The debate over morcellation continues to heat up, with many hospitals banning the practice and the FDA putting a black box warning on power morcellators.

In this edition of Robotic Surgery Advantage, we continue to discuss steps we are taking to decrease the chance of morcellating a sarcoma and causing harm. In medicine, however, there are risks and benefits to everything. As leading medical associations report on their positions, the data show that by banning morcellation, we will actually be doing more harm than good, due to the increased morbidity and mortality of open surgery versus minimally invasive surgery. Ergo, primum non nocere.

Also in this issue, our bariatric surgeons discuss data outcomes and results from our robust bariatric program that includes using the robot to aid in sleeve gastrectomy.

Bariatric surgery has become a great tool in the battle against obesity that we face in developed countries. By nature, the surgery is difficult. Patients are morbidly obese and have difficult anatomy. Robotics has made these challenges easier and has produced very impressive results.

Being a patient of our program myself, I have lost 261 pounds after a bariatric procedure and thank these fine surgeons every time I see them. This is life-altering surgery.

Finally, we look at the use of robotic surgery in treating cancer that has spread to the chest cavity. Ovarian cancer, for example, requires the combination of surgery and chemotherapy for best results. However, many patients have disease in the chest that is not amenable to standard abdominal debulking surgery and would render a good abdominal surgery suboptimal, if not combined with chest debulking.

Our thoracic surgeons have joined our gynecologic oncologists in our fight of this deadly disease to help debulk these patients both in the abdomen and in the chest with excellent results.

Ricardo Estape, M.D.
Medical Director
Center for Robotic Surgery
Significant media attention has focused on the potential dangers of laparoscopic power morcellation in surgeries for uterine fibroids, and the risk of spreading cancerous tissue in patients with leiomyosarcoma. In response, the Food and Drug Administration (FDA) issued a communication about these risks in April 2014, and some health centers even banned the procedure.

In the months since, however, leading medical associations have raised objections to any broad-based ban on power morcellation. The American College of Obstetricians and Gynecologists (ACOG) and the Society of Gynecologic Oncology (SGO) have issued statements. They assert that, while morcellation does pose dangers for patients with uterine sarcoma, the procedure can continue to provide valuable benefits for women at low risk for the disease.

“We’re paying attention to this important debate, and some Baptist Health surgeons are continuing to use morcellation on appropriately selected patients, while taking steps to reduce the risks that the FDA and others have cited,” said Nicholas Lambrou, M.D., gynecologic oncologist and medical director of minimally invasive gynecologic surgery at South Miami Hospital. “While further evidence is examined, we are using other safe and effective minimally invasive surgical approaches.”

**QUANTIFYING RISKS, TRADE-OFFS**

The SGO statement raised concerns about the data the FDA cited in estimating a higher-than-expected prevalence of uterine sarcoma. Additionally, because leiomyosarcoma is so rare, and survival rates so poor under any circumstances, there is scant data comparing survivability with and without morcellation.

“The evidence is simply not in to warrant a total ban,” said Ricardo Estape, M.D., medical director of the Center for Robotic Surgery. “And when you compare the miniscule number of patients with sarcoma with the huge number of patients who will face higher morbidity and mortality rates with open surgery, you’re doing far more harm than good.”

“Some people assume we’re just doing this to save a couple weeks’ recovery time, but that’s not at all the case,” added Rafael Perez, M.D., medical director of the Fibroid Center at South Miami Hospital. “Patients undergoing laparoscopic surgery have less blood loss and fewer transfusions and embolisms.”

For these reasons, Center for Robotic Surgery physicians believe that power morcellation should be discussed as part of a thorough informed consent process.

**STRATIFYING RISK**

Today, the Center is taking steps to reduce risk as much as possible, such as excluding patients based on age and other risk factors, and performing MRIs and endometrial biopsies in an attempt to detect sarcoma. Intraoperatively, if surgeons detect any suspicious disease within or outside the uterus, they send it for analysis before morcellating.

South Miami Hospital has started a fibroid registry to collect data on every procedure and track outcomes for power and non-power morcellation. The hospital also will participate in a national sarcoma registry being established by the National Institutes of Health.

“Anything we can add to this growing body of research will be important for understanding this rare cancer,” said Dr. Perez. “With our high volume of laparoscopic surgeries, we expect to be at the forefront of this research.”
Thoracic surgeons at Baptist Health South Florida’s Center for Robotic Surgery are bringing advanced weapons to the fight against abdominal cancers that metastasize to the chest.

**ROBOTICALLY REMOVING ALL TRACE OF TUMOR**

Debulking surgery may be performed when certain abdominal cancers—such as epithelial ovarian carcinoma, ovarian sarcoma and uterine sarcoma—invade the chest. “A robotic approach can be used for debulking when there are only a few metastatic masses and they are isolated to a particular part of the chest cavity,” said Mark Dylewski, M.D., chief of general thoracic surgery for Baptist Health Medical Group.

In some cases, Dr. Dylewski and his fellow thoracic surgeon, John DeRosimo, M.D., team up with gynecologic surgeons to perform robotic debulking surgery. “This most commonly occurs when a few isolated metastases to the diaphragm are discovered at the time of resecting an abdominal tumor,” Dr. Dylewski said.

Robotic, video-assisted technology provides a magnified, three-dimensional view inside the chest. The superior visualization combined with the maneuverability of robotic instruments enables the surgeon to operate with enhanced precision and dexterity. Robotic surgery is minimally invasive, allowing for a shorter hospital stay and quicker recovery than conventional open surgery.

For more diffuse cancer, the thoracic surgery team provides a full range of traditional minimally invasive and conventional open procedures, including pleurodesis, extrapleural pneumonectomy and radical pleurectomy. “We have the capability to match our surgical approach to the patient’s needs,” Dr. Dylewski said.

**BATHING THE CHEST IN WARM CHEMOTHERAPY**

Often, cancers that have spread to the pleura cannot be resected completely. In those cases, hyperthermic intrathoracic chemotherapy perfusion may be a possible course of treatment. Baptist Health South Florida is awaiting FDA approval for this innovative approach to treating these cases. “Hyperthermic chemotherapy shows great promise for treating malignancies such as metastatic ovarian cancer, metastatic breast cancer and malignant mesothelioma,” Dr. Dylewski said.

Heating chemotherapy solution is thought to increase its effect upon cells. First, the surgeon debulks as much tumor as possible. Then, warm chemotherapy solution is pumped directly into the chest cavity, where it saturates any remaining tumor. “The goal is to improve patient response and decrease disease recurrence,” he said.

Gynecologic surgeons at Baptist Health South Florida have already achieved excellent results using this approach intraperitoneally to treat recurrent ovarian cancer in the abdomen. Dr. Dylewski said, “I believe that hyperthermic chemotherapy will have a valuable role in managing certain hard-to-treat cancers in the chest as well.”

TO REACH DR. DYLEWSKI, CALL THE BAPTIST HEALTH CENTER FOR ROBOTIC SURGERY AT 786-662-8877.
Study Shows Benefits of Robotic Sleeve Gastrectomy

Laparoscopic sleeve gastrectomy (LSG) has become the most widely used bariatric intervention in the United States, but little research exists examining the potential benefits of a robotic approach.

Physicians with Baptist Health’s Center for Robotic Surgery initially adopted robotic technology for complex, higher-risk cases, such as revisional surgeries. In the last several years, however, the surgeons have expanded its use to robotic sleeve gastrectomy (RSG). Now, in one of the first published studies on the technique, they have demonstrated that RSG offers significant clinical advantages.

“It’s definitely counterintuitive,” said Anthony Gonzalez, M.D., a general surgeon with Baptist Health Medical Group and medical director of South Miami Hospital’s Weight-loss Surgery Program. “Most surgeons imagine that using the robot for a relatively simple procedure like gastric sleeve shouldn’t offer much benefit. We found the exact opposite.”

BROAD-BASED META-ANALYSIS

Dr. Gonzalez, along with his partner Jorge Rabaza, M.D., also a general surgeon with Baptist Health Medical Group, compared 134 RSGs performed by their group with a matched group of 3,148 LSG cases, culled from 22 studies. The results, published in the August 1, 2013, edition of Obesity Surgery, were impressive: RSG patients had no leaks or strictures (compared with 1.97 percent and 0.43 percent of patients, respectively, for LSG) and significantly less bleeding. The lower leak rate is particularly important, as leaks can represent a devastating complication.

The analysis found that, while average RSG surgical time was longer, average hospital length of stay was about one day shorter.

Dr. Rabaza credits these results to the advantages of robotic surgery.

“The robot provides much clearer, three-dimensional visualization of the surgical site, as well as better magnification and much greater range of movement,” he said. “It affords the opportunity to be a more precise surgeon.”

SETTING THE STANDARD

Building on these outcomes, bariatric surgeons at the Center will continue to use robotic technology for sleeve gastrectomies, as well as for gastric bypass and revisional surgeries. While the program remains one of very few nationally to offer RSG, the surgeons believe this will soon change.

“As the benefits of the technique continue to be demonstrated in the literature, we expect many more programs to adopt this approach,” said Dr. Gonzalez. “For now, we are very much on the cutting edge.”

To reach Dr. Gonzalez or Dr. Rabaza, call the Baptist Health Center for Robotic Surgery at 786-662-8877.

“"The robot provides much clearer, three-dimensional visualization of the surgical site, as well as better magnification and much greater range of movement."— Jorge Rabaza, M.D.