

Wireless capsule endoscopy

Endoscopy Unit Patient Information Leaflet

Introduction

Your doctor has recommended that you have a wireless capsule endoscopy.

This booklet contains information about this test, including what happens during the test, what are the benefits and risks, how you prepare for the test and what happens after it.

If you have any questions after reading this leaflet, please do not hesitate to get in touch with the Endoscopy Unit at Russell's Hall Hospital on 01384 244113.

What is a wireless capsule endoscopy?

A wireless capsule endoscopy (WCE) allows specialists to see pictures of your small bowel (intestine). The small bowel is the part of your gastrointestinal tract between your stomach and large bowel (colon).

This area can often be difficult to examine with a conventional camera test. A capsule endoscopy allows us to examine this area in detail.

What are the benefits of a WCE?

It can help to:

- Investigate unexplained anaemia and look for bleeding within your small bowel.
- Diagnose inflammatory conditions of your small bowel, such as Crohn's disease.
- Investigate causes of malabsorption, where nutrients cannot be absorbed properly from the bowel, and diagnose conditions such as coeliac disease.
- Diagnose tumours of the small bowel.

How is the test carried out?

The capsule is the size of a large vitamin pill (26 x 11mm). It contains a camera which is powered by two tiny batteries and a wireless transmitter. Once the capsule has been swallowed, it starts to transmit pictures of the small bowel to a receiver belt strapped to the outside of your body.

The capsule has its own light to allow the camera to see the bowel wall. The tiny batteries which power the capsule are safely enclosed within it so they are not harmful. The batteries last no more than 12 hours, which is usually enough time for the capsule to pass right through the small bowel (duodenum, jejunum and ileum) and into the large or lower bowel (colon).

Small abnormalities can easily be seen by the camera in the capsule. The pictures are transmitted from the camera by a wireless technique. Up to 65,000 pictures can be stored for later examination by a trained specialist on a special dedicated computer.

What are the risks of the procedure?

Capsule retention

The capsule may fail to pass through the small bowel and become stuck in your small bowel. This may occur if there is a narrowing in your bowel which does not allow the capsule to pass. In our experience, the risk of this complication is less than 0.5 per cent, and occurs in approximately one out of every 200 to 250 patients.

If your doctor is concerned about a potential narrowing in your bowel, a patency capsule is performed first. This is a dissolvable dummy pill that is swallowed to check the small bowel is clear of any areas of narrowing. If the patency capsule passes, it is safe to proceed with a wireless capsule endoscopy. If you need to have a patency capsule, we will give you more information about this.

On the rare occasion that the pill camera does not pass, you may need an operation, or special endoscopy test, to retrieve the camera from your small bowel. In the majority of cases, the pill camera will pass once the narrowed area of the bowel is treated with anti-inflammatory medications.

Your doctor may ask you to undergo an X-ray of your abdomen to confirm whether the capsule has passed, if it is not evident that your capsule has passed on review of your capsule video examination.

Equipment failure

On rare occasions, the equipment may fail, meaning the pictures are not transmitted or the battery life is reduced. If this occurs, your test may have to be repeated.

Poor bowel preparation

If bowel preparation is poor and therefore adequate pictures are not taken, the test may have to be repeated.

Is there an alternative to this test?

The test is in addition to many other tests that you may have already had to discover the cause of your problems. There are other ways of looking at your small bowel, but none of these are as effective or as comfortable as WCE.

X-ray procedures such as barium follow through, small bowel enemas and angiography are not always very effective. Long endoscopes can be passed into the small bowel (known medically as an enteroscopy). This is often uncomfortable and unhelpful as only about a third of the small bowel can be seen this way. WCE has been shown to be effective at detecting small bowel problems which have not been diagnosed by other tests.

What information should I tell you?

Please tell us if you:

- Have a pacemaker or defibrillator. It will not prevent you from having the test, but it is important you let us know if you have one. We can then perform a brief ECG test to ensure there are no problems before you swallow the capsule.
- Have difficulty swallowing. Under certain circumstances we may have to help you swallow the capsule under sedation (with a gastroscope) but this is unusual.
- Are diabetic. Please contact the Endoscopy Unit for advice before the test.
- Are pregnant, as WCE should not be performed during pregnancy.

Please note that you should not have an MRI scan until the capsule has definitely passed out of your body.

Bowel Preparation for the test

What do I have to do? How to take Plenvu:

Plenvu is a strong laxative treatment which will help clear your bowel of food residues so the capsule can obtain clear pictures.

All sachets must be taken with the right amount of water according to the timings below. You will have lots of watery bowel movements, so stay near a toilet because you may need it urgently.

The **<u>day before</u>** your examination you need to do the following:

• Take a light breakfast before 2pm, such as cereal or white toast (avoid seeds or high fibre foods such as vegetables/fruit/salad).

4

• Stop ALL food intake at 2pm.

- At 4pm you will need to start taking your bowel preparation.
 - Open the carton and remove the **Dose 1** sachet.
 - Pour the contents of the **Dose 1** sachet into a measuring container that can hold 500ml of fluid.
 - Add water to make up to 500ml and stir until the powder has dissolved.
 - Drink **Dose 1** from 4pm. Drink an additional 500mls of water afterwards.
- Take a one to two hour break
- At 6pm
 - Open the carton and remove the Dose 2 sachets A and B.
 - Pour the contents of the Dose 2 sachets A and B into a measuring container that can hold 500ml of fluid.
 - Add water to make up to 500ml and stir until the powder has dissolved.
 - Drink **Dose 2** around 6pm. Drink an additional 500mls of water afterwards.

If you are thirsty, drink plenty of clear fluids only.



Water



Diluted cordials (NOT blackcurrant)



Herbal tea



Clear soup



Clear fruit juice (without pulp)



Black tea/coffee (without milk)

Image provided by Norgine Pharmaceuticals Limited

If you get a headache, drink lots of clear drinks and take paracetamol if necessary (always read the label; do not exceed the recommended dose).

From 9.00pm the night before your test, you must also stop drinking fluids, e.g. you must be nil by mouth for 12 hours before your test.

On the day of the test:

- Do not take any medication on the morning of the test. You will be able to take it after the procedure if necessary, so please bring it with you.
- Please make sure you arrive at the Endoscopy Unit, 1st Floor, West Wing, Russell's Hall Hospital at **8.00am, for the test that** starts at **8.30am.**
- Please wear loose two-piece clothing (for example trousers and a T-shirt, not a dress) to allow easy access to your stomach area. This is because a belt has to go around your waist.

What happens on arrival at the Endoscopy unit?

One of our nurses will welcome you and help you settle in the GI unit recovery area.

The nurse will ask you a few questions. Once they have explained the procedure to you, if you are happy to go ahead, they will ask you to sign a consent form and a disclaimer form.

The nurse will get you take a medication called Metoclopramide. This aids in the emptying of the stomach, thus encouraging the capsule to leave the stomach quicker in order to assess the relevant areas. The nurse will then help you to put the belt around your waist. When the capsule has been switched on, you will need to swallow it with a glass of water. We may be able to show that this has happened using a special real-time scanner, and you will be able to see actual pictures of the lining of your bowel.

The sensors within the belt will then record the data on a pocket size computer which is carried around in a shoulder bag. This should not be removed until the test is completed, due to the wireless connection.

Once the health professional is happy you will be discharged. Three hours after the capsule has been ingested, you may have a drink, and four hours after the capsule has been ingested, you can have a light meal. Eight hours after the capsule has been ingested you can drive, eat and drink normally.

After twelve hours from when you first swallowed the capsule, you can take the belt and bag off. Please put these in the return bag provided and store it in a safe place until you return it to us.

You will need to bring the belt and bag back the following morning to the GI Endoscopy Unit or main reception at Russell's Hall Hospital.

Will the test hurt?

You should feel no pain during the test unless the capsule detects narrowing of the bowel.

What happens after the test is over?

You can eat and drink as normal.

You may notice the capsule passing out of your body in your motions (stools) or into your stoma bag, if you have one.

The capsule is disposable. If you have not passed the capsule after three weeks, it may be necessary for you to have an X-ray.

We will give you the results as soon as possible, but it may take some time for the recording to be analysed on the computer. Once your results are available, we will send you an outpatient appointment in the post to see your consultant.

Aftercare

Before you leave the department, we will give you an aftercare information leaflet.

Consent

You will need to give consent before the doctor or health professional examines or treats you.

As part of your treatment, some kind of photographic record may be made, for example, clinical photographs, video recordings or an X-ray. We will tell you if this is likely to happen.

The photograph or recordings will be kept with your notes and will be held in confidence as part of your medical records. This means that it will normally be seen only by those involved in providing you with care, or those who need to check the quality of care you have received.

The use of photographs is extremely important for other NHS work such as teaching or medical research. However, we will not use yours in a way that allows your identity to be recognised without your permission.

We will ask you to sign a consent form once the procedure has been discussed with you. Health professionals must ensure that you know enough about the procedure beforehand, and that you are fully aware of the benefits and risks of the procedure.

Once the consent form is completed, we will give you a copy to keep. If you later change your mind, you can withdraw your consent after signing.

The health professional will then ask you to sign a disclaimer form before you leave the unit.

This is to verify that you are legally responsible for the equipment whilst it is in your care and to ensure it is returned to Russell's Hall Hospital the following day.

The equipment and relevant forms can either be returned to the Endoscopy Unit on the 1st Floor, or to the reception desk by the main entrance at Russell's Hall Hospital (address below).

Russells Hall Hospital Pensnett Rd Dudley DY1 2HQ

Can I find out more?

The NHS Choices website has information about endoscopy procedures including WCE:

www.nhs.uk/conditions/endoscopy

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

The Endoscopy Unit on 01384 456111 ext. 2731 (8.00am to 6.00pm, Monday to Friday)

Russells Hall Hospital switchboard number: 01384 456111

This leaflet can be downloaded or printed from:

http://dgft.nhs.uk/services-and-wards/gastroenterology/

If you have any feedback on this patient information leaflet, please email dgft.patient.information@nhs.net

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

للحصول على هذه النشرة بحجم أكبر، وعلى شكل إصدار صوتي و بلغات أخرى، الرجاء الاتصال بالرقم 08000730510.

此宣传单可提供大字版本、音频版本和其它语言版本,请拨打电话: 0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

ਇਹ ਪਰਚਾ ਵੱਡੇ ਅੱਖਰਾਂ, ਬੋਲ ਕੇ ਰੀਕਾਰਡ ਕੀਤਾ ਹੋਇਆ ਅਤੇ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਵਿਚ ਵੀ ਪ੍ਰਾਪਤ ਹੋ ਸਕਦਾ ਹੈ, 0800 073 0510 ਤੇ ਫੋਨ ਕਰੋ ਜੀ।

Aceasta brosura poate fi pusa la dispozitie tiparita cu caractere mari, versiune audio sau in alte limbi, pentru acest lucru va rugam sunati la 0800 073 0510.

یہ کتابچہ آپ کو بڑے حروف کی لکھائی ، سمعی صورت اور دیگر زبانوں میں مہیا کیا جا سکتا ہےبرائے مہریاتی فون نمبر 08000730510پر رابطہ کریں۔

Originator: R Vass, Dr Rattenhalli. Date reviewed: January 2023. Next review: October 2025 Version: 6. DGH ref: DGH/PIL/02014.