

## Patient information

# Transanal Endoscopic Microsurgery (TEMS)

## Digestive Diseases Care Group

TEMS enables a specially trained surgeon to remove benign polyps or cancerous growths from the rectum without removing the rectum and without an abdominal incision. The procedure will be completed whilst you are fully anaesthetised.

### **What sort of anaesthetic will be given to me?**

You will be given a general anaesthetic. General anaesthesia is drug-induced unconsciousness: it is always provided by an anaesthetist, who is a doctor with specialist training.

Unfortunately, general anaesthesia can cause side effects and complications. Side effects are common, but are usually short-lived: they include nausea, confusion and pain. Complications are very rare, but can cause lasting injury: they include serious allergic reaction (anaphylaxis), waking up during the operation, paralysis and death.

There is a risk of damage to teeth, particularly caps or crowns and veneers. Your anaesthetist will take every care, but occasionally damage can occur.

The risks of anaesthesia and surgery are lower for those who are undergoing minor surgery, and who are young, fit, active and well.

For more information, please ask for a copy of the leaflet **“You and Your Anaesthetic”** (PIF 344).

You will be given an opportunity to discuss anaesthetic options and risks with your anaesthetist before your surgery.

**If you are worried about any of these risks, please speak to your Consultant or a member of their team.**

During the TEMS procedure, an operating proctoscope is placed through the anus and positioned over the lesion.

The rectum is filled with carbon dioxide gas so there is room to work. A special microscope is used to look at the area, directly and with a video camera. Long instruments are then used to grasp, cut, and suture.

## **What is it used for?**

This procedure is used to remove benign (non-cancerous) polyps and small rectal tumours (cancerous) which cannot be removed any other way other than with a major operation. Previously difficult or large polyps in the rectum were either partially treated by endoscopic removal (a small tube inserted into back passage) or had to be treated by major surgery to remove the back passage (rectum). This procedure means that more of these polyps can be removed completely without major surgery.

## **Why have you been offered this procedure?**

It may not yet be known whether the lesion is a cancer or benign. TEMS allows the lesion to be analysed under the microscope for diagnostic purposes.

There may be a polyp in the back passage which is causing symptoms and you have been advised to avoid major surgery either because of anaesthetic risks or to avoid a stoma (the bowel is brought out through the abdominal wall)

TEMS resection is considered a treatment for early rectal cancer based on results of clinical examination, endoscopy, ultrasound and imaging.

It is only offered in selected cases that have been discussed in our specialist early rectal cancer multidisciplinary meeting.

It is also important to be aware that TEMS will sometimes provide a large biopsy and that further analysis may still be advised for major conventional surgery.

## **What are the benefits of this operation?**

This operation means that these polyps (non-cancerous) and small early rectal tumours (cancerous) can be removed completely without major Surgery.

TEMS may also provide a definitive answer as to whether a polyp is benign (non-cancerous) or malignant, or be curative for some small tumours.

## **Before your operation**

You will attend a pre-operative clinic, when you will meet a member of the medical team. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations. Please ask us any questions and feel free to discuss any concerns you may have at this time.

## **Who will perform my procedure?**

TEMS is a specialist procedure that will only be performed by a Consultant Colorectal Surgeon.

## **Alternative procedures which are available**

If it is not yet known whether a polyp is cancerous or not, it is sometimes possible to try and remove the polyp during a Colonoscopy. However this frequently involves the polyp being removed in several pieces, rather than one specimen.

This may make interpretation of the polyp in the laboratory more difficult, for example, as to whether the polyp has been adequately removed or not.

Some tumours low in the back passage can be removed under direct vision. This procedure is known as transanal resection of tumour (TART). It can only be used for very low tumours for example if a polyp is prolapsing (descending) out of the back passage.

Some people prefer not to have any treatment at all. The implications of this will be discussed with you at your appointment.

### **What should I expect before the operation?**

The back passage needs to be completely empty for this operation to be performed. You may have to take a fluid preparation (Picolax/Moviprep) the night before Surgery or the back passage may be cleared using enemas on the day of Surgery.

On the day of the procedure you will be asked to not eat for six hours before the surgery and drink only clear fluids two hours prior to surgery. Nothing is allowed by mouth after two hours before surgery apart from normal medication with a sip of water.

### **What should I expect after the operation?**

Most people will feel fine after this operation. Some may feel dizzy, sick or have general aches and pains.

You will be able to eat and drink as soon as you feel able to do so. We will encourage you to try and get up and about as soon as possible. Most people who have had this procedure can resume normal activities after a couple of days.

You are likely to stay in hospital two to three days after your operation. There is usually very little pain after this surgery.

Inflammation may occur in the rectum where the surgery has been performed which may cause discomfort in the back passage but you should be able to get up and about after the surgery.

Occasionally due to inflammation you may notice that your motions (stools) are quite loose.

A temperature is common after the operation.

### **What are the risks of TEMS?**

Although TEMS is a minimally invasive technique with lower risks than major abdominal surgery, it still carries some risks.

**Bleeding** – a small amount of bleeding from the site of Surgery often happens up to two days after the procedure. It usually stops by itself without further problems.

There is a 1 in a 100 risk of significant postoperative bleeding (haemorrhage). A blood transfusion may be required. Occasionally it is necessary to stop the bleeding with another small operation.

**Pelvic Inflammation** – the area where the polyp has been removed can lead to inflammation around the back passage. This can be treated with a course of antibiotics and rarely causes problems.

If you develop severe pain in the lower abdomen, back passage or low back area these are signs that infection may be developing. You should either see your family doctor (GP) or consult the Hospital promptly taking this leaflet with you.

**Incontinence** – you may experience slight staining of underwear and seepage of mucus from the back passage for a little while after the operation or have difficulty controlling gas for about two to three months after surgery.

This is not uncommon due to the gentle stretching of the back passage (anus) during the operation. This almost always comes back to normal without any treatment.

**Emptying of the bladder** (urination) may be temporarily impaired due to the type of anaesthetic used and pressure from the operating microscope. This usually resolves within a few hours. It may be necessary to temporarily insert a catheter into the bladder to drain urine if this occurs.

**Major Surgery** – sometimes it is not possible to complete this operation using the TEMS procedure. Very occasionally this means us using conventional surgery to remove the polyp. If this is a possibility it will be discussed with you before the operation by the surgeon.

Your Consultant Colorectal is Mr Shakil Ahmed.

Patient choice is an important part of your care. You have the right to change your mind at any time, even after you have given consent.

### **Feedback**

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

### **Further information**

**If you have any further questions or concerns please contact**

**Ashley Keogh**

**Colorectal Nurse**

**Tel: 0151 706 3453**

**Text phone number: 18001 0151 706 3453**

**Bowel Cancer UK**

**Tel: 08008403540**

**[www.bowelcanceruk.org.uk](http://www.bowelcanceruk.org.uk)**

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