process includes left or right designation at the time the surgery is scheduled, verification of the site on the day of surgery with the patient and the patient's current medical record, marking the site by the surgeon, and final verification in the operating room. In 2018, 7,986 surgeries were performed at LMH.

	LMH 2016	LMH 2017	LMH 2018	LMH Goal
Wrong-site surgeries	0	0	0	0

Patients who have open-incision surgery are at elevated risk to develop an infection at the surgical site. LMH utilizes strict infection-prevention strategies for each surgical patient and ensures that the Hospital's Central Sterile staff members receive certification in proper reprocessing sterilization policies for surgical equipment.

	LMH 2016	LMH 2017	LMH 2018	LMH Goal
Central Sterile staff with certification within one year of completed training	100%	100%	100%	100%
Surgical site infections	0.50	0.00	0.30	0.10

As a quality care indicator, hospitals track 30-day readmission rates for patients who had total hip or total knee replacement surgeries. LMH tracks the rate of patients who had an unplanned readmission back to LMH for any reason (even if the reason was unrelated to the surgery) within 30 days of their Hospital discharge.

	LMH 2016	LMH 2017	LMH 2018	National ⁽¹⁾
30-day readmissions:				
Total hip replacement readmissions	4.65%	5.00%	3.18%	2.38%
Total knee replacement readmissions	2.66%	2.24%	2.84%	2.07%

Delays in surgical procedures are an inconvenience to patients who may have fasted for hours and often are nervous. The LMH Surgery staff makes every effort to schedule procedures appropriately for the comfort of patients and their families.

	LMH 2016	LMH 2017	LMH 2018	LMH Goal
Surgeries that started on time	89%	88%	89%	Greater than 90%

Postoperative patients who lie in bed for long periods are at increased risk of developing a blood clot in their lungs (pulmonary embolism) or legs (deep vein thrombosis). To prevent the formation of these dangerous conditions, LMH uses multiple methods to reduce the risk of blood clots, including the use of blood thinning medications and mechanical compression devices. In some cases, despite using these interventions, these blood clots may still occur.

	LMH 2016	LMH 2017	LMH 2018	LMH Goal
Postoperative patients who developed a pulmonary embolism or deep vein				
thrombosis	0.40%	0.60%	0.30%	0.50%

Data Footnotes: (1) MIDAS CPMS comparative database (2) Ohio Hospital Association



enjoys spending time with his family. He was able to travel to Jackson, Wyoming, to spend time with his daughter soon after the operation this past summer.

LMH's state-of-the-art surgical facilities are located in the John & Mary Alford Pavilion, which opened in 2007. Licking Memorial Surgery Department is a Licking Memorial Hospital (LMH) service, providing care to both inpatients and outpatients of all ages.

Some of the common surgical services provided are:

- Ear, nose and throat
- Obstetrics/Gynecology
- Urology
- Orthopedics
- General

- Vascular
- Ophthalmology
- Podiatry
- Plastic/Reconstructive

Health Tips – Smoking Cessation Before Surgery

As part of the Enhanced Recovery After Surgery (ERAS) program at Licking Memorial Hospital (LMH), smoking cessation can greatly reduce postoperative complications. The chemicals in cigarettes increase the risk of infection, the amount of time required for a wound to heal, and the likelihood of scarring after the healing process. Smoking also may cause pulmonary (respiratory) issues during and after surgery. Patients who quit smoking before surgery may see better results after surgery and in their daily lives, including:

- Reduced time required for a wound to fully heal
- Reduced blood pressure during and after surgery
- Increase in the body's ability to fight infections or bacteria
- Less sputum production during and after surgery, which allows easier breathing and lowers the risk of fluid reaching the lungs

For better results, patients should stop smoking a week or more prior to surgery. However, smokers should quit as soon as possible to avoid smoking-related diseases, such as lung disease, heart disease and cancer.







Visit us at www.LMHealth.org.

Please take a few minutes to read this month's report on **Surgical Care**. You'll soon discover why Licking Memorial Health Systems is measurably different ... for your health!

The Quality Report Card is a publication of the LMHS Public Relations Department. Please contact the Public Relations Department at (220) 564-1572 to receive future mailings.

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