

PATIENT INFORMATION

Colonoscopy and Endoscopic Mucosal Resection (EMR) Explained Using Moviprep

The information contained in this leaflet is very important. Please read it carefully. This information is for patients who are having a colonoscopy. It tells you what is involved and any significant risks which may occur. The test itself will last about 30-40 minutes and you will normally be able to go home approximately 1-2 hours later.

What is a colonoscopy?

A colonoscopy is an examination of your large bowel (colon). A thin, highly flexible tube (colonoscope) is passed gently into your back passage (anus) and manoeuvred around the bowel. This will give the doctor a clear detailed image of your bowel.

What is an Endoscopic Mucosal Resection?

An endoscopic mucosal resection is a technique for removing large or flat polyps (growths) within the bowel which reduces the risk of damage to the bowel. Using this technique many large polyps can be removed avoiding surgery.

Liquid is injected beneath the polyp. It is then removed by placing a thin wire loop around the polyp and cutting it off with an electric current or "diathermy" device. Removal of a polyp in this way will not be painful.

Preparing for colonoscopy

Before having the colonoscopy you will be asked to change your diet and then take a strong laxative.

What does the examination involve?

- The endoscopist doing the examination will discuss it with you and ask you to sign a consent form confirming that you understand and agree to go ahead. You are free to ask for more information at any time.
- You will need to undress and wear a hospital gown along with a dressing gown. You will be offered disposable dignity shorts to wear.

- Most people choose to have an injection that contains a relaxant (sedative) and a pain killer (analgesic), and you may be offered Entonox. The aim of the drugs is to make you relaxed and to minimise any discomfort, you will remain awake during the test. Then with you laying on your left hand side the endoscopist will gently insert the endoscope into your anus and up into the bowel. **This test may cause some discomfort** due to the bowel being gently inflated to expand it so that the lining can be seen clearly. We now use carbon dioxide (CO₂) instead of air to do this, and this has proved to be much more comfortable.
- Any polyps removed by the EMR procedure are sent off to the laboratory for further testing. The site in the bowel where the polyp was removed may be marked by the endoscopist with tattoo ink so it can be found again accurately in the future if needed.
- The nurse will be with you during your test.
- At the end of the test the colonoscope is easily removed.
- Colonoscopy with endoscopic mucosal resection can be a longer procedure than a standard colonoscopy. You and your friends or family accompanying will be given an estimate of time for the procedure and when you may be leaving the unit to go home.
- You will be given preliminary results of the procedure by the nurse or endoscopist before you go home. Results of the laboratory analysis take several days and you would normally hear from your consultant in around 7 to 10 days.

About sedation:

A small plastic tube (cannula) will be placed in a vein in your arm in order to give you a sedative and a painkiller. This will be done just before the test starts.

Benefits of sedation:

You will feel relaxed during the test and may or may not remember much about it.

Drawbacks of sedation:

Sedation takes up to 24 hours to wear off and during this time you are **not safe** to:

- Drive a vehicle or operate machinery
- Drink alcohol
- Sign legal documents or make important decisions
- Sedation is not suitable for everybody as it can have adverse effects.
- **After sedation it is very important that you are not alone during the 12 hour recovery period, and that you do not use public transport, but are collected from the Endoscopy unit.**

Are there any risks from having a Colonoscopy and Endoscopic Mucosal Resection?

This examination and endoscopic mucosal resection is very safe. However, as with any procedure there is a small chance of side effects or complications. National studies and local results have shown serious complications are infrequent. They include:

- **Reactions** to the sedative drugs or the polyp removal fluid.

Complications of endoscopic mucosal resection can be more frequent than standard polyp removal.

- **Perforation:** It is possible to damage the large bowel lining by making a small hole called a perforation. This may occur in 1 to 2% of patients. The risk is highest for large polyps and those on the right side of the colon where the bowel wall is thinnest. If a complication occurs it *may* be necessary to stay in hospital and have an urgent operation to repair the hole.
- **Bleeding:** Bleeding occurs from where the polyp is removed in between 5 or 10% of 100 patients. Bleeding can occur up to 7-10 days after polyp removal. Bleeding often settles without treatment, but if it continues it may be necessary to return to the hospital for assessment.
- **Pain** can occur during endoscopic mucosal resection. The procedure can sometimes last over an hour and you may need further sedatives if their effects wear off. It can also occur due to the CO2 gas stretching the bowel, from the injection of fluid under the polyp or rarely from a reaction to the diathermy itself. This is termed “post polypectomy syndrome”. Some patients need to stay in hospital or even return to the hospital from home if this happens.
- We usually repeat the colonoscopy 3 to 6 months after the EMR procedure to make sure none of the polyp remains. Polyps can regrow (or recur) in between 10 or 20% of patients. Usually we can treat recurrence with further colonoscopy and EMR but if this is unsuccessful then referral for another technique or for an operation may be necessary.

Please speak to the endoscopist before the examination if you have any worries about these risks.

What if I don't have a Colonoscopy and Endoscopic Mucosal Resection?

Endoscopic mucosal resection is used to remove polyps with a risk of becoming cancers. The alternative is to have a surgical operation, under general anaesthetic with removal of a section of the bowel. If the endoscopic mucosal resection is unsuccessful, or if unsuspected cancer is found within the polyp, then you may require an operation at a later date.

Torbay Hospital is a Regional Training Centre for Endoscopic Procedures. Doctors and nurses training in Endoscopy at many different levels attend our lists and will be involved in your care under the direct supervision of experienced Consultants. If you do not wish to be involved in training these experts of the future, please let us know by contacting our Booking Office on the above numbers.

You may find it helpful to watch a video about having a colonoscopy at Torbay. Just type the following link into your internet browser:

<http://www.torbayandsouthdevon.nhs.uk/endoscopy/>

How to prepare for your Colonoscopy

Correct preparation is extremely important if the test is to be completed successfully.

All patients are given a pre-assessment telephone call from a nurse to explain how to prepare.

Please ensure during your call you have informed us if:

- You take Insulin for your diabetes (If you take tablets for your diabetes – **DO NOT** take them if you are not eating)
- You are on any of the following oral anti-coagulation medication (blood thinning agents). Rivaroxaban, Dabigatran, Apixaban, Warfarin or Clopidogel.
- You suffer from the rare genetic condition Phenylketonuria or Glucose Six Phosphate Deficiency (G6DP)

Note: If you are on the contraceptive pill, you are advised to take additional precautions for up to seven days after taking the bowel cleansing agents.

Jewellery and decorative piecing should ideally be removed. If you cannot remove your jewellery, it can be covered with tape, but please inform us when you see the nurse on the day of your procedure. Please inform us also of any coloured tattoos.

It is important for this test that your bowel is empty to allow a complete examination. In order to achieve this please read and carefully follow the instructions below.

You will receive an envelope containing two packs of **Moviprep**. Each pack contains 2 sachets: 1 labelled A and 1 labelled B. Moviprep is a strong laxative. Once you have taken the bowel preparation you will get frequent bowel actions and diarrhoea, some cramping is normal. If you feel clammy and faint or if you vomit please stop taking the Moviprep and call the Endoscopy Unit (see Useful Contacts information at the end of this leaflet).

5 days before your colonoscopy:

If you take iron tablets or medications to control diarrhoea please stop taking them until after your examination. You should continue to take any other medication. Stop taking Codeine phosphate, Lomotil (cophenotrope), Imodium (Loperamide), iron tablets and Fybogel

3 days before your colonoscopy:

Continue to eat but only choose "Foods you can eat" from the following list:

Foods you can eat:	Foods you must not eat:
Cornflakes, Rice Crispies, Ricicles, Sugar Puffs, Coco Pops	Wheat Bran, All Bran, Weetabix, Shredded Wheat, Oat Bran, Branflakes, Wheatflakes, Muesli, Ready Brek, Porridge
White bread (you may use butter / margarine)	Wholemeal, high-fibre white, soft grain or granary bread, oatbread. Avoid all seeds e.g. no seed covered bread, cakes or individual nuts and seeds.

Any sugar based sweets e.g. Jelly babies, Fruit pastels, Wine gums, Foxes Glacier Fruits and Mints and Polos. (but not red sweets, as they stain the bowel)	Wholemeal pasta, brown rice
White flour, White pasta, white rice	Wholemeal or granary flour, wheatgerm
Potatoes (no skin)	Fruit, vegetables and Salad
Chicken, turkey, fish, cheese and eggs	All red meats including pork, ham/ bacon
Milk puddings, mousse, jelly (not red), sponge cakes, madeira cake, any plain biscuits e.g. Rich tea or wafers.	Those containing wholemeal flour, oatmeal, nuts, dried fruit, etc. Fruit cake, Ryvita, Digestives or Hobnob biscuits
Sugar, jelly jam, jelly marmalade, honey, syrup, lemon curd. Fruit Pastilles, Wine Gums, Jelly Babies.	Jam or marmalade with pips, skins and seeds, sweets and chocolates containing nuts and / fruit Muesli bars
Clear or sieved soups, Consommé, chicken noodle soup, diet cup-a-soups. (These all need to be strained to remove any noodles, vegetables etc.)	Chunky vegetable, lentil or bean soups.
Ground salt and pepper, vinegar, mustard, gelatine, salad cream, mayonnaise	Nuts, Seeds, Quorn, fresh ground peppercorns, houmous

2 days before

Continue to eat choosing only foods from the Foods you can eat list above and maintain a good fluid intake (any liquid).

HOW TO PREPARE IF YOUR TEST APPOINTMENT IS IN THE MORNING (BETWEEN 8AM AND 1PM)

1 day before:

At 8am have a large breakfast of food taken from list of “foods you can eat” above.
After this do not eat any more solid food.

At 2pm combine and dissolve sachet A and sachet B from the first pack of Moviprep in 1 litre of cold water and **drink the MOVIPREP over the next hour**. Store the mixture in the fridge and drink a glass every 15 minutes until it is all gone. You may add squash to improve the taste or use a straw. You may drink from the listed fluids in between mouthfuls of Moviprep.

Follow this with at least half a litre of clear fluid (e.g. water or squash).

At 6pm combine and dissolve sachet A and sachet B from the second pack of Moviprep in 1 litre of water and **drink the MOVIPREP over the next hour**. Store the mixture in the fridge and drink a glass every 15 minutes until it is all gone.

Follow this with at least half a litre of clear fluid (e.g. water or squash). See the list below.

Then continue to drink plenty of clear fluid up until the time of your appointment the next morning. You can bring a drink of clear fluid with you.

HOW TO PREPARE IF YOUR TEST APPOINTMENT IS IN THE AFTERNOON
(BETWEEN 1PM AND 6PM)

1 day before:

At 1pm have a good lunch of food taken from list of “foods you can eat” above.
After this do not eat any more solid food.

At 6pm combine and dissolve sachet A and sachet B of Moviprep from the first pack of Moviprep in 1 litre of cold water and **drink the MOVIPREP over the next hour.** (Store the mixture in the fridge and drink a glass every 15 minutes until it is all gone. You may add squash to improve the taste or use a straw. You may drink from the listed fluids in between mouthfuls of Moviprep.

Follow this with at least half a litre of clear fluid (e.g. water or squash).

Continue to drink plenty of clear fluids...see the list below

The day of your procedure:

No breakfast...just clear fluids

At 9am combine and dissolve sachet A and sachet B of Moviprep from the second pack in 1 litre of cold water and **drink the MOVIPREP over the next hour.** Store the mixture in the fridge and drink a glass every 15 minutes until it is all gone.

Follow this with at least half a litre of clear fluid (e.g. water or squash). Then continue to drink plenty of clear fluid up until the time of your appointment. You can bring a drink of clear fluids with you.

It is important to stay hydrated by drinking plenty of “clear fluids” while preparing for your test.

Clear fluids include:

All types of water
Any fruit squash
Lucozade and any other “sports drinks”
Tea and coffee (little or no milk)
Fruit and herbal teas
Any fizzy drink e.g. coke, ginger beer, tonic water etc.
Clear fruit juice such as apple, cranberry, pomegranate and white grape juice.
(NOT fresh orange juice)
Hot honey and lemon

Do not drink any fruit smoothies or milky drinks

The day of your colonoscopy:

It is essential that you drink plenty of fluids (water / clear sugary drinks, e.g. lemonade) to avoid becoming dehydrated, right up until your appointment time. You are welcome to bring a bottle of soft drink to your appointment.

What will happen when I arrive?

An endoscopy nurse will care for you from your arrival through to your discharge from the Unit. The nurse will explain the test to you and check your details including blood pressure and pulse. If you have any allergies please tell the nurse.

What happens after the examination?

- You will be able to get dressed after the test.
- Your nurse will speak to you after the test but biopsy results will be reviewed within a few days. If you have not heard from the Consultant after 3 weeks, you can call your GP surgery for any biopsy results.
- You will be offered some refreshment and be discharged home as soon as you are ready to go.
- You may be given a copy of your report, which we will also send on to your GP.


How will I feel when I go home?

- You may have some discomfort for the rest of the day in the form of wind, bloating, and may have a little bleeding but this will pass.
- You may eat and drink as normal when you leave the Unit.


If you do not understand any part of the information, or if you have any questions or concerns about preparing for your test, please contact us for advice

Useful contacts

If you have any further questions or concerns, please contact:

The Endoscopy Unit
 **Tel (01803) 656890/654455**
(9.00am - 5.00 pm, Monday to Friday)

If you have any urgent concerns outside of these hours
please phone the switchboard

 **Tel (01803) 614567**
and ask for bleep number **110**

For further assistance or to receive this information in a different format, please contact the department which created this leaflet.