

## Barium Enema

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [1], February / 2014



Listen to the [Cancer.Net Podcast: Barium Enema?€"What to Expect](#) [2], adapted from this content

### Key Messages:

- A barium enema is an x-ray examination of the colon and rectum that helps a doctor identify inflammation, polyps, or cancer.
- Before a barium enema, you will need to empty your colon by following a restricted diet and using a laxative or enema.
- During the examination, a liquid called barium is delivered into the colon through the anus and x-rays are taken.
- After the procedure, you will go to the restroom to push out the barium; you may be asked to take a laxative at home to get rid of any barium still in your body.

A barium enema is an x-ray examination of the colon and rectum. The colon and rectum make up the large intestine, which plays an important role in the body's ability to process waste.

An enema is a procedure that delivers liquid into the rectum and colon through the anus. Barium, which is a special dye called a contrast medium, is the liquid used in a barium enema. When an x-ray is taken, the barium shows up bright white, clearly outlining the colon and rectum. Abnormalities, such as inflammation, polyps (precancerous growths), and cancer, are then visible.

### The medical team

A barium enema is performed in an x-ray room in either a hospital or a doctor's office. The test is performed by a radiology technician (a health care professional who is trained in performing this type of test) or a radiologist (a medical doctor who performs and interprets imaging tests to diagnose disease). The radiologist interprets the results of the barium enema and diagnoses or confirms any abnormalities.

### Preparing for the procedure

When you schedule the barium enema, you will get detailed instructions for how to prepare. Because your colon must be completely empty, you will need to follow a restricted diet consisting of either soft foods or clear liquids, such as fat-free bouillon or broth, black coffee, and strained fruit juice, for one to three days before the procedure.

You will also need to take a laxative or give yourself an enema the day or night before your appointment to remove any remaining waste from the colon. If your doctor prescribes a laxative, it will be either a pill or a powder that you mix with water before drinking. In either form, the laxative will make you use the bathroom frequently, so it is a good idea to have easy access to a bathroom during this time. You will not be allowed to eat or drink anything after midnight on the day of your procedure.

Tell your doctor about all of the medications you are taking, as well as any drug allergies you may have, especially if you have an allergy to a contrast medium. Also, ask whether you should take your usual medications on the day of the procedure. Finally, you will need to tell the doctor about any medical conditions you have. Women should tell their doctors if there is any chance that they are pregnant because x-rays can be harmful to the developing baby.

Before your appointment, you may want to check with your insurance provider to find out whether the cost of the procedure will be covered and if there are any additional costs you may need to pay yourself. Once you arrive at the doctor's office or hospital, you will be asked to sign a consent form that states you understand the benefits and risks of the barium enema and agree to have the procedure. Talk with your doctor about any concerns you may have.

### During the procedure

A barium enema usually takes 20 to 30 minutes to complete. Before the procedure begins, you will be asked to remove all clothing, jewelry, and any other metal objects that could interfere with the x-ray image (picture). You will be given a hospital gown to wear.

When you are ready, the doctor or technician will direct you lie on your side on an examination table in a private room, and a sheet will be draped over your body. The examination table is attached to a fluoroscope, a special x-ray machine connected to a video monitor.

The x-ray technologist will begin the exam by taking several x-rays to make sure that your colon is empty. A well-lubricated enema tip attached to a tube will be inserted into your anus. The radiologist will then insert barium into your colon through this tube.

You may be asked to move into several different positions during the test so the barium can flow through the entire colon. Once the radiologist determines there is enough barium in the colon, a small amount of air may be delivered into the colon through the same tube to inflate the bowel and produce a better view of the intestinal wall. If this occurs it is called a double contrast barium enema. Several x-rays will be taken during this time.

You may feel some mild abdominal pressure and cramping when the barium flows through the colon. Taking slow, deep breaths can help make you more comfortable. You may also feel discomfort from lying still for a long time. Once the barium is inserted into the colon, you may also feel the urge to have a bowel movement. It is important for you to try to hold in the barium until the examination is complete.

### **After the procedure**

Once the radiologist determines that enough images of the colon have been taken, the enema tip is removed. You will be helped down from the table so you can go to the restroom to push out the barium. You will then return to the examination room for an additional x-ray to make sure that you have emptied your bowel enough.

You may notice gray or white stool for several days after a barium enema as the remaining barium leaves your body. Because barium can cause constipation (infrequent or difficult passage of stool), you may need to take a laxative as directed by your doctor when you return home to help remove any remaining barium.

Be sure to drink plenty of fluids for the next several days to help prevent constipation. If you feel severe abdominal pain or have a fever, bloody bowel movements, dizziness, or weakness, call your doctor immediately.

You can go back to your usual activities immediately after the barium enema, but it may be a good idea to have someone else drive you home from the test. If your doctor finds any areas of concern during your barium enema, additional tests may be needed to examine them more closely.

### **Questions to ask your doctor**

Before your barium enema, consider asking the following questions:

- Why are you recommending this procedure?
- Who will perform the barium enema? Who else will be in the room?
- What will happen during the barium enema?
- How long will the procedure take?
- Will it be painful?
- Are there risks associated with having a barium enema?
- Will I need to avoid any activities after the barium enema?
- How accurate is a barium enema at finding cancer?
- When will I learn the results? How will they be communicated to me?
- Who will explain the results to me?
- What other tests will I need if the barium enema finds evidence of cancer?

### **More Information**

[Tests and Procedures](#) [3]

[Guide to Colorectal Cancer](#) [4]

[Colonoscopy](#) [5]

### **Additional Resources**

[RadiologyInfo: Lower Gastrointestinal Tract X-ray](#) [6]

[MedlinePlus Interactive Tutorials: Barium Enema](#) [7].

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#### **Links:**

[1] <http://www.cancer.net/about-us>

[2] [http://www.cancer.net/sites/cancer.net/files/Barium\\_Enema\\_What\\_to\\_Expect.mp3](http://www.cancer.net/sites/cancer.net/files/Barium_Enema_What_to_Expect.mp3)

[3] <http://www.cancer.net/node/24959>

[4] <http://www.cancer.net/node/18701>

[5] <http://www.cancer.net/node/24481>

[6] <http://www.radiologyinfo.org/en/info.cfm?pg=lowergi>

[7] <http://www.inspireweightloss.net/tutorials/bariumenema/html/>