

BARIUM ENEMA (LOWER GASTROINTESTINAL)

△ GENERAL INFORMATION

A barium enema (lower GI) is a valuable way to examine the large bowel (Fig. 1–1) for a number of things that may be wrong with it.

HOW A BARIUM ENEMA WORKS

- The barium used is the color and consistency of buttermilk.
- An x-ray picture of the colon without any preparation would simply look black because the x-rays would pass right through such soft tissue. Barium, however, does not let x-rays pass through it. For this reason, when any barium is placed in the large bowel, and x-rays are taken, the large bowel with barium in it will look white, and everything else around it will be black (Fig. 1–2).
- However, if some growth is in the large bowel (Fig. 1–3), and it keeps the barium from getting to the area occupied by the growth, this part of the large bowel will not appear white; x-rays will pass right through it, and it will appear black (Fig. 1–4).

Radiologists are experts at giving barium enemas and on reading the x-rays. They can pick up lesions as small as a pea.

- Do not eat breakfast.
- Use one Dulcolax rectal suppository according to the instructions supplied.
- There may be conditions that would make it advisable to use a different method to cleanse your bowel.
- Vital medications can be taken with a tiny sip of water. Talk with your doctor about taking any diabetic medications before the study.
- Let the doctor know if you are, or think you are, pregnant.

THE PROCEDURE

- You will lie on the x-ray table on your left side.
- A smooth enema tip with petroleum jelly (Vaseline) on it will be inserted in the anus gently and the barium allowed to flow in very much like a regular enema.
- As the radiologist watches the barium flow into your large bowel, x-ray pictures will be taken of important areas and of any suspicious lesions.
- During the examination, the x-ray machine and the x-ray table will move in several directions. Also, you will be asked to roll in various positions.

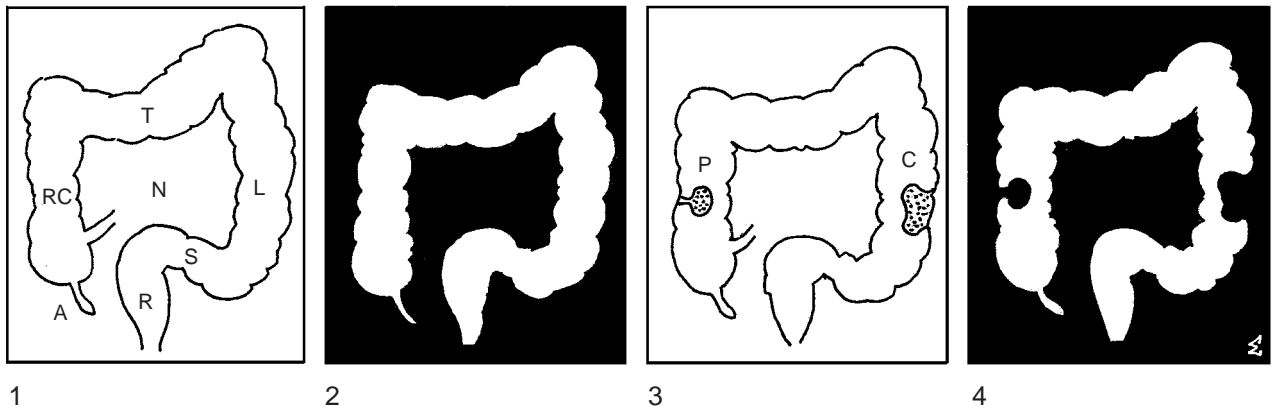


Figure 1. 1, Anatomy of normal large bowel. A, Appendix; RC, right colon; T, transverse colon; L, left colon; S, sigmoid colon; R, rectum; N, navel. 2, An x-ray of normal large bowel with barium in it. 3, Anatomy of large bowel with polyp (P) and cancer (C) in it. 4, An x-ray of large bowel shown in Part 3 after it has been filled with barium.

PREPARATION FOR A BARIUM ENEMA

The large bowel must be clean; otherwise pieces of stool in it may be mistaken for tumors. One of several ways to clean your bowel is as follows:

- Eat a clear liquid breakfast, lunch, and supper on the day before the examination. Do not drink milk or cream.
- Starting at 1 o'clock on the day before, drink an 8-ounce glass of water. At 6 o'clock, drink a cold, full (10-ounce) bottle of citrate of magnesia. At 7 o'clock swallow whole, four Dulcolax tablets and one full glass or more of water.
- On the morning of the examination:

- You may feel the urge to have a bowel movement, but you should try to hold the barium in the colon.
- You may feel some bowel cramping. If necessary, medicine can be given to relax your bowel during the examination.
- When this part of the examination is completed, the barium will be let out through the same enema tip and tube already in place. If necessary, you also will be able to evacuate additional barium in the bathroom toilet right next to the x-ray room.
- You will be asked to get on the table again for more pictures after you have evacuated the barium. Most of the time a thin film of barium still sticks to the

bowel lining, making it possible to see even more and finer details.

- The entire procedure usually takes less than 1 hour.
- You are free to leave after the examination.
- You are free to eat as usual after the examination.
- Drink plenty of liquids to help you avoid constipation.

- You may be instructed to take a mild laxative.
- The first bowel movement or two will be white because of the barium.

The results of your examination will be reported to your doctor.