Capsule Endoscopy Information Sheet

What is Capsule Endoscopy?

Capsule endoscopy is a procedure that allows your doctor to examine the lining of the small intestine. The capsule is a small sized video camera that when swallowed takes multiple pictures of your gastrointestinal tract and sends the images to a recording device that you will wear during the procedure. After the procedure is done, the images will be downloaded onto a computer and read by one of the UNC gastroenterologists. This procedure is most commonly done to look for bleeding in the small intestine but can also be used for polyp detection, identification of small intestinal tumors, and identification of small intestinal diseases such as Crohn’s disease, ulcers and celiac disease.

How is the procedure done?

When arriving in GI procedures you will be checked in and a data recorder will be attached to a belt that you will wear for the duration of the procedure. You will then be asked to swallow a video capsule that is about the size of a large pill. This will pass naturally through your digestive tract while it is transmitting images to the recording box. If you have had problems swallowing, past surgery on your stomach, or problems with stomach emptying (gastroparesis), you should let your physician know, in which case the capsule may be placed with an upper endoscopy. You will be able to drink clear liquids after two hours. Further instructions on what you can do during the procedure will be given to you at the time of the procedure. The procedure usually takes about 8 hours. You should not be near an MRI device until the capsule is passed from your intestinal tract.

What are the possible complications of capsule endoscopy?

Although complications can occur with capsule endoscopy, they are not common. Associated risks include:

1. **Capsule retention.** Retention of the capsule camera is estimated to occur in 1 to 2 studies per 200 evaluations performed. This may occur because of a narrowing of the gastrointestinal tract (stricture) from inflammation, surgery or tumor. Retention may be associated with bowel obstruction. Signs of obstruction include bloating, abdominal pain and nausea/vomiting. Surgery is required in the event of capsule retention. This surgery is typically elective, but emergency surgery may be necessary.

2. **Delayed capsule passage.** Variations in intestinal anatomy or motility may delay capsule passage or affect the ability to complete the study. This may occur in up to 20 studies of every 100 evaluations performed. This may require further...
evaluations such as provider assessment or x-rays to localize or document capsule passage. In addition, it may affect the quality of the study and/or the ability to complete the evaluation.

3. **Image loss.** Malfunction of the capsule or system (hardware or software) may also affect the study quality or its completeness. This is estimated to occur in 1 to 2 per 100 studies and may require repeating the capsule endoscopy procedure.

**Other complications may occur.** Rare complications may occur including aspiration of the capsule or stomach contents, sore throat, and dental injury. In addition, infection, bleeding, or perforation of the digestive tract is possible.

**Death:** Capsule endoscopy may rarely result in death related to the procedure itself or related interventions such as surgery for capsule retention.

**Benefits:** Capsule endoscopy is a non-invasive diagnostic exam that provides an improved level of visual imaging for early detection and diagnosis of gastrointestinal tract diseases and may identify a cause for symptoms that may not be obtained by X-ray or other diagnostic means. The procedure is generally very safe and is well tolerated by most patients.

**Alternative options:** X-rays, MRI scans and surgery are alternative ways of looking at the small intestine.

**When to expect results?**
Results from the capsule endoscopy are usually available within a week of the study. You should check with your referring physician if you do not hear anything about the results in 2 weeks. If the physician reading the study does not see the capsule enter the large intestine or exit your bowel you will receive a phone call to see if you have passed the capsule. If you have not seen the capsule pass, an X-ray of your abdomen will be performed to make sure the capsule has passed.