

Capsule Endoscopy

You have been asked to have a test called a capsule endoscopy.

What is capsule endoscopy?

Capsule endoscopy is also known as pill-camera or wireless endoscopy.

Capsule endoscopy is used mainly to pinpoint bleeding in hidden areas in the small bowel. 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. In Australia, we are currently researching and trialling new generation capsules for examination of the gullet and large bowel.

Capsule endoscopy uses a 10 - 27mm capsule, 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 provides high-resolution images of the stomach and small intestine, taking two pictures every second for up to 11 hours, providing about 60,000 pictures in total.

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.

What do I need to do to prepare for the capsule?

You should fast (no food or drinks) for 8 hours before undergoing capsule endoscopy. Diabetics should withhold their diabetic medication during the fasting period. If you take insulin, this should be discussed with your doctor.

Often, no bowel preparation is required for capsule endoscopy; however, your doctor may suggest that only a fluid meal is taken the night before the procedure. No special diet is required but strongly coloured foods and iron tablets should be avoided for 24 hours before the examination.



An information leaflet for patients and interested members of the general public prepared by the Digestive Health Foundation

What happens during the procedure?

On the day of the procedure, a harness, holding the data recorder, is worn for 8 hours after the capsule is swallowed. 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.

A glass of water is permitted when swallowing the capsule and a substance called "simethicone" is often added to this to prevent "bubbles" which can interfere with the picture transmitted by the capsule.

What happens after the procedure?

Eight hours after the capsule is swallowed, the patient returns to the doctor's surgery 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 the doctor.

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.

Remember

- No fluid for 2 hours after swallowing the capsule.
- No solid food for 4 hours after swallowing the capsule.

Are there any risks?

Capsule endoscopy is a very safe procedure. Complications of capsule endoscopy are very infrequent.

The capsule has a gel coating which makes it easy to swallow. 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.

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 consult your doctor.

Digestive Health Foundation

This information leaflet has been designed by the Digestive Health Foundation as an aid to people who will undergo a capsule endoscopy or for those who wish to know more about it. This is not meant to replace personal advice from your medical practitioner.

The Digestive Health Foundation (DHF) is an educational body committed to promoting better health for all Australians by promoting education and community health programs related to the digestive system.

The DHF is the educational arm of the Gastroenterological Society of Australia (GESA). GESA is the professional body representing the specialty of gastrointestinal (GI) and liver disease. Members of the Society are drawn from physicians, surgeons, scientists and other medical specialties with an interest in gastrointestinal disorders. GI disorders are the most common health related problems affecting the community.

Research and education into gastrointestinal disease are essential to contain the effects of these disorders on all Australians.

Further information on a wide variety of gastrointestinal and liver conditions is available on our website - www.gesa.org.au

