

Lower GI Series



National
Institute of
Diabetes and
Digestive
and Kidney
Diseases

National
Digestive
Diseases
Information
Clearinghouse

2 Information Way
Bethesda, MD
20892-3570

Tel:
(301) 654-3810

Fax:
(301) 907-8906

E-mail:
niddic@info.niddk.nih.gov

NATIONAL
INSTITUTES
OF HEALTH

National Digestive Diseases Information Clearinghouse

Lower GI Series

A lower gastrointestinal (GI) series uses x-rays to diagnose problems in the large intestine, which includes the colon and rectum. The lower GI series may show problems like abnormal growths, ulcers, polyps, and diverticuli.

Before taking x-rays of your colon and rectum, the radiologist will put a thick liquid called barium into your colon. This is why a lower GI series is sometimes called a barium enema. The barium coats the lining of the colon and rectum and makes these organs, and any signs of disease in them, show up more clearly on x-rays. It also helps the radiologist see the size and shape of the colon and rectum.

You may be uncomfortable during the lower GI series. The barium will cause fullness and pressure in your abdomen and will make you feel the urge to have a bowel movement. However, that rarely happens because the tube the physician uses to inject the barium has a balloon on the end of it that prevents the liquid from coming back out.

You may be asked to change positions while x-rays are taken. Different positions give different views of the intestines. After the radiologist is finished taking x-rays, you will be able to go to the bathroom. The radiologist may also take an x-ray of the empty colon afterwards.

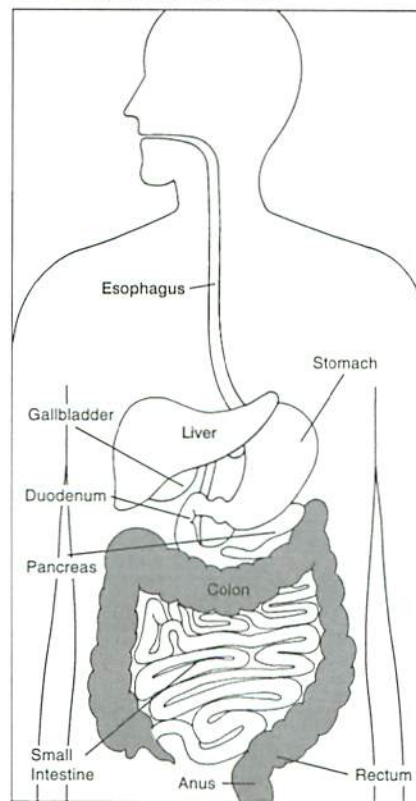
A lower GI series takes about 1 to 2 hours. The barium may cause constipation and make your stool turn gray or white for a few days after the procedure.

Preparation

Your colon must be empty for the procedure to be accurate. To prepare for the procedure you will have to restrict your diet for a few days beforehand. For example, you might be able to drink only liquids and eat only non-sugar, nondairy foods for 2 days before the procedure; only clear liquids the day before;

and nothing after midnight the night before. A liquid diet means fat-free bouillon or broth, Jell-O®, strained fruit juice, water, plain coffee, plain tea, or diet soda. To make sure your colon is empty, you might be given a laxative or an enema before the procedure. Your physician may give you other special instructions.

The Digestive System



Your physician has fact sheets on other diagnostic tests:

- Colonoscopy
- ERCP
- Sigmoidoscopy
- Upper Endoscopy
- Upper GI Series



U.S. DEPARTMENT
OF HEALTH AND
HUMAN SERVICES
National Institutes
of Health

NIH Publication
No. 98-4334
June 1998

Upper GI Series



National Digestive Diseases Information Clearinghouse

National
Institute of
Diabetes and
Digestive
and Kidney
Diseases

National
Digestive
Diseases
Information
Clearinghouse

2 Information Way
Bethesda, MD
20892-3570

Tel:
(301) 654-3810

Fax:
(301) 907-8906

E-mail:
niddic@info.niddk.nih.gov

NATIONAL
INSTITUTES
OF HEALTH

Upper GI Series

The upper gastrointestinal (GI) series uses x-rays to diagnose problems in the esophagus, stomach, and duodenum (first part of the small intestine). It may also be used to examine the small intestine. The upper GI series can show a blockage, abnormal growth, ulcer, or a problem with the way an organ is working.

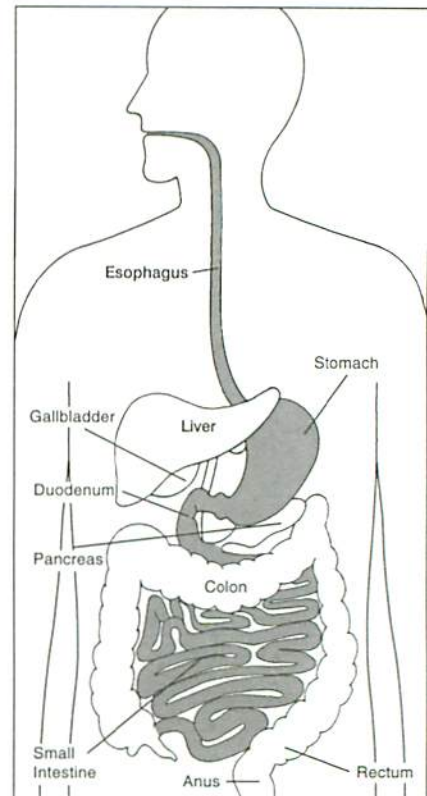
During the procedure, you will drink barium, a thick, white, milkshake-like liquid. Barium coats the inside lining of the esophagus, stomach, and duodenum and makes them show up more clearly on x-rays. The radiologist can also see ulcers, scar tissue, abnormal growths, hernias, or areas where something is blocking the normal path of food through the digestive system. Using a machine called a fluoroscope, the radiologist is also able to watch your digestive system work as the barium moves through it. This part of the procedure shows any problems in how the digestive system functions, for example, whether the muscles that control swallowing are working properly. As the barium moves into the small intestine, the radiologist can take x-rays of it as well.

An upper GI series takes 1 to 2 hours. It is not uncomfortable. The barium may cause constipation and white-colored stool for a few days after the procedure.

Preparation

Your stomach and small intestine must be empty for the procedure to be accurate, so the night before you will not be able to eat or drink anything after midnight. Your physician may give you other specific instructions.

The Digestive System



Your physician has fact sheets on other diagnostic tests:

- Colonoscopy
- Sigmoidoscopy
- ERCP
- Upper Endoscopy
- Lower GI Series



U.S. DEPARTMENT
OF HEALTH AND
HUMAN SERVICES
National Institutes
of Health

NIH Publication
No. 98-4335
June 1998