

On surgery's CUTTING EDGE

A PRACTITIONER DISCUSSES
TODAY'S ADVANCED MINIMALLY
INVASIVE PROCEDURES

A DECADE AGO, WEIGHT-LOSS operations such as gastric bypass were a novel advance, available at only a few hospitals, including Monmouth Medical Center. Today these procedures are performed at hundreds of institutions nationwide. To find out what's new in surgery today at Monmouth that will become widespread tomorrow, *Monmouth Health & Life* recently spoke with Frank J. Borao, M.D., the hospital's director of minimally invasive surgery and bariatric surgery, who has helped pioneer a number of surgical procedures.

MH&L: *You've been a practicing surgeon for 10 years, the past nine at Monmouth. What drew you to gastrointestinal surgery in general, and minimally invasive surgery in particular?*

DR. BORAO: Well, after medical school at the University of Medicine and Dentistry of New Jersey and my general surgery residency here at Monmouth Medical Center, I completed a fellowship at the Institute for Minimally Invasive Surgery—New York Medical College. There I was exposed to the most cutting-edge advanced minimally invasive procedures at the time. I knew that this was the future of surgery and was able to bring this technology back to central New Jersey.

MH&L: *At that time, was the focus mainly on gastrointestinal procedures?*

DR. BORAO: Yes. The institute was one of the first ones to do bariatric weight-loss surgery, and when I joined



Monmouth we were the only ones doing it in this region. In all, I've done more than 1,000 stomach-related laparoscopic surgeries over the years, giving us the most experience in the area.

MH&L: *Now that weight-loss surgery is fairly commonplace, what procedures can you offer here that can't be found elsewhere?*

DR. BORAO: We're pioneering an operation to fix failed gastric bypass procedures: We were one of only six centers

in the country participating in a trial for the ROSE procedure (restorative obesity surgery—endoluminal), which is performed through the mouth. Over time, the small pouch created during a gastric bypass can become enlarged and the opening can drain the pouch, allowing the patient to eat more and therefore regain weight. We can put specialized endoscopic equipment through the mouth and downsize the pouch and its opening. There are no incisions and virtually no pain. Patients can go home that day. We did 22 of the 120 cases in the trial. This represents the cutting-edge nature of this type of surgery.

MH&L: *What else can you do without open surgery?*

DR. BORAO: We do a lot of what's called "foregut surgery," which involves the stomach and esophagus. There are basically two types of stomach surgery—besides bariatric (weight loss) surgery there's gastrectomy, which is removing part or all of the stomach, mainly because of cancer. We are the only place in the region to do total laparoscopic gastrectomies, removing the entire stomach and reconstructing the esophagus (food pipe) to empty into the intestines without open surgery.

MH&L: *People can live without a stomach?*

DR. BORAO: Yes. The small intestine can be connected to the esophagus and nutrients will still be absorbed in the small bowel. You may lose some weight at first, but your body adapts.

MH&L: *What unusual esophageal surgery can you offer?*

DR. BORAO: There's a condition called achalasia in which the muscles around the esophagus to the stomach are thickened and the valve between them is spastic. This condition makes it very difficult for the patient to eat. We can do a procedure called a Heller myotomy with a laparoscope. We cut all the muscles around the food pipe, then go into the stomach and cut some of those muscles too. We recently did that for a woman who had been on a liquid diet for years. She was transformed into a different person. This is quite a rare condition; we see only a few cases per year.

We are also the only center in the state doing laparoscopic esophagectomies to remove a cancerous esophagus. It is an extremely challenging procedure to perform laparoscopically, because you are removing an

organ that is located in various body compartments. You are operating in the abdomen, chest and sometimes the neck. I do these in conjunction with Anthony Squillaro, M.D., a top-notch cardiothoracic surgeon.

Finally, our experience with minimally invasive paraesophageal hernia repairs—that is, repairs of a very severe kind of hiatal hernia in which most or all of the stomach goes through the diaphragm and into the chest cavity—includes more than 120 successful repairs.

MH&L: It sounds like there isn't much you can't do laparoscopically.

DR. BORAO: We perform the entire spectrum of advanced laparoscopic procedures. Many hospitals say they offer advanced laparoscopic procedures, but in reality they mean hand-assisted laparoscopic operations. An incision is

made large enough to accommodate the use of their hand, which may take away some of the benefits of minimally invasive surgery. There's substantially greater risk of wound complications and hernia formation. We can take out part or all of any solid organ—spleen, kidney, adrenal gland, ovary and uterus—with a laparoscope. We've been doing colon

resections that way for 10 years now. In the rest of the country, fewer than 10 percent are done laparoscopically, and most of those are hand-assist. My partners, Roy Dressner, D.O., and Michael Arvanitis, M.D., are among the few colorectal surgeons performing laparoscopic colectomies in New Jersey. Their experience includes more than 800 cases, one of the highest totals in the tri-state area.

MH&L: *I'm sure the surgeon's skills are a major factor in these advances. What role does the hospital itself play?*

DR. BORAO: That is always a factor, both in performing the procedures and in the outcomes. Monmouth is a great institution. It wants to be cutting-edge, a leader not just in New Jersey but in the whole country. The medical center keeps up with the latest technology and has state-of-the-art operating rooms. These procedures can only happen at a facility that has the resources and leadership to support them. ■

“We perform the entire spectrum of advanced laparoscopic procedures.”

Frank J. Borao, M.D.

For more information on minimally invasive surgery at Monmouth Medical Center, please call 1-888-724-7123.