

Transanal Endoscopic Microsurgery (TEMs)

Introduction

This leaflet gives you information about the operation known as Transanal Endoscopic Microsurgery (TEMs). It explains what the operation involves and some of the common complications associated with it.

What is TEMs?

TEMs is a specialist operating system, designed to be performed within the rectum (back passage) using a specialist microscope under a general anaesthetic (while you are asleep). There are usually no cuts or wounds either in the abdomen or the perineum (the external area around the back passage).

What is TEMs used for?

TEMs is most commonly used to remove benign (non-cancerous) polyps from the rectum. In the past, difficult to remove or awkward polyps in the rectum were either partially treated by burning or scraping away or by major surgery which involved removal of the rectum. By using TEMs more of the polyps can be removed completely, without the need for major surgery.

Sometimes, TEMs is used to remove small cancers from the rectum. This is either because the cancer is in the early stages or because a major operation is not possible.

What investigations will I need for this procedure?

Flexible sigmoidoscopy

This procedure involves using a flexible telescope to look inside the rectum. It is usually done without the need for any sedation or anaesthetic.

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Patient Information

This gives us a clear idea of what the polyp looks like and allows the consultant to assess whether your polyp is suitable for the TEMs surgery. A leaflet explaining the procedure will be provided with your appointment letter.

A Trans Rectal Ultrasound Scan (TRUS)

This is a scan of the polyp performed through the back passage. It assesses your polyp and the surrounding tissues in the rectum.

This may be done at the same appointment as the flexible sigmoidoscopy or a separate appointment may be needed depending on circumstances. This procedure does not require any sedation.

Before the flexible sigmoidoscopy and TRUS investigation, you will require an enema to empty your rectum to allow the consultant to clearly assess the polyp. This is often done at home before you come to the hospital for your appointment.

If you have any concerns about doing this, the enema can be given by the nursing staff on arrival in the endoscopy department.

How long will I be in hospital?

The TEMs operation is regularly performed as a day-case (where you are admitted on the day of your surgery and allowed home that afternoon or evening) but occasionally an in-patient stay of one or more nights is needed. This is usually due to past or current medical history or if the operation is likely to be long or difficult.

Pre-admission clinic

You will be asked to attend a pre-admission clinic before your operation. This may be on the day of your flexible sigmoidoscopy and TRUS investigations. **Please allow up to 2 hours for this clinic visit.**

While you are at the clinic, we will take a detailed past medical history and assess your heart and lungs in preparation for the operation. A series of tests, such as blood pressure, pulse and an ECG (reading of your heart rate) will be performed.

Patient Information

Please bring a list of any medications you are currently taking. Should any further investigations be needed, you will be notified by the nurse practitioner or doctor. You will also be given information about when to stop eating and drinking before the operation.

Your consultant's secretary will then contact you with an offer of a date for your operation and a copy of your appointment details will be sent to you in the post.

On the day of your operation

Please arrive at the Day Surgery Unit where you will be prepared for theatre. If you haven't had your enema at home, you will be given one before the procedure to empty the rectum. The anaesthetist and a doctor will visit you on the unit and explain the procedure to you before asking you to sign a consent form.

What to expect after the operation

- Inflammation in the rectum where the surgery has been performed may cause discomfort in the back passage. This may be more severe if the polyp is very low down in the rectum and the anal canal (the 'tail end' itself) becomes inflamed. The consultant will discuss the details of your surgery and any risks before the operation. You should be able to get up and about soon after the surgery.
- A raised temperature is common after the operation and your consultant may prescribe 5 days of antibiotics. Please complete the course as directed.

Possible complications

- Bleeding – some bleeding and discharge from the surgery site often happens up to 7 days after the operation. The bleeding usually stops by itself without further surgery. Occasionally, a larger bleed can happen in the first week or so after surgery. Although this can be alarming, it usually stops by itself but around 3 in every 100 patients may have a larger bleed which will require a further operation or a blood transfusion.

Patient Information

- Pelvic inflammation – the raw area in the rectum where the polyp has been removed can lead to inflammation around the back passage. This is usually treated with a course of antibiotics and observation but rarely causes serious problems. Abscesses or infections spreading outside the rectum which need further treatment or major surgery happen in fewer than 2 in every 100 cases.
- Incontinence – you may experience slight staining of your underwear and a discharge of mucus for a little while after the operation. This is common and is due to the gentle stretching of the anus (tail end) during the operation. This almost always returns back to normal without any treatment.
- Major surgery – sometimes it is not possible to complete the operation using TEMs and occasionally, this means having to revert to conventional major surgery to remove the polyp. Where possible, this will be discussed with you before the operation, particularly if it is possible that this would go ahead under the same anaesthetic.
- Narrowing of the rectum – where a polyp is removed a small amount of scarring in the lining of the rectum happens but this does not normally cause any problems. If the polyp is very large and involves a large area of the lining of the rectum then scarring may happen causing narrowing of the rectum.
This can usually be successfully treated, under a general anaesthetic, with 1 or 2 minor procedures to stretch the rectum.

Other complications from the surgery

- Chest infection - you can help by practicing deep breathing exercises. If you smoke, we strongly advise you to stop.
- Thrombosis (blood clot in the leg) - surgery carries a small risk of a clot formation in the leg. To reduce this risk, if you stay overnight a small dose of blood thinning medication will be given by injection. You will also be fitted with some support stockings to be worn during your hospital stay. You can help to reduce the risk of thrombosis by moving around as much as you are able and by exercising your legs while in the bed or chair.

Patient Information

- Pulmonary embolism (blood clot in the lung) - rarely, a blood clot from the leg can break off and become lodged in the lungs. This would need treatment with blood thinning medication.
- Risk to life - your surgeon and anaesthetist will discuss this risk with you. Most people will not experience any serious complications from their surgery. However, risks do increase with age and for those who already have heart, chest or other medical conditions such as diabetes or for those who are overweight or smoke. For most people this risk is very low.

What alternatives to the TEMs are there?

The options to remove polyps or tumours of the rectum vary according to their size and position and this will usually be discussed in detail with you before deciding on the TEMs surgery.

- Major surgery – an operation to remove part or the entire rectum (back passage) is sometimes the main alternative where the growth is cancerous or suspected to be so. This is a much larger procedure and would be discussed with you in detail before surgery.
- Endoscopic (telescope) removal – sometimes polyps can be removed by an endoscopy procedure. This usually removes the polyp in many pieces and can make assessment of the polyp in the laboratory more complicated. Endoscopic removal can be used when the polyp cannot be reached by the TEMs or when the risk may be lower using this method.
- No treatment – very rarely it is felt that any attempt at removal is too great a risk and the best treatment is not to do anything. This would be discussed with you if it were considered.

**Patient
Information**

After you return home

You will need to arrange for a lift home and somebody will need to be with you overnight. If you feel unwell overnight, please return to the hospital Emergency Department to be reviewed.

Do not drive until you can comfortably carry out an emergency stop.

It is important that you remain mobile during the next few days but do not do any strenuous exercise for a couple of weeks.

You should not operate any machinery or sign any legally binding documents for 24 hours after having an anaesthetic.

Follow-up

If you live locally, your consultant may write to you or an appointment will be made for you to see your consultant in clinic when the results are available.

If you live out of Gloucestershire, your consultant will write to both you and your local colorectal consultant with the results. An appointment will be made locally for you to discuss the results if needed.

Contact information

If you need any further information, please contact your consultant's secretary and they will arrange for a specialist nurse or doctor to contact you. If your call is not answered, please leave your name, telephone number and a brief message on the answerphone. Your call will be returned as soon as possible.

Mr Neil Borley's secretary

Cheltenham General Hospital
Tel: 0300 422 3176

Mr Mark Peacock's secretary

Cheltenham General Hospital
Tel: 0300 422 3417

In an emergency or out of hours, contact NHS 111.

Tel: 111

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