



Patient Story – Zach Hunsaker

There had been no discernible “popping” sound nor any sensation of a muscle tear, but 33-year-old Zach Hunsaker of Pataskala still suspected that the protrusion just under his belly button was a hernia. An older family member once had been treated for an abdominal hernia, and Zach knew there can be a hereditary link in some cases.

Zach leads an active life to stay physically fit. “I began to lift weights off and on as a teenager,” he said. “I got serious about exercise and began going to the gym consistently around the age of 30. I had been deadlifting up to 265 pounds earlier this summer, and one day, I noticed after I got home that I had a bulge on my belly. I was a little concerned, but it did not hurt at that time.”

When Zach first noticed the bulge it was approximately the diameter of a nickel and protruded one-half inch. Within a couple of months, it had grown to the diameter of a quarter and protruded approximately one inch. “It started to hurt, so I made an appointment with my family physician at Licking Memorial Family Practice – Pataskala,” Zach said. “But two days before the appointment, the pain became severe so I went to the Emergency Department at Licking Memorial Hospital. I knew that a hernia can be dangerous if left untreated.”

At Licking Memorial Hospital (LMH), Emergency Medicine Physician Scott D. Jolly, D.O., confirmed a hernia upon examination. He ordered a CT scan and lab work to rule out complications. The tests showed the hernia involved fat tissue, and that Zach was not in immediate danger. Dr. Jolly ordered medications to alleviate Zach’s pain until he could visit with his family physician. Then Dr. Jolly advised Zach not to lift anything heavy in the meantime. Accustomed to sharing the parenting duties of three young daughters with his wife, Kayla (who was expecting a baby boy at the time), Zach now found himself restricted from picking up the girls or any other strenuous activity that could worsen his condition.

A hernia occurs when a weak spot in muscle tissue allows other tissue or internal organs to push through. Most hernias are found in the groin or the abdominal wall. Umbilical hernias, such as Zach’s, develop in an area near the belly button where underlying muscle layers normally overlap. Umbilical hernias are more common in infants and small children whose muscles are still developing, and they often resolve on their own as the child matures. Umbilical hernias also can form in adults of both



genders, especially those with any of the following risk factors:

- Obesity
- Heavy lifting
- Pregnancy
- History of abdominal surgery

Two days after the Emergency Department visit, Zach’s family physician evaluated the hernia as well as his overall health, and referred him to Brent M. Savage, M.D., of Licking Memorial Surgical Services. “Umbilical hernias typically do not require urgent treatment,” Dr. Savage explained, “but Zach was experiencing pain, and the hernia was increasing in size. If the tissue that is protruding through the hernia’s opening becomes twisted or cut off from the blood

supply, the hernia is said to be ‘strangulated,’ and potentially could develop gangrene. We decided to schedule surgery in the near future to avoid the risk of needing surgery on an emergency basis.”

Zach said, “I already assumed that I would need surgery to repair the hernia, and it was an easy decision to have it performed at Licking Memorial Hospital even though I live just as close to other hospitals in Columbus. I liked the idea that all my patient information is connected within Licking Memorial Health Systems’ electronic health records. For me, that was a convenience and an added safety factor.”

Zach’s hernia repair surgery was scheduled on an outpatient basis at LMH for the following week on August 24. In the pre-op room, Kayla was able to accompany Zach until the time of surgery. As they waited, the anesthesiologist spoke with them to answer their questions about the procedure and ensure that Zach did not have a history of anesthesia-related complications.

“The staff attended to Kayla, as well as to me,” Zach said. “They explained everything well to her and confidently addressed all her questions. Her impression of the experience was very positive.”

Zach also had a positive assessment of the care he received. “Everybody on staff was excellent, and I was quite impressed,” he said. “Dr. Savage is a really nice guy – from the outset, he made me feel confident about his skills as a surgeon. I’d recommend him to anyone.”

From arrival to discharge, Zach was at the Hospital for several hours before returning home. “The surgery was very successful, and I had no problems at all. There was minimal pain after the surgery, although I was pretty sore for three days,” he reported.

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 them to benchmark measures. Then, we publish them so you can draw your own conclusions regarding your healthcare choices.

Check out
our Quality
Report Cards online
at www.LMHealth.org.

1 Moderate sedation allows patients to tolerate unpleasant 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 2012	LMH 2013	LMH 2014	LMH Goal
Use of reversal agent for GI procedures	0.13%	0.08%	0.09%	less than 0.90%

2 The healthcare team at Licking Memorial Hospital 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 2014, 7,781 surgeries were performed at LMH.

	LMH 2012	LMH 2013	LMH 2014	LMH Goal
Wrong-site surgeries	0	0	0	0
Surgical site verification checklist completed	99%	99%	99%	100%

3 Receiving the appropriate antibiotic within an hour before surgery reduces a patient's risk for developing infection. Additionally, discontinuing use of antibiotics within 24 hours after surgery lessens the patient's risk of developing antibiotic-resistant bacterial infections. Medical studies have shown that the use of certain antibiotics, specific to each surgery type, can be most effective at preventing infections after surgery.

	LMH 2012	LMH 2013	LMH 2014	National ⁽¹⁾
Antibiotic received within 1 hour	98%	100%	99%	99%
Antibiotic selection accurate per national recommendations	98%	99.6%	99.6%	99%
Antibiotic discontinued within 24 hours	98%	100%	99.6%	98%

4 Some surgeries require the temporary insertion of a catheter into the patient's bladder. The catheter can enable the patient to evacuate the bladder even when unconscious or otherwise incapacitated. However, leaving a catheter in the bladder for too long can increase the risk for a urinary tract infection. Ideally, catheters will be removed within two days following surgery to minimize the risk for this type of infection after surgery.

	LMH 2012	LMH 2013	LMH 2014	National ⁽¹⁾
Urinary catheter removed within two days after surgery	98%	99.6%	99.6%	98%

5 Medical studies have shown that if patients experience hypothermia (low body temperature) during and after surgery, they have a greater risk of developing complications. Effectively warming patients during surgery can ensure their body temperatures remain in normal range. This measure tracks the percentage of patients at LMH who had a normal body temperature immediately after surgery.

	LMH 2012	LMH 2013	LMH 2014	National ⁽¹⁾
Peri-operative temperature within normal range	100%	100%	100%	100%

6 VTE, or venous thromboembolism, is the medical term for a blood clot that forms in a vein. Surgery increases the risk of VTE, and while most clots can be treated, some can be life-threatening. It is recommended that hospitals use medications and mechanical devices to prevent the formation of blood clots. LMH tracks the percentage of patients who correctly had these interventions activated, based on CMS guidelines, within 24 hours of surgery.

	LMH 2012	LMH 2013	LMH 2014	National ⁽¹⁾
VTE prophylaxis started within 24 hours of surgery	97%	99%	100%	99%

7 LMH tracks surgery patients who appropriately receive beta-blocker medications during the peri-operative period. Studies show that in selected patients undergoing non-cardiac surgery, beta-blocker medication can reduce the incidence of heart attack and death.⁽²⁾

	LMH 2012	LMH 2013	LMH 2014	National ⁽¹⁾
Appropriate use of beta blocker prior to admission and peri-operatively	97%	98%	98%	98%

8 Patients undergoing certain surgical procedures as outpatients (not admitted to the hospital) should receive antibiotics before their procedure. Using the correct antibiotics at the correct time can reduce the risk of infections after the procedure.

	LMH 2012	LMH 2013	LMH 2014	National ⁽¹⁾
Outpatient procedure patients with correct antibiotic prescribed	94%	96%	96%	98%

Data Footnotes: (1) *Hospitalcompare.hhs.gov national benchmarks.* (2) *Specifications Manual for National Hospital Inpatient Quality Measures, 2012.*

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“It’s not good that I had to have the surgery, but it’s good that I had it at Licking Memorial Hospital.” Zach was able to return to his work as a floral designer in two weeks, and after a follow-up appointment with Dr. Savage, he was cleared to resume weightlifting.

LMH’s state-of-the-art surgical facilities are located in the John & Mary Alford Pavilion which opened in 2007. Out of the 7,781 surgeries performed in 2014, more than 6,000 took place on an outpatient basis, saving the patients from extended hospital stays and additional expenses.

Health Tips – Tips for Preventing Infection After Surgery

Every infection control protocol is implemented at Licking Memorial Hospital to ensure that each surgical procedure is performed in the safest manner possible. There also are additional steps that patients should take, themselves, to decrease the risk of infection, both before and after surgery.

Before surgery:

- Eat a nutritious diet during the two-week period leading up to your surgery.
- Quit smoking at least two weeks before surgery.
- If you have diabetes, carefully monitor your blood sugar level in the days leading up to the surgery.
- Do not drink alcoholic beverages during the 24 hours prior to surgery.
- Use the germicidal cleanser provided by your physician to shower or bathe the night before and the morning of your surgery.
- Do not shave the surgical site area. The surgical team will perform any necessary shaving immediately prior to surgery.
- Get eight hours of sleep the night before the surgery.

After surgery:

- Wash your hands frequently, and ensure that all your caregivers wash their hands before providing wound care.
- Change dressings as instructed and keep the wound site clean and dry. Do not use ointments unless prescribed.
- Take antibiotics exactly as prescribed by your physician.
- Avoid smoking and exposure to secondhand smoke.



Sentinel Lymph Node Biopsy Conserves Tissue

In most cases, the first step in treating a new diagnosis of breast cancer is to surgically remove all the malignant tissue. Medical science has made many advances since a few decades ago when it was considered best to remove a great deal of tissue surrounding a malignant tumor just “to be safe.” Repeated studies have shown that the outcomes for patients with breast cancer are just as favorable when only the malignancy, as well as a smaller margin of healthy tissue, is removed.

“Patients heal more quickly and have fewer long-range adverse effects when we are able to conserve more healthy tissue,” explained Brent M. Savage, a general surgeon at Licking Memorial Surgical Services. “It is very important to be able to determine whether the cancer has spread beyond the original tumor, and precisely which tissue is involved. The sentinel lymph node biopsy is very effective in helping us to make those determinations.”

Lymph is a clear fluid that contains several substances, including white blood cells to fight infection and nutrients for the body’s tissues. It also transports waste products and foreign substances, such as infections and sometimes tumor cells away from the tissues. The lymph passes through a network of vessels to small, pea-shaped organs called lymph nodes that are located throughout the body. The lymph nodes filter the lymph, removing foreign substances, disposing them into the blood stream so that they can be eliminated from the body. By examining the lymph nodes, physicians can learn whether a malignancy has begun to spread through lymph beyond its original site.

Sentinel lymph nodes are the first lymph nodes to collect cancer cells that have spread because of their proximity to the primary tumor. In the case of breast cancer, the sentinel lymph nodes are usually located in the armpit or behind the breastbone.

At Licking Memorial Hospital (LMH), the sentinel lymph node biopsy is performed on an outpatient basis. After a patient has been diagnosed with breast cancer, a date is set for the sentinel

lymph node biopsy surgery. On that date, the patient reports to registration, and is then shown to the Radiology Department to receive a special radiological tracer injection near the tumor. The patient is then escorted to the operating room to receive anesthesia. The surgeon uses advanced technology to pick up the tracer’s signals which reveal the precise location of the sentinel lymph nodes. The surgeon then is able to take small tissue samples and send them directly to LMH’s Pathology Department for closer examination.

Lori J. Elwood, M.D., chief of Pathology at LMH, said, “The traditional biopsy procedure required the pathologist to examine up to 40 lymph nodes through a microscope for traces of cancer, a process that may take days. Now, the surgeon can, in most patients, isolate and remove only a few sentinel lymph nodes that will reveal the same information. The pathologist is able to perform the studies much more quickly – sometimes with preliminary results available while the patient is still in the operating room. The sentinel lymph node biopsy has been shown to be just as accurate as the traditional method in patients with clinically node-negative breast cancer.”

If the sentinel lymph nodes test positive for cancer cells, the surgeon may decide to remove additional lymph nodes to track other possible areas of cancer in the patient’s body. If the pathology tests are negative, it is likely that no further surgery will be required at that time. The sentinel lymph node biopsy also is used in some cases of melanoma, a form of skin cancer.

“The sentinel lymph node biopsy allows us to conserve as much tissue as possible,” Dr. Savage explained. “This allows the patient to heal more quickly, with fewer complications.”

In the past, patients were required to travel to a larger hospital to have a sentinel lymph node biopsy performed. By offering the testing at LMH, patients can now avoid the inconvenience of traveling out of the area which is a valuable asset, especially during the stressful time of a new cancer diagnosis.