TRANSANAL ENDOSCOPIC MICRO-SURGERY (TEMS)

Transanal Endoscopic Micro-Surgery (TEMS) allows for the removal of benign polyps of the rectum without need for conventional surgery. It has many benefits over conventional surgery, is safe, and allows for early discharge being performed as a day-stay procedure.

Figure 1. TEMS microscope being inserted into the rectum

Recovery is quicker than conventional surgery with discharge from hospital the following day.

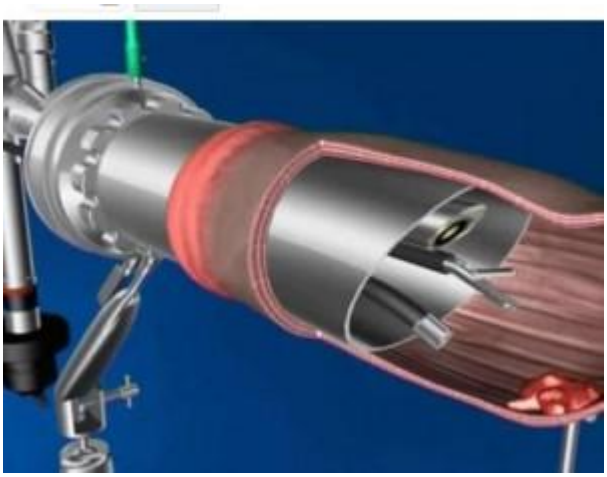

Figure 2. TEMs scope is inserted into the rectum allowing instrument insertion for removal of a benign polyp.

INDICATION FOR TEMS

TEMs is indicated for benign polyps of the rectum. In certain circumstances, it may have a role for early cancer within a polyp provided strict criteria are adhered to and include the following:

1. Small cancer (<3cm) in a mobile polyp
2. Cancer is not poorly differentiated
3. There is no lymphovascular invasion
4. Margins are clear

SALVAGE SURGERY

Patients who undergo TEMS and subsequently are discovered to not meet the above criteria should then be advised to undergo conventional surgery, with excellent survival with rates with immediate salvage surgery compared to delayed salvage surgery once a recurrence is found [1-3].

BENEFITS OF TEMS

The benefit of TEMS over other endoscopic surgical technique (EMR AND ESD) include better exposure and control, with complete removal of the lesion in one piece. It also avoids major surgery and the need for a stoma.

WHAT TO EXPECT PRE AND POST OPERATIVELY FOR TEMS SURGERY

A normal diet without bowel prep is required the day before surgery. You need to fast from midnight the night before if your surgery is scheduled for the morning, or from 6am if scheduled for the afternoon. You will be admitted as a day-stay procedure. You will receive a fleet® enema 1-2 hours prior to your TEMS operation.

Following your procedure, you will recover for a hour until the effects of sedatives have worn off. You should not drive yourself home after your procedure and should have someone organised (a friend or relative) to accompany you.

You will be sent home on a course of the oral antibiotic metronidazole (Flagyl®). This will prevent infection and inflammation to the surgical site. You should also remain on regular laxatives and simple analgesics for 1 week. We recommend taking twice daily a tablespoon of natural psyllium husk (Metamucil® or Fibogel®), and 30ml of lactulose (Duphalac®). It is not unusual for there to be some pain to the anal region in the first week following surgery. For pain we recommend after each meal 400mg of ibuprofen (Brufen®) and 1g of paracetamol. Opioid medications (Codeine and Morphine) should be avoided as they cause constipation. Twice daily warm to hot salt water (sitz) bathing to the anal region is soothing and antiseptic, and should be done for 1 week following your procedure.

You should follow up with your colorectal surgeon in 6 weeks to review your wound and discuss further management if indicated.

References

1. Baron PL, Enker WE, Zakowski MF, Urmacher C. Immediate vs. Salvage Resection After Local Treatment for Early Rectal Cancer. Diseases of the Colon and Rectum 38(2): 177-181, 1995

2.Friel CM, Cromwell JW, Marra C, et al. Salvage radical surgery after failed local excision for early rectal cancer. Dis Colon Rectum. 2002;45:875–879

3.Hahnloser D, Wolff B, Larson D, Ping J, Nivatvongs S. Immediate radical resection after local excision of rectal cancer: an oncologic compromise? Diseases of the Colonand Rectum 48(3): 429-37, 2005.