

Article 1520

Overview

An upper GI and small bowel series is a special X-ray test. It allows the doctor to see the upper part of the digestive tract. This area includes the esophagus, the stomach, and the small intestines.

Who is a candidate for the test?

This test may be ordered to investigate many different problems. These include:

- » abdominal pain
- » bleeding in the stomach or the bowels
- » bloating
- » diarrhea
- » food intolerance
- » gas
- » heartburn
- » indigestion
- » vomiting

This test may also be used after surgery has been performed on the upper digestive tract.

How is the test performed?

The person is asked to undress and put on a hospital gown. The technologist will then take a regular X-ray of the abdomen. Next, the individual drinks a large glass of chalky liquid called barium. The barium coats internal structures and makes them show up on the X-ray film. Sometimes, the person is also asked to swallow a carbonated powder to produce gas in the stomach. This helps provide contrast to the barium and makes visualization easier. As the barium flows through the digestive tract, multiple X-rays are taken with the person in different positions. This is so the entire gut can be seen from all sides. During the test, the person taking the X-rays may press on the individual's stomach with a lead glove or paddle. X-rays are usually done every 15 or 30 minutes to follow the dye as it moves through the digestive tract. When the barium reaches the large bowel, the test is finished.

What is involved in preparation for the test?

The individual is asked to refrain from drinking or eating for 8 hours before the test. If there is any concern over possible pregnancy, a pregnancy test should be done before the barium swallow. During the process, people must remove all jewelry and metal objects since these may interfere with the X-ray pictures. The healthcare provider will tell the individual if any other preparations are required.

What do the test results mean?

The X-rays may show several different abnormalities including:

- » esophageal abnormalities, such as esophageal atresia (inadequate development of the esophagus)
- » cancer
- » noncancerous tumors
- » peptic ulcer disease
- » poor function, or motility, of the esophagus.

The test can also detect other conditions such as gastroesophageal reflux disease, or GERD. This is a disorder in which the stomach contents flow back up into the esophagus.