

New Incisionless Surgery to Treat GERD, California First

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Jackie Carr

Every day, more than 20 percent of the U.S. population experiences the painful burning symptoms of gastroesophageal reflux disease (GERD). For these 20 million Americans, the first line of defense is medication. To find a long-term, permanent solution for this nagging condition, the Center for the Future of Surgery at UC San Diego Medical Center is leading a multicenter clinical trial to test the safety and effectiveness of a new incisionless GERD treatment.

"Patients who suffer from GERD find themselves dealing with a debilitating lifelong condition that puts them at risk for a precancerous condition known as Barrett's esophagus," said Santiago Horgan, MD, chief of minimally invasive surgery at UC San Diego Medical Center. "Because GERD is caused by an anatomical abnormality, medication is a temporary aid - only surgery can truly correct the problem. The goal of this clinical trial is to evaluate a scarless technique that eliminates the defect and restores the esophagus to normal function."

GERD is a progressive disease resulting from a weak muscle in the lower esophagus, the organ which passes food to the stomach. When this muscle functions properly, it acts as a protective valve between the esophagus and the stomach, allowing food and liquid to pass, but preventing the reflux or back up of acidic stomach contents. In patients with GERD, the valve is weak or nonfunctional, allowing movement of stomach acids in the wrong direction. The result is often burning pain and ultimately damage to the digestive tract.

During a 45-minute procedure, an endoscope - a long slender tube containing minimally invasive surgical instruments - is gently placed in the patient's mouth, down the throat, and into the upper stomach. Operating an advanced computerized device from outside the patient, Horgan deploys three small titanium staples to attach a small section of the stomach to the upper esophagus. The re-constructed valve prevents stomach acids from flowing back up.

"During this clinical trial procedure, no cuts are made to the patient's abdomen," said Horgan, who is also director of UCSD's Center for the Future of Surgery. "In a traditional laparoscopic procedure, up to five incisions would be made to the patient resulting in a need for stitches, an extended period of healing, and a potential need for pain medication. With this highly precise, no-cut procedure, the primary side effect is a sore throat."

This clinical trial procedure, approved by the UCSD Institutional Review Board, is one of an ongoing series of scarless clinical trial procedures being performed by the UCSD Center for the Future of Surgery. Dedicated to pioneering new minimally invasive surgical techniques, the Center was the first in the United States to remove a diseased appendix through the mouth.

The Center for the Future of Surgery will break ground in November 2009 on a state-of-the art training facility as part of the new UCSD School of Medicine, Medical Education Building. In its new location, the Center will be the first of its kind in the nation with a mission of testing safe and effective surgical techniques and teaching these approaches to the next generation of surgical pioneers.

This clinical trial is sponsored by Medigus.

To qualify for this study, patients must have a history of reflux symptoms and must be taking GERD medications on a daily basis. To inquire about this study, please call 619-471-0447.

Media Contact: Jackie Carr, 619-543-6163, jcarr@ucsd.edu

