



Minimally invasive approach to removing rectal tumors now available: Transanal Endoscopic Microsurgery (TEM)

Missouri Baptist Medical Center is now one of the few hospitals in the U.S. to have on-staff surgeons able to perform a unique minimally invasive surgical procedure for patients with anal polyps and rectal tumors — transanal endoscopic microsurgery or TEM.

The hospital purchased the required microsurgery suite of equipment needed for its trained colorectal surgeons to perform TEM. Physicians trained in TEM can remove tumors through the anus, offering many benefits to patients. In many cases, patients can avoid a major abdominal surgery.

Both benign and malignant rectal lesions can be excised with TEM. Rectal adenomas should be excised or ablated. Increases in sizes of adenomas carry a potential risk in the development of cancer. Patients also often require treatment for relief of symptoms, which can include rectal bleeding, tenesmus and discharge of mucous. TEM is feasible for selected patients with favorable tumors of the rectum and distal sigmoid colon that lie within 20 cm of the anus, and is potentially safer than major abdominal surgery, especially for unfit and elderly patients.

Direct patient benefits:

TEM provides:

- A less invasive approach for patients than radical rectal surgery (there are no incisions)
- Faster recovery for patients after surgery
- Fewer complications than major rectal surgery
- Access through the anus to tumors that are not readily accessible by other methods

- Decreased rates of recurrence for benign adenomas removed by TEM compared to those removed by standard transanal excision.

Medical benefits:

The surgery:

- Allows for more precise tumor resection as TEM provides better visual clarity of the operative area
- Helps avoid the need for abdominal operations and possibly the need for colostomy
- Permits most specimens to be removed intact; thereby improving the pathologist's ability to perform an evaluation
- Reduces the risk of morbidity and mortality compared to major rectal surgery, especially in older and unfit patients.

Trained and certified TEM specialists:

Missouri Baptist Medical Center now has two trained specialists in TEM:

- Colorectal surgeon, Eric D. Lederman, MD
- Colorectal surgeon, Lawrence G. Mendelow, MD

History:

TEM has been slow to gain in popularity primarily because of the equipment expense and the training required for physicians to perform the procedure. TEM, which was developed in the early 1980s by Gerhard Buess, MD, in Germany, has been used in Europe for two decades.

TEM equipment:

This endoscopic technique is performed “inside” a cylinder 4 centimeters in diameter by trained specialists. Two different lengths of proctoscopes enable physicians to access polyps at different locations within the rectum.

Pre-operative:

Patients must have full bowel preparation prior to surgery.

During surgery:

The surgery is performed under general anesthesia and the entire procedure is performed transanally. (In the event of an unexpected complication, the procedure can be converted

immediately to an abdominal procedure.) The surgery may take anywhere from 30 minutes to three hours, depending on the size of the lesions and the scope of the procedure, with most TEM procedures taking about one hour.

Post-surgery:

Patients are generally released within 24-48 hours, and are able to eat and drink almost immediately. Some temporary incontinence may occur, usually lasting for only a few days.

Other advantages of TEM:

TEM can be performed as a first line of treatment since it does not preclude radical surgery, if later needed, and TEM can be repeated to excise recurring tumors.

For more information, or to refer a patient, please call:
Physician Referral Services
314-996-LIFE (5433)

