Obesity Surgery Performed Through Vagina, U.S. First

*ScienceDaily (Sep. 25, 2008)* — On Tuesday, September 16, 2008, the UC San Diego Center for the Future of Surgery performed the nation’s first gastrectomy, a partial removal of the stomach, through the vagina. This new “natural orifice” technique may be an attractive alternative for the 200,000 U.S. patients who undergo surgery for the treatment of obesity each year.

“More than 15 million people in the United States suffer from severe obesity,” said Santiago Horgan, M.D., director of the UC San Diego Center for the Future of Surgery and Center for the Treatment of Obesity. “The Center for the Future of Surgery at UC San Diego is developing and testing innovative techniques that will offer patients globally more and better treatment options.”

The sleeve gastrectomy is a weight loss surgery in which 80 percent of the stomach is removed, leaving a slender moon-shaped stomach. The procedure works by dramatically reducing the size of the stomach so that the patient feels full after eating less, takes in fewer calories, and loses weight. This is the first time the minimally invasive procedure has been performed in the U.S. through one of the body’s natural openings.

The patient, Maria Soto, 29, of Escondido, California, is 5 feet tall and weighed 253 pounds before surgery. As a six year-old child, Soto suffered from polio which caused permanent disability in her leg, and ongoing back pain, preventing her from exercising regularly.

“I chose this surgery because I needed to lose weight and wanted a procedure that offered less pain and fast healing. Years ago, I had my gallbladder removed and the procedure resulted in two post operative hernias. I didn’t want to risk that again,” said Soto. “I liked this option because there were only two small incisions and a short hospital stay.”

The 75-minute procedure at UC San Diego Medical Center was performed with two millimeter-sized incisions versus the five incisions required by a traditional laparoscopic procedure. One incision was placed in the belly button through which a camera was placed to safely view the abdomen. The second incision was placed just below the sternum to insert an instrument to retract the liver.

The gastrectomy, or partial stomach removal, was then performed by entering the vagina and making a small incision behind the uterus through which the abdomen and stomach could be accessed with surgical tools. The stomach was reduced in size using conventional surgical staplers. The excess stomach was then pulled down through the abdomen and out of the vagina. The process of performing surgery through a natural opening is known as Natural Orifice Translumenal Endoscopic Surgery or NOTES.

“This is another milestone for Dr. Horgan and his team at the UC San Diego Center for the Future of Surgery. Our goal is to continually improve and expand surgery options using emerging technology so that patients experience less pain and better outcomes,” said Mark A. Talamini, M.D., professor and chair of surgery at UC San Diego Medical Center and president of The Society of American Gastrointestinal and Endoscopic Surgeons.

The UC San Diego Center for the Future of Surgery has performed 30 natural orifice clinical trial surgeries. Surgeons at UC San Diego Medical Center were the first in the United States to remove an appendix through the mouth and an appendix through the vagina. These minimally
invasive techniques hold promise for future gastrointestinal and esophageal surgeries including treatments such as tumor removal for cancer.

Members of the surgery team included Santiago Horgan, M.D., Garth Jacobsen, M.D., Lauren Fischer, M.D., Brian Wong, M.D. and James Nguyen, M.D.

Adapted from materials provided by University of California, San Diego Health Sciences.