



Promising Future For Scarless Surgery Reported At DDW 2009

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Researchers present the latest advances in a technology that continues to change the face of gastroenterology and surgery, known as Natural Orifice Translumenal Endoscopic Surgery®, or NOTES®, at Digestive Disease Week® 2009 (DDW®). NOTES eliminates the need for incisions and allows for less pain and scarring associated with traditional laparoscopic surgery along with a much faster recovery time for the patient. Study findings and video demonstration will illustrate the most recent NOTES applications including cholecystectomy, appendectomy and gastrectomy. DDW is the largest international gathering of physicians and researchers in the fields of gastroenterology, hepatology, endoscopy and gastrointestinal surgery.

"The potential of NOTES and near-NOTES procedures is being demonstrated," said Michael L. Kochman, MD, FASGE, AGAF, Hospital of the University of Pennsylvania and NOscar® Research Subcommittee co-chair. "These latest studies show that surgeries that once subjected patients to significant pain and recovery time may become a thing of the past."

NOTES is performed by passing an endoscope through a natural orifice, or opening, then through an internal incision in the stomach, vagina, bladder or colon, thus avoiding any external incisions or scars.

Transoral Gastroplasty. A Novel Technique For Incisionless Weight Loss Surgery (Abstract #1016)

Researchers will present for the first time early results and a video demonstration of a promising new technique for incisionless weight loss surgery known as Transoral Gastroplasty.

The novel procedure, aimed at patients in need of intermediate weight loss, involves placing a device into the stomach that uses a vacuum to bring the sides of the stomach together and stapling them without the necessity of making incisions in the abdominal wall. The video presented by the researchers, Edward Phillips, MD, and Kai Nishi, MD, of the Comprehensive Weight Loss Center at Cedars-Sinai Medical Center, is the first demonstration of the instrument being used in a procedure involving humans.

Because the study is part of an FDA clinical trial, researchers cannot yet share the findings of their study, but are confident that the weight loss results will prove to be as effective as more traditional weight loss surgeries without the complicated recovery involved in those methods.



"Any time you can avoid making an incision in a patient, you dramatically improve their recovery," said Dr. Phillips. "This procedure holds tremendous promise not only for weight loss, but for any procedure that currently requires abdominal incisions."

Drs. Phillips and Nishi will present their video on Wednesday, June 3 at 9:45 a.m. CDT in S504, McCormick Place.

NOTES Transvaginal Sleeve Gastrectomy - Initial Human Experience in the United States (Abstract #527)

The first uses of Natural Orifice Translumenal Endoscopic Surgery (or NOTES) to perform transvaginal sleeve gastrectomy in morbidly obese patients show promise, according to researchers at the University of California San Diego (UCSD) who say this could be a far less painful and dangerous surgical weight loss option.

The transvaginal sleeve gastrectomy requires surgeons to make two small incisions in the abdomen and one in the vagina to remove 70 percent of the patient's stomach. By contrast, laparoscopic gastrectomy requires five to seven larger incisions in the abdomen that can cause significant scarring and put patients at risk for infections and hernias.

"Compared to traditional laparoscopic techniques in which patients experience a high incidence of infections and hernias, the results so far indicate this procedure accelerates weight loss while minimizing adverse events," said Santiago Horgan, MD, professor of surgery at UCSD.

In the first two patients to undergo the procedure, no infection was reported. Horgan said he and his colleagues are optimistic that transvaginal sleeve gastrectomy is a viable option for weight loss in morbidly obese patients, but they caution that more patients need to undergo the procedure under IRB protocols to demonstrate its efficacy.

NOTES Transvaginal Appendectomy (Abstract #639)

Appendectomies are the latest, successful use of NOTES according to researchers at the University of California, San Diego (UCSD). Initial results suggest transvaginal appendectomy is a promising, emerging technique for acute appendicitis.

Under IRB protocol, a team of surgeons at UCSD performed transvaginal appendectomies in two patients. Surgeons removed the appendix using the vagina as the port of entry to the peritoneal cavity. Unlike in standard laparoscopic transabdominal appendectomy, which requires several abdominal incisions, transvaginal appendectomy requires only two small incisions, one in the abdomen and one in the vagina.

Santiago Horgan, MD, professor of surgery at UCSD, and his colleagues are the first to perform appendectomies transvaginally. Previous NOTES research has demonstrated the efficacy of transvaginal removal of other organs including the gallbladder and pancreas. Similar to those studies, initial results show the benefits of NOTES over transabdominal laparoscopic surgery including less pain, scarring and incidence of infection and hernia, as well as quicker recovery



time.

"Our initial results suggest when appendectomies are performed transvaginally, patients experience less pain, fewer complications and are on their feet in three to four days," said Dr. Horgan. "While we have enough data to prove that the procedure is safe, the question now is to see if it can be duplicated successfully in a larger sample of patients."

Transvaginal NOTES Cholecystectomy: Postoperative Gynecological Evaluation (Abstract #S1392)

Researchers at Hospital Bocalandro at the University of Buenos Aires have successfully performed cholecystectomy, or removal of the gallbladder, using ground breaking NOTES techniques. This procedure allows access to the abdominal cavity and removal of organs without the need for visible incisions.

Using a hybrid NOTES technique including a laparoscopic control, videogastroscope and forceps, doctors successfully removed the gall bladder through the vagina in 21 of the 22 patients enrolled in the study. One patient could not complete the procedure due to pelvic adhesions.

Gynecological assessment was performed at seven, 30 and 60 days post-procedure and included both a physical exam and a patient questionnaire regarding the procedure and recovery. All 21 patients healed successfully with no complications, were able to resume sexual activity without pain following the brief recovery period, and reported no change in sexual desire. Each of the patients rated their satisfaction with the procedure as "excellent" or "very good" and each said they would undergo the NOTES procedure again. Two patients have become pregnant post-procedure, one of whom has had a normal birth delivery with no complications, the other is not yet full term.

"Gallbladder removal using the NOTES procedure is remarkably safe and effective. We can eliminate the pain and recovery time of traditional surgery without introducing complications, either gynecological or sexual, for the patient," said Oscar M. Laudanno, MD, chief of gastroenterology at Hospital Bocalandro.

Source:
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