

## Capsule endoscopy

### Definition

Endoscopy is a way of looking inside the body. Endoscopy is often done with a tube put into the body that the doctor can use to look inside.

Another way to look inside is to put a camera in a capsule (capsule endoscopy). This capsule includes one or two tiny cameras, a light bulb, a battery, and a radio transmitter.

It is about the size of a large vitamin pill. The person swallows the capsule, and it takes pictures all the way through the digestive (gastrointestinal) tract.

- The radio transmitter sends the photos to a recorder the person wears on their waist or shoulder.
- A technician downloads the photos from the recorder to a computer, and the doctor looks at them.
- The camera comes out and is flushed down the toilet safely.

### Alternative Names

Capsule enteroscopy; Wireless capsule endoscopy; Video capsule endoscopy (VCE); Small bowel capsule endoscopy (SBCE)

### How the Test is Performed

This test can be started in the doctor's office.

- The capsule is the size of a large vitamin pill, about an inch (2.5 centimeters) long and less than ½ inch (1.3 centimeters) wide. Each capsule is used only once.
- The health care provider may ask you to lie down or sit up while swallowing the capsule. Capsule endoscope will have a slippery coating, so it is easier to swallow.

The capsule is not digested or absorbed. It travels through the digestive system following the same path food travels. It leaves the body in a bowel movement and can be flushed down the toilet without harming the plumbing.

The recorder will be placed on your waist or shoulder. Sometimes a few antenna patches may also be put on your body. During the test, the small light on a recorder will blink. If it stops blinking, call your provider.

The capsule may be in your body for several hours or several days. Everyone is different.

- Most of the time, the capsule leaves the body within 24 hours. Flush the capsule down the toilet.
- If you do not see the capsule in the toilet within two weeks of swallowing it, tell your provider. You may need an x-ray to see if the capsule is still in your body.

### How to Prepare for the Test

Follow your provider's instructions. If you do not follow instructions carefully, the test may have to be done a different day.

Your provider may ask you to:

- Take medicine to clear your bowels before this test
- Have only clear liquids for 24 hours before this test
- Have nothing to eat or drink, including water, for about 12 hours before you swallow the capsule

DO NOT smoke for 24 hours before this test.

Be sure to tell your doctor:

- About all the medicine and drugs you take, including prescription medicine, over-the-counter (OTC) medicine, vitamins, minerals, supplements, and herbs. You may be asked to not take some medicines during this test, because they could interfere with the camera.
- If you are allergic to any medicine.
- If you have ever had any blockages of the bowel.
- About any medical conditions, such as problems swallowing or heart or lung disease.
- If you have a pacemaker, defibrillator, or other implanted device.
- If you have had abdominal surgery or any problems with your bowel.

On the day of the test, go to the provider's office wearing loose fitting, two-piece clothing.

While the capsule is in your body you should not have an MRI.

### **How the Test will Feel**

You will be told what to expect before the test is started. Most people consider this test comfortable.

While the capsule is in your body you can do most normal activities, but not heavy lifting or strenuous exercise. If you plan to work on the day of the test, tell your provider how active you will be on the job.

Your provider will tell you when you can eat and drink again.

### **Why the Test is Performed**

Capsule endoscopy is a way for the doctor to see inside your digestive system.

There are many problems it can look for, including:

- Bleeding
- Ulcers
- Polyps
- Tumors or cancer
- Inflammatory bowel disease
- Crohn disease
- Celiac disease

### **Normal Results**

The camera takes thousands of color photos of your digestive tract during this test. These pictures are downloaded to a computer and software turns them into a video. Your provider watches the video to look for problems. It may take up to a week for you to learn the results. If no problems are found, your results are normal.

### **What Abnormal Results Mean**

Your provider will tell you if they find a problem with your digestive tract, what it means, and how it can be treated.

### **Risks**

There are very few problems that can occur with capsule endoscopy. Call your provider right away if, after swallowing the capsule, you:

- Have a fever

- Have trouble swallowing
- Throw up
- Have chest pain, cramping, or abdominal pain

If your intestines are blocked or narrow, the capsule can get stuck. If this happens, you may need surgery to remove the capsule.

If you have an MRI or go near a powerful magnetic field (like a ham radio) you could have serious damage to the digestive tract and abdomen.

## References

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