

Capsule Endoscopy

What is capsule endoscopy?

Capsule endoscopy is also known as pill-camera or video capsule endoscopy. It involves swallowing a 10x 27mm capsule (Approximately size of a multivitamin tablet), which contains a tiny camera, batteries, light source and transmitter. After swallowing, the capsule travels like a piece of food through the gastrointestinal system. It captures 2 to 6 frames per second for up to 11 hours, providing about 60,000 pictures in total which makes a high-resolution video of the stomach and small intestine.

Why should I have a capsule endoscopy?

It allows visualisation of lining of the small bowel which is not readily possible using standard gastroscopy and colonoscopy. It helps to pinpoint bleeding in hidden areas in the small bowel in cases of ongoing gastrointestinal bleeding and recurrent iron deficiency anemia. It is more sensitive than many other techniques. Capsule endoscopy discovers a source of bleeding in approximately 60 - 70% of patients. It is also useful for tracking small bowel tumours and obscure abdominal pain.

Please note that capsule endoscopy is a diagnostic procedure and is limited by an inability to obtain biopsies or administer therapy. You may still require further treatment with a different procedure following the capsule endoscopy.

How do I prepare for a capsule endoscopy?

You will be required to fast (no food or drinks) for 8 hours before undergoing capsule endoscopy. In some cases one litre of bowel prep or a (ONLY) fluid meal may be advised to be taken the night before the procedure to achieve good images of the small intestine. No special diet is required but strongly coloured foods and iron tablets should be avoided for 7 days before the examination.

Prior to undergoing a capsule endoscopy, your Gastroenterologist will review you to discuss the procedure in more detail and obtain informed consent. At the time of this appointment, it is important to inform your doctor if you have previously had abdominal surgery or bowel obstruction, issues with swallowing, or if you have a pacemaker.

What do I do with my medications prior to capsule endoscopy?

If you have Diabetes you are advised to withhold your diabetic medication during the fasting period. If you take insulin, then you will be advised about the management of insulin during fasting period. Any other essential medications can be taken with a sip of water up to 2 hours before the examination. If you are taking any blood thinning medications you should continue them prior and after the procedure

.What happens during capsule endoscopy (Day of Procedure)?

On the day of the procedure you will be asked to attend in the morning. A harness, holding the data recorder will be applied around your abdomen and left for 8 hours after the capsule is swallowed. A glass of water is permitted when swallowing the capsule and a substance called “simethicone(infacol)” is often added to this to prevent “bubbles” which can interfere with the picture transmitted by the capsule. Gentle activity is encouraged while wearing the harness as this will aid the progress of the capsule.

No fluids should be taken for 2 hours after the capsule is swallowed and solid food is not permitted to be eaten for 4 hours afterwards. Do not swallow chewing gum during the examination.

Recording probes, taped on the abdomen, track the progress of the capsule. The images obtained by the capsule are transmitted to a data-recorder worn in a harness around the waist. You are free to return home during the procedure, and get on with your usual daily activities. Strenuous exercise is to be avoided whilst undergoing the procedure. While wearing the recorder, you should also avoid large radio transmitters (due to interference) or airports (because the belt may trigger security screening equipment).

A capsule endoscopy takes between 8-12 hours to perform. **Capsule endoscopy is a day procedure, so you will not need to stay in hospital overnight. Capsule endoscopy does not require any sedation or anaesthetic drugs.**

What happens after capsule endoscopy?

Eight hours after the capsule is swallowed, you are required to return to the clinic to have the belt and leads removed. The information from the data-recorder is downloaded on a computer and the images are composed into a video to be examined by your gastroenterologist.

The capsule is single use only and does not need to be retrieved. The capsule passes naturally in a stool within 1-3 days. Most patients are not aware it has passed. The capsule doesn't need to be retrieved and can be safely flushed down the toilet. If you are concerned that the capsule has not passed after 7 days you should contact your Gastroenterologist's rooms. Results of the capsule endoscopy are usually available within a few days to 1 week of the procedure. An appointment will be made with your Gastroenterologist to discuss the results.

What are the risks or side-effects?

Capsule endoscopy is a very safe procedure. Complications of capsule endoscopy are very infrequent. There should be no discomfort associated with a capsule endoscopy. The video capsule is small, coated with gel so should not be troublesome to swallow or pass. Less than 1 patient in 100 has difficulty swallowing the capsule. Abdominal pain or nausea after swallowing the capsule is extremely rare and should be reported immediately.

Approximately 1 in 100 patients retain the capsule in the bowel. This may occur if the bowel is narrowed or has some other unusual anatomy. Usually the capsule will eventually pass. On rare occasions it will need to be removed endoscopically or surgically. The obstructing lesion can be corrected at the same time. If bowel narrowing is suspected your doctor may suggest an initial trial with a dissolvable (Patency) capsule.

On the day of the test, approximately 1 in 10 patients may have a slow small bowel transit and the capsule may not be seen to reach the large bowel on the capsule endoscopy recording. An abdominal X-ray will then be arranged to check that the capsule has passed out of the bowel.

Very rarely, Capsule stays in the stomach the whole time of study. If this happens then first of all an xray or serial xrays of abdomen may be required to ensure the capsule has progressed through the small bowel. Capsule study will need to be repeated but Capsule will be inserted using endoscopy.

Patients wearing the harness and data recorder are advised to stay away from large radio transmitters (e.g. TV transmission towers) and are advised not to visit airports and major shopping centres where the harness could trigger security screening equipment.

Who can I contact if I have any questions?

If you have any questions or need advice please contact our rooms or specialist (if after hours) using the contact details as above.

