Patient Information

Endoscopy Unit

Colon Capsule Endoscopy (CCE)

To help you prepare for this procedure/test, please read this information carefully and bring this booklet with you to your appointment.

Introduction

This booklet aims to help you to make an informed decision about agreeing to have this investigation. Please make notes or write questions you may like to discuss/clarify with the specialist nurse before you sign the consent form on the day of the procedure.

The procedure you will be having is called colon capsule endoscopy or colon capsule examination. There is no endoscope (flexible camera i.e. endoscope) used in the examination. This is an examination of your large bowel (colon) to look for any cause for your symptoms.

Why do I need to have a colon capsule endoscopy?

This test is usually done so we can look at your large bowel for symptoms like change in bowel habit or blood in poo with or without abdominal pain.

What is Colon Capsule Endoscopy?

You will swallow a small capsule with 2 cameras inside which will provide us with images so we can look at the lining of your large bowel and to establish whether there is any growth (polyps/cancer), inflammation or pathology to explain your symptoms. This is an alternative test to colonoscopy or a CT colonography (CT scan). The disposable capsule camera is around the same size as of a large vitamin pill. It contains two tiny video cameras which are powered by tiny batteries and it sends images to a recorder. This disposable capsule camera can be easily swallowed with sips of water.
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You will be asked to swallow the capsule after having a low residue diet for 5 days and following a laxative regimen as explained later in this leaflet. This capsule camera travels through the digestive tract, like your food would. As the capsule passes through the digestive tract, it takes thousands of pictures of the lining of your bowel and sends it to a recorder connected with the Sensor Belt, which you wear around your waist. The capsule is disposable and will pass out of your body after few hours or rarely in couple of days with your poo.

For some people the stomach is slow to empty. All patients are given medication (metoclopramide 10 mg tablet) with the capsule to help it move through the stomach.

Will it hurt?

The capsule camera can be swallowed easily by most patients. It has a smooth surface similar to capsules for pain relief. You shouldn’t feel any pain or discomfort when swallowing it, or while it moves through your bowel.

What to do when you have received your appointment letter

- Check the appointment is convenient and that you will be able to get to the Endoscopy Unit and home again. If not, phone us on 024 7696 7361 or 024 7696 6755.

- Notify us if you have any
  - Problems with swallowing
  - Previous abdominal surgery or radiation treatments
  - Crohn’s disease
  - Cardiac pacemaker in place
  - Take painkillers (NSAIDs) like diclofenac, ibuprofen or naproxen on regular basis
  - If you are on treatment for diabetes (insulin or tablets). We shall organise an alternative test for you.
  - If you are pregnant as the Capsule Endoscopy should not be performed during pregnancy
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- As this is a teaching hospital, your procedure may be observed or assisted by trainee staff. Please let us know, on your arrival, if you do not wish to have trainees present.

Should your condition worsen before your Endoscopy appointment we advise you to contact your GP immediately.

Preparing for the investigations

Time Table Summary for the Procedure

<table>
<thead>
<tr>
<th>One week before the test</th>
<th>-5 days before the test</th>
<th>-4 till -2 days before the test</th>
<th>-1 day before the test</th>
<th>On the day of the test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop iron tablets a week before the test, if you are taking them</td>
<td>Start low residue diet Breakfast Lunch Dinner</td>
<td>Continue low residue diet Breakfast Lunch Dinner</td>
<td>No Solid food Fluids Only 7 pm: Moviprep Sachet A+B in 1 litre of water</td>
<td>6 to 6:30am: Moviprep Sachet A+B in 1 litre of water Attend Endoscopy Unit (UHCW)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STOP taking any of the following medications: Codeine Phosphate Tramadol Imodium Lomotil Fybogel Isphagula Husk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is a low residue diet?
A low residue diet is made up of foods that are easily digested and absorbed. It is recommended before this test to help 'clear out' your bowel so we can get clearer images.

Low Residue Diet

<table>
<thead>
<tr>
<th>Food type</th>
<th>Foods Allowed</th>
<th>Foods to Exclude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Fish</td>
<td>Minced or well-cooked lean beef, lamb, ham, veal, pork, poultry, fish, shellfish</td>
<td></td>
</tr>
<tr>
<td>Fruit and Vegetables</td>
<td>Potatoes - boiled, creamed, mashed or baked (no skins)</td>
<td>All other fruits and vegetables</td>
</tr>
<tr>
<td>Pasta and Rice</td>
<td>Plain macaroni, spaghetti, noodles. Plain boiled white rice</td>
<td>Wholemeal pasta or spaghetti. Brown rice or vegetable rice</td>
</tr>
<tr>
<td>Cereals and Bread</td>
<td>Cornflakes, crisped rice, white bread, teacakes/ plain bread rolls</td>
<td>Weetabix, bran, cereals, muesli, wholemeal granary Bread/ bread with seeds</td>
</tr>
<tr>
<td>Biscuits, Pastries and Puddings</td>
<td>Plain biscuits/crackers, plain scones, muffins, Yorkshire pudding, Plain yogurt, jelly notred coloured</td>
<td>Wholemeal biscuits/ cakes. Seeded jams, fruit or nut yogurts. Bread or cakes with fruit</td>
</tr>
<tr>
<td>Other</td>
<td>Eggs, cheese, sauce clear soup, treacle, margarine, boiled sweets, chocolate</td>
<td>Pickles, chutney, vegetable soups, jam with rind/pips</td>
</tr>
</tbody>
</table>
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One day before your appointment

- **Fluids only, no solid food**
  You should take clear fluids only e.g. Tea or coffee with a small amount of milk, water, strained fruit juice, fruit squash, soda water, tonic water, lemonade, Oxo, Bovril, Marmite (mixed into weak drinks with hot water), clear soups and broths, consommé.

- **Fluids NOT allowed**
  Drinks or soups thickened with flour or other thickening agents.

- **In addition:**
  - You may eat clear jellies and ice-cream
  - You may suck clear boiled sweets and clear mints.
  - You may add sugar or glucose to your drinks.

- **Around 07:00 pm:**
  Add **Moviprep A and Moviprep B** sachets to a litre container. Pour 1 litre of water and stir until all the powder has dissolved and the Moviprep solution is clear or slightly cloudy. This may take up to 5 minutes. Drink this over 1-2 hours. Try to drink a small glass/cup every 10-15 minutes. Drinking any faster may make you feel sick. Sometimes it helps to use a straw to sip slowly.

To make sure we do not miss any lesions, it is important for you to have good bowel preparation to make sure your bowel is clean. Please stick to the diet and bowel prep as advised.

Once you have started your bowel preparation you should stay at home with access to a toilet. The solutions will make you go to the toilet a lot so you may wish to use a topical barrier cream such as zinc and castor oil; to protect your bottom whilst taking the bowel preparation.

On the day of your appointment

- **Around 06-6:30am** - Take the second box of Moviprep and mix sachets A and B together in a litre container. Pour in 1 litre of water and stir until all the powder has dissolved and the Moviprep solution is clear or slightly cloudy. Try to drink a small glassful/cup every 10-15 minutes. Drink a further litre (approximately 2 pints) of clear liquid preferably water to prevent you becoming thirsty and dehydrated. You should finish bowel prep by 08:30
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- **Stop drinking bowel prep an hour before the appointment so you do not have difficulty in travelling to the hospital.**
- Take your routine medication with small amount of water
- Wear loose fitting two-piece clothing
- Because the sensor belt must not be worn over synthetic fabric, you will need to wear an upper garment of thin, natural fibre cloth (cotton) that is long enough to reach at least to hip level
- Another layer of clothing such as sweatshirt, sweater, or jacket may be worn over the sensor belt
- Bring in any medications you are taking (including inhalers), or a list of their names
- Do not arrive too early for your appointment
- Do not bring any valuables or large amounts of cash with you

**What happens when I arrive?**

The nurse specialist will explain the procedure to you, and you can ask any questions that you may have. You will be asked to sign a consent form giving your permission to go ahead. This is to make sure that you understand the risks and benefits of the procedure.

The nurse specialist will place a belt containing the radio sensors around your waist and the data recorder will be attached. This will remain in place for duration of the test. After these are fitted, the nurse specialist will instruct you to swallow the Capsule camera with small amount of water and a tablet to improve your stomach movement. She will check the capsule progress via the data-recorder. Once she has ensured that equipment is functioning / recording as expected you will be discharged home with some further advice relevant to your test, when you get home.

You then need to return to the hospital the next day. The images from the data recorder will be processed and a video will be created and subsequently reviewed.

**How long will I be in the Endoscopy Unit?**

You should expect to be in the Unit for approximately 1-2 hours. This largely depends time taken for admission, processing and setting up the equipment.
Alerts on your device and discharge advice

After swallowing the capsule

- After swallowing the capsule, a specialist nurse will go through the alerts messages on the monitor, their meaning and on how to take extra bowel prep booster doses, when you get home.

You may receive an **Alert 0** on the monitor, which is an indicator of capsule position in the stomach. 

Please ignore this alert

You will get **Alert 1** approximately an hour after taking the capsule, a reminder to take the 1<sup>st</sup> booster dose.

Please take 1<sup>st</sup> booster dose

- Soon after you receive the Alert 1, please prepare first booster bowel prep dose provided. **Mix 30ml of sodium phosphate** (Phosphosoda oral solution) with **1000ml of water**. Try to drink a small glassful/cup every 10-15 minutes.

Three hours after Alert 1, if you still have not noticed capsule coming out, you will get **Alert 2** on monitor, a reminder to take the second booster dose.

Please take 2<sup>nd</sup> booster dose
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- Soon after you receive the Alert 2, please mix **15ml of sodium phosphate** (Phosphosoda oral solutions) with **500ml of water**. Try to drink a small glassful/cup every 10-15 minutes.

Two hours after Alert 2, if you still have not noticed capsule coming out, you will get Alert 3, a reminder for the suppository

![Time to insert suppository](image)

Please insert one suppository (**Glycerol 4gm**) provided. Wait for next alert. **This will be either Alert 4 or End of procedure.**

![Alert 3](image)

![Alert 4](image)

You can eat a small meal and wait for the ‘End of Procedure’ Alert.

- Check the blue flashing Data Recorder light every 15 minutes. If it stops blinking or changes colour, note the time and contact us.

- Complete the Capsule Endoscopy event form recording the time of any event such as eating, drinking or changes in activity. Return the completed form to the nurse when you return to have the equipment removed.

- Avoid strong electromagnetic fields, such as MRI scans or ham radios after swallowing the capsule and until you pass it in a bowel movement.

- Do not disconnect the equipment or completely remove the belt at any time during the procedure.

- Treat the Data Recorder carefully; avoid sudden movements and banging of the recorder.

- Avoid direct exposure to bright sunlight.
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Risks
Rarely, if the capsule does not exit the intestine an X-ray may be needed. Please inform your attending nurse specialist if you have abdominal pain, nausea or vomiting during the procedure. A contact number will be given to you before you leave the hospital.

The test may be repeated if good views of the bowel are not obtained. Rarely camera may not pass through the bowel.

What happens if the pill camera does not pass through?
If the pill camera reveals Crohn's disease, treatment with anti-inflammatory medications may allow the narrowed part of the bowel to heal so that the pill passes by itself. If the pill camera is at the extreme upper or lower end of the small bowel, it may be possible to retrieve it using an endoscope (gastroscope or colonoscope). If the bowel is severely ulcerated, scarred or blocked by a tumour, an operation might be needed, not only to remove the pill camera, but also to treat the disease.

If you require any further information or clarification, please contact Beibei Liu, Clinical Nurse Specialist Capsule Endoscopy Service, on 024 7696 7361.

After the procedure
Results
The images from capsule endoscopy will be uploaded on the computer and the specialist will read and prepare the report. The report will be sent to your consultant, who in turn will discuss the results with you at your next outpatient appointment.

General points to remember
- If you are unable to keep your appointment please notify the endoscopy department on 02476 96 6755 as soon as possible. This will enable us to offer the appointment to another patient.
- Please note to ensure the privacy and dignity of other patients we do not allow friends or relatives into the clinical area of the department. Should you wish to remain with your friend or relative you may join them in the main waiting area.
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- We will aim to see you as soon as possible after your arrival. However, the department is very busy and your investigation may be delayed.

The hospital cannot accept any responsibility for the loss or damage to personal property during your time on these premises.

The trust has access to interpreting and translation services. If you need this information in another language or format, please contact us on 024 7696 6755 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email feedback@uhcw.nhs.uk