

Your Disease

As someone who has been newly diagnosed, you're probably familiar with a variety of procedures. However, your ongoing treatment will require follow-up tests. You can familiarize yourself with these procedures in this section.

Watch for signs of a flare, address any changes in symptoms, and identify possible side effects of treatment.

After you are diagnosed, your doctor will work with you on a treatment plan. Once you begin treatment, there may be regular follow-up appointments to monitor your disease, watch for signs of a flare, address any changes in symptoms, and identify possible side effects of treatment. As your symptoms change or improve, the medical team will adjust your treatment program accordingly.

Testing And Screening

Periodic blood and stool tests

You may have undergone several lab tests as part of your initial diagnosis. Periodic blood and stool tests may be performed in the future to:

- Check medication levels in the blood
- Test the function of various body systems and how they respond to treatment
- Monitor white blood cells to watch for risk of infections
- Look for any other abnormalities

Routine blood tests include *complete blood count* (CBC) to detect infection and anemia as well as to monitor drug toxicity, and tests for inflammatory markers such as *C-reactive protein* (CRP) and *erythrocyte sedimentation rate* (ESR).

Endoscopic procedures

The following procedures are performed to both diagnose IBD and to monitor your disease and potential complications. You may already be familiar with some of them.

Endoscopy refers to procedures where a flexible tubular camera system is used to look at the inside of the digestive tract by entering through the mouth or anus. The scope also has other tools that may be used for additional purposes, including collection of tissue samples for biopsies.

Colonoscopy: Typically this procedure is performed at a special endoscopy center, or sometimes in an operating room. A gastroenterologist (or in some cases, a surgeon) inserts the scope through the anus and into the colon. The scope has a light which allows the doctor to see the internal walls of the rectum, colon, and lower end of the small intestine (ileum). The procedure is very safe and generally does not cause significant pain or discomfort. The American College of Gastroenterology (ACG) website (www.gi.org/media/colonoscopy) offers a video about the effectiveness,

"I bring somebody with me to procedures. Your friends, your loved ones... ask them for help."

SABRINA, Living with IBD

safety, and importance of a colonoscopy. Featuring the experience of a female patient, the video reviews all clinical information on the procedure.

Sigmoidoscopy: A shorter endoscope can be used to inspect the lower portion of the colon in a flexible sigmoidoscopy. This is often referred to as a "flex-sig" procedure.

Colorectal cancer screening: During a colonoscopy or sigmoidoscopy, the doctor can inspect for early signs of colorectal cancer. Some IBD patients are at a slightly higher risk for colorectal cancer, particularly those with uncontrolled inflammation who have had the disease for a long period of time. However, cancer can often be discovered at earlier stages because of the regularity of IBD-related tests.

EGD: Short for esophagogastroduodenoscopy, and also known as upper GI endoscopy, EGD is similar to a colonoscopy, but it is performed on the upper end of the digestive tract. A similar scope is used, entering through the mouth and esophagus. The doctor can inspect the inside of the stomach and upper end of the small intestine (*duodenum*).

Enteroscopy: Similar to an upper endoscopy, an enteroscopy is performed to look deeper into the small intestine. The doctor may be able to reach as far as the *jejunum*, the middle section of the small intestine.

Capsule endoscopy: In cases where the affected area of the bowel cannot be reached with traditional scopes, a capsule endoscopy may be performed. This involves swallowing a capsule that's equipped with a camera—a "pill camera" (PillCam[®], Endo Capsule[®]). As it travels through the intestines, the capsule automatically takes pictures. The images are wirelessly sent to receivers built into a vest worn by the patient. The capsule is expelled during a bowel movement, usually within a day. While this procedure provides helpful images, some portions of the intestines may be missed due to the direction the camera is pointing in and the time that elapses between photographs. It is not used when there are *strictures* (narrowed parts of the intestine) since there is some risk that the capsule will get stuck in a stricture.

ON THE DVD

Listen to Jonathon and others discuss how to monitor your symptoms and what to ask your doctor about tests to expect down the road.



External Imaging Procedures

There are a variety of technologies that generate images of the digestive organs and other soft tissue from outside the body.

Computed tomography (CT Scan)

Computed tomography, also known as a CT Scan, uses a series of X-ray images taken from a variety of angles, which are joined together to form a combined image of internal organs. *CT enterography* (CTE) provides a specialized look at the small intestine. A contrast material is usually given before these procedures.

Magnetic resonance imaging (MRI)

Magnetic resonance imaging (MRI) provides detailed images of soft tissue. The machine moves along the body using magnetic waves to take pictures, which generate a two- or three-dimensional image that can be viewed as a series of cross-sections. Like CTE, MR enterography (MRE) provides a detailed look at the small intestine. Contrast material is also given to the patient before these procedures.

Barium studies

Similar to the enterography techniques mentioned above, oral contrast material can be used with traditional X-ray technology as well. Barium studies use barium sulfate as the contrast material. It is a chalky/milky liquid that the patient drinks prior to the procedure. A series of X-rays are taken while the patient is moved around on a table. This allows the doctor to observe the material flowing through the digestive system.

- Upper gastrointestinal (GI) series focuses on the esophagus, stomach, and duodenum.
- Small bowel follow-through observes the entire small intestine, including the jejunum and ileum.
- Lower GI series involves inserting the contrast material directly into the rectum and colon (barium enema), and provides images of the large intestine.

KEY TAKEAWAYS

Your doctor may order tests or procedures periodically for a variety of reasons, including monitoring your progress, looking for complications, and determining how well you are responding to treatment.

Logging your symptoms and diet can help you keep track of your disease management. This information may also be beneficial to your healthcare team.

"Being honest about your symptoms and medications you're taking or not taking is very important."

DR. YEN, Gastroenterologist