

Tip Sheet: Capsule Endoscopy

How does capsule endoscopy work?

Capsule endoscopy is a pill the size of a jelly bean that contains a small camera. It works by taking approximately 2 pictures per second over a period of 8 hours. This adds up to approximately 50,000 pictures, which are transmitted to a recorder worn on a belt during the 8 hours. These pictures are then downloaded from the recorder overnight. All the apparatus will be taken off when the study is over at about 8 hours.

What is the sequence of events when doing a capsule endoscopy?

The day prior to the procedure, your child may eat regular food up until 12 pm. After this time, he/she will need to have a clear liquid diet. Clear liquids include water, sodas, apple juice, ice pops, Jell-O, or broth. Clear liquids mean anything that you can see through. Typically patients are asked to use a mild bowel preparation to ensure that the capsule goes through the entire small bowel within 8 hours. On the day of the procedure, the patient comes to our office to swallow the pill. There should be nothing ingested that morning.

How long does Capsule endoscopy procedure take?

The procedure takes about 8 hours.

How is the capsule removed from the body?

The capsule should be passed naturally in the bowel movement. This may take up to a week. We ask that once the Capsule is ingested that stools are screened to insure its passage out of the body. You do not need to return the capsule.

How big is the Small Bowel Capsule?

The capsule is 11 mm x 26 mm and is roughly the size of a large jelly bean.

Does insurance cover capsule endoscopy for children?

We will call the insurance company for authorization prior to the procedure. Note that authorization does not guarantee payment.

How does small bowel capsule endoscopy differ from conventional endoscopy?

Conventional endoscopy is considered an invasive procedure that requires general or moderate sedation. During an upper or lower endoscopy, the physician will take tissue samples called biopsies. Capsule endoscopy is done without anesthesia as a way to visualize the small intestine which cannot be reached by conventional upper endoscopy. Capsule endoscopy does not take any biopsy samples.

What are the risks associated with capsule endoscopy?

There is a rare complication called Capsule retention. This is when the capsule does not pass through the small bowel due to slow transit or a narrowing of the small bowel. The populations that are at risk are those with known Crohn's Disease, chronic non-steroidal anti-inflammatory drug (NSAID) use, or previous abdominal surgery. This complication can potentially lead to small

bowel obstruction (SBO) and may need to be corrected surgically. A retained capsule does not always lead to small bowel obstruction or require surgery.

What can be done to possibly predict if a capsule will be retained?

Small bowel imaging by CT scan, upper GI series with small bowel follow through or magnetic resonance enterography (MRE) prior to performing a capsule endoscopy may be helpful in assessing the risk of a narrowed small bowel, but these tests are not always reliable. Another option is using a patency capsule (Agile Capsule) which can pass through the small intestine as a camera pill would, but if there is an obstruction, the Agile Capsule will begin to dissolve at about 30 hours after ingestion. The passage of a dissolved patency pill suggests a narrowing in the small intestine.

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