

New Technique to Remove Large Colon Polyps, California First

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For the first time in the western United States, a surgical team lead by Elisabeth McLemore, MD, has used a novel operating platform to perform the scarless removal of rectal tumors. Called Trans-Anal Minimally Invasive Surgery (TAMIS), the technique allows surgeons to excise large polyps and masses that cannot be completely removed during a routine colonoscopy.

"With the use of this new surgical platform, we can now offer patients an innovative, less invasive procedure to remove advanced polyps with significantly less pain and scarring compared to the standard surgical procedure," said McLemore, colorectal surgeon at UC San Diego Moores Cancer Center and the third surgeon in the world to perform the procedure. "Instead of a major abdominal operation with removal and reconstruction of the colon and rectum, we can remove the growth by operating through an existing natural body opening."

During a TAMIS procedure, thin surgical instruments are placed through a soft but stable surgical platform that rests inside the anus. The platform permits full visualization of the rectal growth allowing surgeons to precisely access and excise the abnormality. The intact growth can be removed through the anus allowing pathologists to more accurately evaluate and diagnose its thickness. The defect where the growth was removed is then closed with internal stitches. There are no permanent scars on the abdomen or around the anus.

Polyps are abnormal clusters of cells that grow along the lining of the rectum and colon. While most polyps are harmless, some develop into colon and rectal cancer. Polyps are usually identified and treated during a colonoscopy, a procedure to visually examine the colon from the cecum to the rectum. Polyps may range in size from 3-10 cm and can be fully excised using the TAMIS technique.

McLemore believes that TAMIS will likely serve as the platform for rectal natural orifice transluminal endoscopic surgery (NOTES), which has not been done yet in the U.S. TAMIS may also have future implications for treating patients with familial adenomatous polyposis, Gardner's syndrome and Lynch syndrome, inherited genetic conditions that result in the mass growth of polyps.

"I am hopeful that with time, we may be able to safely remove the entire colon and rectum through the anus without the need to make incisions in the abdomen," said McLemore.

"What we are seeing here is an evolution of natural orifice transluminal endoscopic surgery, the ability to perform complex operations through natural body openings," said Mark Talamini, MD, professor and chairman of surgery and co-director of the Center for the Future of Surgery at UC San Diego Health System. "Four years ago we predicted that NOTES would evolve to treat early forms of cancers and that is what we are seeing now at UC San Diego. Dr. McLemore is making this a reality."

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