

What is Wireless Capsule Endoscopy? Your doctor has recommended that you have a wireless capsule endoscopy (WCE). A 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? WCE can help to investigate:

- Iron deficiency anaemia (lack of iron in the body).
- Unexplained bleeding in your stomach or small bowel (that cannot be investigated with a standard endoscope).
- Suspected inflammatory conditions of your small bowel such as Crohn's disease.
- Abnormalities such as polyps (small growths), seen on CT or MRI scans.

WCE has further benefits that include:

- The capsule is easily swallowed.
- It is painless and sedation is not required.
- The procedure does not require a hospital stay.
- Exposure to potentially harmful radiation does not occur.
- Additional investigations can often be avoided.

What are the risks? WCE is generally a safe procedure. On rare occasions 2% of the capsules may get stuck in the small bowel. This usually only occurs in areas of abnormality such as strictures (narrowing) of the bowel and could require an operation to remove it. If your doctor suspects that you may have a narrowing in your small bowel, you will usually be sent for a Patency Capsule or MRI scan to check that it is safe to proceed. Occasionally the test may not work because of poor bowel preparation or technical failure, should this be the case the test may have to be repeated.

Please telephone the department if any of the following apply:

- You have pacemaker or any cardiac device.
- You suffer from abdominal pain and vomiting after meals.
- You have had previous small bowel surgery.
- You have been taking Non-Steroidal Anti-inflammatory drugs for 6 months or more.
- You suspect you are pregnant.

PLEASE NOTE. You must not have an MRI scan until the capsule has passed

Are there any alternatives 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.

Preparing for the test For a successful examination, it is important that the small bowel is clear of waste material. If the bowel is not completely clear it is possible to miss something or may mean the procedure may have to be repeated. You will therefore need to follow the instructions carefully on what to eat and drink before the WCE. If you suspect you are pregnant please tell us as soon as possible as the procedure should not, then be carried out. It is not necessary to have someone with you for this procedure, but you may wish to talk this through with someone at home and have someone with you on the day you attend.

Medicines to stop before the WCE Some medications can affect the quality of the images. If you have a long-term health condition requiring injections or tablets, please discuss the dietary instructions with your specialist nurse or doctor before you swallow the capsule.

Medications that should be stopped 7 days before the examination are:

- Iron tablets, anti-inflammatory medication such as Ibuprofen, Diclofenac etc

Medications that should be stopped 5 days before the examination are:

- Codeine, Co-Codamol, Morphine, Buscopan, Mebeverine, loperamide, Imodium, Colofac

Your GP should be able to suggest alternatives if required.

Food and drink before the WCE If there is food left in the stomach and small intestine it is hard to see the bowel lining clearly and so the presence of something to explain your health problem may be missed. Please follow the instructions below to make sure that your small intestine is clean and clear: On the day before your appointment: Your usual medications can be taken with water during the day You may eat and drink until 1pm following a low residue/low fibre diet.

For a low residue/low fibre diet please avoid:

- Red meat, pink fish • Raw fruit or other vegetables, skins, pips • Cereals • Salads, mushrooms, sweet corn • Nuts / seeds • Wholemeal bread

From 1pm until 10pm please take a liquid diet. You should drink plenty of clear fluids such as:

- Tea or coffee (sweetened to taste but no milk) • Fruit squashes but not blackcurrant • Water • Clear soups (Oxo, Bovril, clear chicken broth etc. – strain the soup first) • Clear jelly (but not strawberry, raspberry or blackcurrant)

From 10pm you must not eat or drink anything else until instructed to do so at your appointment.

On the day of your appointment

- You should not eat or drink anything (including gum, sweets and mints) until instructed at your appointment.
- Essential medicines can be taken with water only before 6am. Non-essential medicines can be postponed until you have a snack at lunchtime – full instructions will be given.
- Please wear a loose top that buttons up or zips up at the front.

During the test On your arrival please check in at.....

- A consultant /clinical scientist or physiologist will then take you into a private room and discuss the test with you.
- You will be asked about your bowel preparation.
- Any allergies will be confirmed.
- You will be asked to sign a consent form for the procedure. A copy of the consent form will be offered to you. Please feel free to ask questions or voice any concerns you may have regarding your test.
- A sensor belt with the recorder box will be placed around your waist.
- You will be offered a cup of water which contains Simethicone (Infacol) and asked to swallow the capsule which is the size of a large vitamin pill. Most people have no problems doing this.
- The capsule then passes naturally through your stomach and bowel, transmitting images to the data recorder.

During the examination period you shouldn't:

- Do any physical activity that makes you sweat.
- Go anywhere near powerful magnets, for example an MRI scanner.
- Remove the recorder.

- The data recorder is a small computer and it needs to be treated with care. Try to avoid sudden movement and don't let anything hit against it. Page 4 Wireless Capsule Endoscopy Information and advice for patients GI Physiology Sandwell and West Birmingham NHS Trust
- You must not have anything to drink until at least two hours after swallowing the capsule camera.
- After two hours, you may take clear fluids (with your regular medications if necessary).
- After four hours, you may take a light lunch.
- You will be instructed to wear the recorder belt until you go to bed
- At bedtime you will be instructed how to remove the recorder belt and asked to return it the following day. You will be given an instruction leaflet to refer to during the test.

After the test The capsule camera is designed to be disposable. It passes out naturally in 24 to 48 hours. It flushes down the toilet. We don't want the capsule camera returned to us. If you develop abdominal pain or sickness after swallowing the capsule camera, you may have developed a blockage of your bowel. Please contact.....

Outside normal working hours, please contact the A&E department or emergency GP.

You should NOT have an MRI scan until you are sure that the capsule camera has passed.

How do I get the results of Capsule Endoscopy? After the examination, images are downloaded from the recorder box to a computer. Up to 50,000 pictures need to be reviewed which takes time. It can be a few weeks before the results of the examination are sent to your referring doctor who should contact you regarding further management.

Contact details If you have any questions or concerns before or after the test, please contact.....

Further information

- NHS (2019) Endoscopy. Available at: <https://www.nhs.uk/conditions/endoscopy/> (Accessed 21 April 2020).

Sources used for the information in this leaflet

- Pennazio M, Spada C, Eliakim R, et al. (2015). Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. Endoscopy, 47(4), pp.352–376.
- British Society of Gastroenterology (BSG) (2015) ESGE Guidelines on Small-Bowel Capsule Endoscopy (BSG Endorsed). Available at: <https://www.bsg.org.uk/clinical-resource/esgeguidelines-on-small-bowel-capsule-endoscopy-bsg-endorsed/> (Accessed 21 April 2020)