



Surgery Excellence



CHI Health Surgery Center
at Creighton University Medical Center – Bergan Mercy
7710 Mercy Rd, Ste 2000 | Omaha, NE 68124

Fall 2020 | Issue 1
CHIhealth.com/Hernia



Complex Abdominal Wall Reconstruction and Hernia Repair

Expertise, innovation and collaboration are hallmarks of abdominal wall reconstruction program at CHI Health Creighton University Medical Center-Bergan Mercy. Firmly on the forefront of quality outcomes and demonstrable results, our program was approved by the Creighton University Board of Governors more than a decade ago and has since treated more than 2,500 complex abdominal wall defects. Here, state-of-the art care is made possible with the support of primary care physicians and of surgeons around the world.

Advances in Complex Abdominal Reconstruction

Gregg A. Drabek, MD, FACS

Surgical repair of a ventral/incisional hernia has evolved significantly in just the last decade. Driven by poor outcomes -including recurrence, mesh complications, and poor functional results - the techniques employed by surgeons dedicated to abdominal wall reconstruction have evolved to meet the needs of patients.

Mesh engineering has improved with extensive research on the strength of the prosthetic material, tissue ingrowth, and deployment technologies to assist with proper positioning and fixation of mesh. Instrumentation allowing for minimally invasive techniques has served to improve outcomes and enhance recovery.

New anatomic research has led to novel methods of reconstructing

complex incisional hernias to provide for more physiologic results. This includes even those formerly thought not to be amenable to surgical repair due to loss of abdominal domain. Minimally invasive techniques have been developed that may be appropriate for some patients. We hope to cover these in future newsletters.

Methods to repair larger abdominal wall hernias, especially complex and multiply recurrent hernias, have evolved significantly. We now know that “bridging” of abdominal wall defects without actually reapproximating muscular elements results in diastasis and poor abdominal-wall compliance. Improved anatomic understanding of the layers of the abdominal wall has provided opportunities to

improve on our results for both the risk of recurrence and enhanced functional outcomes.

Component separation has become a standard for reconstruction of the abdominal wall for complex hernias. Separation of the lateral abdominal muscle layers (obliques and the transversus abdominis) allows for advancement of the rectus muscles to the midline for re-approximation. This recreates the normal physiology of the abdominal muscle envelope, resulting in an improved function. Placing the mesh within the rectus sheath behind the rectus muscles ensures exclusion of the mesh from the peritoneum while providing for quality reinforcement of the hernia repair to reduce recurrence.

Loss of abdominal domain is often a concern in treating these large and often chronic hernias. When this is a concern, techniques may be employed to expand the abdominal compartment prior to surgery to improve the

chances for closure without tension or risk for abdominal compartment syndrome. These techniques might include tissue expanders in various muscle layers or the use of abdominal insufflation with the implantation of an infusion device into the abdomen. These patients may require multiple procedures and multidisciplinary care from not only the abdominal wall reconstruction surgeons but also plastic surgery, anesthesia, physical therapy, pain management and rehabilitation. Some patients with morbid obesity may derive benefit from an evaluation from our bariatric surgeons to prepare them for hernia surgery.

These procedures result in significant dissection of the space occupied by the hernia. The skin overlying the hernia and hernia sac is at risk for ischemia. Additionally, the hernia space is at risk for seroma. Consequently, excision of the redundant skin and soft tissues is often recommended to alleviate this risk. In some cases, this can provide

for a secondary benefit in removing old scars. If the hernia is low in the abdomen, a panniculectomy may be appropriate, providing the patient with a cosmetic as well as functional result of the hernia repair.

The abdominal wall reconstruction program at CHI Health Creighton University Medical Center-Bergan Mercy offers patients personalized treatment that starts with a thorough preoperative assessment by our experienced surgeons. This includes an initial examination, an in-depth review of the previous abdominal surgeries, a review of previous attempts at reconstruction and the appropriate use of abdominal imaging.

For the convenience and comfort of our patients, we offer virtual care where appropriate, via phone or through video visits. From our patients' first visit to their last follow-up, state-of-the-art care is our standard in treating these complex and challenging conditions.



Meet Our Specialists

To refer a patient to our Abdominal Wall Reconstruction experts, call 402-717-4900.



Robert Fitzgibbons, MD, FACS is the Harry E. Stuckenhoff Professor and Chairman of the department of Surgery at Creighton University School of Medicine in Omaha, Nebraska. For over four decades, his clinical and research efforts have focused on minimally invasive surgery especially as it relates to the management of abdominal wall hernias. He has performed thousands of hernia repairs and has made over 400 national and international presentations primarily on minimally invasive surgery and abdominal wall reconstruction. He is the author of over 300 scholarly publications. He served as the co-editor in Chief of journal "Hernia: The World Journal of Hernias and Abdominal Wall Surgery" for nearly 20 years concluding his term in 2018. He is a past board member of the Society of American Gastrointestinal Endoscopic Surgeons, a Past President of the Society of Laparoendoscopic Surgeons and the American Hernia Society. In addition, he is a member of the American Surgical Association, the Society of Surgeons of the Alimentary Tract, and 21 other societies.



Gregg Drabek, MD, FACS is the medical director of surgical services at CHI Health Clinic and an attending physician and assistant professor in the department of Surgery at Creighton University School of Medicine in Omaha, Nebraska. He has gained extensive experience in hernia repair over the course of his thirty year career in surgery. Dr. Drabek has performed minimally invasive repairs on all types of hernias. His interest grew when he began complex abdominal wall reconstruction ten years ago. In the last three years alone, he has completed over 250 robotic inguinal hernia repairs. He is currently the medical director of surgery and anesthesia for the CHI Health Clinic, a network of 15 acute care hospitals and the university practice plan.