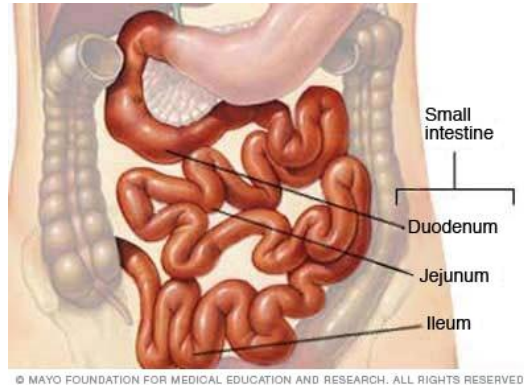


# COMPREHENSIVE GASTROINTESTINAL HEALTH

## CAPSULE ENDOSCOPY INFORMATION

### What is a capsule endoscopy?

- Capsule endoscopy allows for examination of the small intestine.
- This middle portion of your gastrointestinal tract, which includes three portions of the small intestine (duodenum, jejunum, ileum), cannot be easily reached with standard endoscopy methods.



### How is a capsule endoscopy performed?

- You will be given a pill sized video camera for you to swallow. This camera has its own light source and takes pictures of your small intestine as it passes through. These pictures are sent to a small recording device you have to wear on your body.
- Your doctor will be able to view these pictures after they are downloaded. This may provide information on structural changes in your small intestine.

### Why is a capsule endoscopy done?

- The most common reason for doing capsule endoscopy is to search for a cause of bleeding from the small intestine.
- It may also be useful for detecting polyps, Crohn's disease, ulcers, and tumors of the small intestine.

### How do you prepare for a capsule endoscopy?

- The day before the test, eat normally in the morning. After noon, have only a liquid diet. Stop eating and drinking completely after 10 p.m. By keeping your stomach and small intestine empty, the camera is allowed to capture clear images of the small intestinal lining.
- To prevent medications from interfering with the camera, take your medications either two hours before or two hours after your procedure is scheduled.
  - o Stop iron supplementation or bismuth salicyclate (Pepto Bismol) for the week before the capsule endoscopy procedure.

### **What happens during the capsule endoscopy?**

- Your health care team will review the procedure with you.
- You may be asked to remove your shirt so that adhesive monitors can be attached around your abdominal wall. Each patch contains an antenna with wires that connect to a recorder.
- The recorder is worn on a belt around your waist and collects data from the camera throughout the day.
- Once the equipment is ready, you swallow the pill-sized camera capsule with water. Once the camera is swallowed, you should not be able to feel it anymore.
  - o The pill sized capsule is about the size of a large pill (26 mm x 11 mm; 1 inch x 0.43 inches).
- The capsule passes naturally through your digestive tract while transmitting video images to a data recorder worn on your belt for approximately eight hours. At the end of the procedure you will return to the office and the data recorder is removed so that images of your small bowel can be put on a computer screen for physician review.
- You are then free to proceed with your normal daily activities.
  - o After ingesting the capsule and until it is excreted you should not be near an MRI device or schedule an MRI examination.

### **What happens after the capsule is swallowed?**

- The camera capsule will pass naturally through your digestive tract.
- You will have to avoid vigorous physical activity such as running or jumping during the study.
- After two hours, you may begin drinking clear liquids.
- After four hours, you may have a light lunch or snack.
- After eight hours, when the test is complete, you may resume your normal diet.

### **What do I do after the test is over (either 8 hours has passed or you see the capsule passed into the toilet)?**

- You may remove the patches and the recorder from your body and pack them in a bag.
- Arrive at our office 8 hours after the capsule has been swallowed.

### **When will the camera capsule pass through my body? What do I do when I see it pass?**

- If you see the camera capsule in the toilet, there is no need to retrieve it. You can flush the camera capsule down the toilet.
- Your body might expel the camera capsule within hours or after several days. Each person's digestive system is different.
- If you do not see the capsule in the toilet within two weeks, contact our office. We may order an x-ray to see if the capsule is still in your body.

### **When will I receive the results?**

- The camera used in capsule endoscopy takes thousands of color photos as it passes through your digestive tract. The images saved on the recorder are transferred to a computer with special software that strings the images together to create a video.

- Your doctor watches the video to look for abnormalities within your digestive tract. It may take several days to a week to download and review the results.
- If you have not received the results from our office within one week, please call us.

### **Is capsule endoscopy safe?**

- Capsule endoscopy is a safe procedure that carries few risks. However, it's possible for a capsule to become lodged in the digestive tract rather than leaving your body in a bowel movement within several days.
  - o The risk, which is small, might be higher in people who have a condition — such as a tumor, Crohn's disease or previous surgery in the area — that causes a narrowing (stricture) in the digestive tract.
  - o If you have abdominal pain or are at risk of a narrowing of your intestine, your doctor likely will get a CT scan to look for a narrowing or perform a patency capsule study before using capsule endoscopy.
  - o Even if the imaging study is negative, there's still a small chance that the capsule could get stuck.
- It's important to recognize obstruction early. Signs of obstruction include unusual bloating, abdominal pain, nausea or vomiting. You should call your doctor immediately for any such concerns.
- Also, if you develop a fever after the test, have trouble swallowing or experience chest pain, tell your doctor immediately.
- Be careful not to prematurely disconnect the system as this may result in loss of pictures being sent to your recording device.
- If the capsule hasn't passed in a bowel movement but isn't causing signs and symptoms, your doctor might give the capsule more time to leave your body. However, a capsule causing signs and symptoms that indicate bowel obstruction must be removed, either by surgery or through a traditional endoscopy procedure, depending on where the capsule is stuck.

### **CHECKLIST PRIOR TO SCHEDULING A CAPSULE ENDOSCOPY EXAM:**

- Swallowing disorder
- Pacemaker
- Defibrillator
- Previous abdominal surgery
- Previous history of bowel obstruction
- History of Crohn's disease
- History of adhesions
- Possibility of pregnancy

Depending on these factors, capsule endoscopy may not be the correct choice for you or you may need additional evaluation prior to performing capsule endoscopy to minimize risks.

# COMPREHENSIVE GASTROINTESTINAL HEALTH CAPSULE ENDOSCOPY INSTRUCTIONS

## DAY BEFORE SWALLOWING CAPSULE

- You may eat normally in the morning
- After noon, have only a liquid diet
- You may have nothing to eat or drink after 10 p.m.

## DAY OF SWALLOWING CAPSULE

- Arrive at the office at 8:30 a.m.
  - o Review consent (see detailed information below)
    - Acknowledge risk of obstruction
    - Acknowledge risk of MRI
    - Clarify that you are not pregnant, as the safety of the PillCam capsule in pregnancy has not been established.
  - o Swallow capsule
- Return to the office at 4:30 p.m. to drop off all of the equipment so that it can be downloaded and interpreted

## INFORMED CONSENT

- Patients with suspected or known intestinal strictures may be at increased risk for bowel obstruction due to impaction of the camera capsule at the site of the narrowing or stricture.
  - o Endoscopy or surgery may be necessary if a capsule becomes lodged.
  - o The risk of capsule retention (defined as the capsule remaining in the digestive tract for more than two weeks) can be caused by NSAID strictures, Crohn's disease, small bowel tumors, intestinal adhesions, ulcerations, and radiation enteritis.
  - o Summaries in published literature identify the risk of retention for obscure bleeding to be 1.5%, for suspected Crohn's disease to be 1.4%, for known Crohn's the risk is higher at 5% and for neoplastic lesions the rate of retention is 2.1%.
- You should be aware that if you develop abdominal pain, nausea, vomiting, or distension, that you should contact our office immediately.
- DO NOT UNDERGO AN MRI until excretion of the PillCam capsule has been confirmed.
  - o If you undergo an MRI while the capsule is inside your body, this may result in serious damage to the intestinal tract or abdominal cavity.
  - o If the excretion of the PillCam capsule was not positively verified, you should contact us for possible abdominal x-ray before undergoing an MRI examination.

Patient name (printed) \_\_\_\_\_

Patient signature \_\_\_\_\_ Date \_\_\_\_\_

Employee signature \_\_\_\_\_ Date \_\_\_\_\_