Medical Center East

Medical Center East Standardizes with SonoSurg™ Ultrasonic Cutting and Coagulation System

Physicians Prefer SonoSurg™, the Reusable Instrument that Costs Much Less to Use than Disposables

The surgical services department at Medical Center East (MCE) is committed to providing the very best patient care possible. They have approached this commitment by providing the latest technology available to their patients and through standardization of technology wherever possible. In MCE’s highly regarded Surgical Weight Loss Program, for instance, surgeons perform 650 Roux-en-Y Gastric Bypasses per year, all using the SonoSurg™ Ultrasonic Cutting and Coagulation System from Olympus.

Why standardize with SonoSurg? Surgeons especially like its efficiency in coagulating as it dissects — compared with the HARMONIC SCALPEL — as well as its ease of use, and automatic mist evacuation. SonoSurg’s reusable, autoclavable probes result in substantial cost savings for MCE over the disposable competition: $218 per surgery, for projected savings of more than $140,000 this year in Bariatric surgery alone.

The hospital has also standardized using Olympus as the vendor of choice for its 10 operating rooms which are now ALPHA O.R.™ build-on-demand O.R. systems. MCE’s ALPHA O.R.s include two EndoALPHA™ centralized O.R. control systems integrated with SonoSurg. VISERA™ Multi-Specialty Digital Imaging Platform and EndoEYE™ surgical videoscopes.

In addition, MCE runs a Surgical Weight Loss Program that has been designated a Bariatric Center of Excellence. Surgeons there perform 650 Roux-en-Y Gastric Bypasses and a number of adjustable banding procedures each year, all using SonoSurg. SonoSurg is also used in laparoscopic Nissen fundoplications and laparoscopic GYN procedures.

The Challenge

Long known for its willingness to invest in innovative technology, the hospital adopted ultrasonic surgery as part of an early commitment to minimally invasive surgery and a bloodless field. It was first used in laparoscopic GYN procedures, where surgeons liked the minimal risk to the patient and saw its advantages in surgery. At that time, the surgical team expanded the use of ultrasonic cutting and coagulation to procedures around the esophagus and for gastric bypasses. This led to the purchase of a HARMONIC SCALPEL, which surgeons began utilizing in 1999.

“When we purchased the HARMONIC SCALPEL, there was much interest in ultrasonic technology,” says DeNene Cofield, RN, BSN, CNOR Administrative Director of Surgical Services. “But the doctors were frustrated because of the plume generated during the procedure and the product’s inconsistency in its ability to dissect and coagulate.” Cost per procedure of the disposable device was also high.
The Olympus® Solution

Surgical services shifted direction in 2000 when Olympus was chosen as the imaging vendor of choice. “As part of the optics evaluation, we brought in an ALPHA O.R. integrated O.R. system with an EndoALPHA centralized O.R. control system to support our Surgical Weight Loss Program,” Cofield says. “In the process we were exposed to SonoSurg and were impressed with the integration between automatic mist evacuation, insufflation, cutting and coagulation. Our physicians discovered that it was much more efficient in the operating room. When we calculated the cost savings using SonoSurg, we were convinced it was the best product for us.” Indeed, SonoSurg offers significant advantages over the HARMONIC SCALPEL; chief among these is cost per surgery. Unlike the HARMONIC SCALPEL, SonoSurg features reusable probes. This exclusive feature delivers significantly lower costs, since each probe can typically be reused 20 times or more. In keeping with the needs of a reusable instrument, SonoSurg is designed for easy assembly and cleaning. It is fully autoclavable and immersible in standard ultrasonic cleaners.

Clinical performance is also better due to the use of 47 KHz frequency modulation. This lower frequency produces a longer wavelength that means more power for faster cutting and superior coagulation. SonoSurg features fully rotatable scissors for reduced physician fatigue and compatibility with cautery for heavy bleeders.

The merits of SonoSurg became clear during a three-month evaluation period managed by the local Olympus representative, who trained the staff and was on hand during surgeries to support the product. The physicians found SonoSurg so efficient in coagulating as it dissects that they didn’t have to go back to control bleeding. “They really appreciate SonoSurg. Superior patient outcomes, great product performance, cost efficient price is our mantra for SonoSurg,” says Cofield.

“We’ve had wonderful support from Olympus in terms of sterilization.

We’ve had no infections and no ill side effects in all of the procedures we’ve done.”

—DeNene Cofield, RN, BSN, CNOR Administrative Director of Surgical Services

“We first thing I noticed was that the SonoSurg™ product is faster, has more power and dissects tissue two to three seconds faster than the HARMONIC SCALPEL without the loss of hemostasis.”

—Dr. Lee Schmitt, MD, General Surgery

possible, minimizing the amount of time the patient spends under anesthesia and in the operating room. Furthermore, complication rates have decreased.”

The nursing staff was also pleased, finding SonoSurg highly intuitive, easy to use and safe. “We like that because the operating room can be technically challenging — it’s a jungle in there,” Cofield says. “So ease of use and safety are key requirements for any product that we introduce.” Autoclavability is another positive aspect, essential in a reusable instrument. “We’ve had wonderful support from Olympus in terms of sterilization,” Cofield says.

The General Surgery Team Leader, Tamara Trudeau, RN, agrees: “SonoSurg is ergonomically intuitive for the physician and easier for the nurse to set up versus the HARMONIC SCALPEL. That is because the set-up is consistent, as compared to the variable settings with the HARMONIC SCALPEL. Training is also very easy, virtually accomplished ‘on the job’, and for the nurses the conversion from the HARMONIC SCALPEL was a very positive experience.”
The Savings

The initial positive reaction led to the purchase of SonoSurg with EndoALPHA for Roux-en-Y and Nissen fundoplications, but scheduling conflicts soon developed: The Weight Loss Program had first priority, relegating concurrent surgeries to the original HARMONIC SCALPEL. “The surgeons complained that they wanted to use SonoSurg with EndoALPHA, and we didn’t appreciate the disposable costs,” says Cofield. “So the general surgery team leader asked us to buy another SonoSurg for use in other rooms.”

That was two years ago, and Medical Center East now has standardized to ALPHA O.R.s, integrated with EndoALPHA, SonoSurg, VISERA and EndoEYE.

During this time the hospital has performed more than 650 SonoSurg surgeries, giving it a clear picture of the cost savings compared to the HARMONIC SCALPEL. They are considerable.

At a cost of $130 per case, versus $348 for the HARMONIC SCALPEL, SonoSurg’s disposable probes save the hospital $218 per case. Projecting that out to the 650 Roux-en-Y procedures it expects to perform in 2003, the savings total $141,700. Physicians are typically getting 20 to 30 uses for each probe, and six to eight months per transducer at a volume of 53 cases per month.

“In the beginning when we started projecting our savings, we wondered if the pricing gap could really be $218 per case — maybe Olympus was overstating the life expectancy of the probes or transducers,” says Cofield. “Since January 2002 we implemented an automated instrument tracking system to track the number of cases per SonoSurg probe as well as the transducer life over time; in fact, the cost savings and use per probe exceeded Olympus’ projections.”

“Rarely does the opportunity arise whereby we can save $50 per case, but with SonoSurg we achieved $218 per case savings; at 650 cases per year that represents a six-figure savings that is truly meaningful to our standard of care,” continues Cofield. “Ultimately this savings directly affects patient outcome, allowing us to cost justify approximately three additional surgical nursing positions.”

For Dr. Miles, cost savings was not a decisive issue; for him, it was all about ease of use and patient outcome. However, in retrospect, Dr. Miles says, “I now appreciate the cost savings as a driving factor in maintaining the Bariatric Center of Excellence program here at MCE. In this era of plunging reimbursements and escalating costs, SonoSurg has facilitated MCE to provide top quality state-of-the-art technology and service to our patients.”

While everyone appreciates the savings, standardizing on SonoSurg was ultimately an issue of better patient care. Says Cofield, “We are very confident that we are continuing to make the right decision to provide SonoSurg to our patients because of the clinical efficacy, and not just because of the cost savings. Olympus understands our core business and our commitment to providing the highest possible quality and best technology; we have found a true partner in the diligent pursuit of our mission in our center of excellence programs.”

“In this era of plunging reimbursements and escalating costs, SonoSurg™ has facilitated...top quality state-of-the-art technology and service to our patients.”

—Robert Leslie Miles Jr., MD, General Surgery

OLYMPUS
Your Vision, Our Future
Purchasing SonoSurg™

Olympus makes several options available, including capital purchase and an innovative Probe Contract that offers a free generator with the purchase of 12 probes over a one-year period. Medical Center East chose capital purchase for its first SonoSurg, when it was ramping up its volume of Bariatric and Nissen procedures; as the procedure volume increased, MCE chose the cost-effective Probe Contract for its next two units.

“Both purchase methods worked beautifully at the time,” Cofield says. “Initially when we were setting up the service, we had the capital available and our volumes were lower. But when we started doing more gastric bypasses and hiatal hernia repairs, we had the volume to justify two Probe Contracts.”

Her advice to surgery departments considering which option to choose? “When the volume is there, the Probe Contract makes perfect sense.”

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For more information about Olympus Financial Services®, call 1-888-4YourRx (496-8779) or visit www.olympusamerica.com/financialservices.