

Upper Gastrointestinal (UGI) Series

About the Upper Gastrointestinal Tract

The upper gastrointestinal tract refers to the parts of the body that food passes through during digestion. The upper gastrointestinal tract includes the esophagus (the tube in the neck that connects the mouth to the stomach), the stomach, and part of the small intestine.

About the Upper Gastrointestinal (UGI) Series

An upper gastrointestinal (UGI) series is a video X-ray of the upper gastrointestinal tract at work. A UGI series involves taking X-rays while a patient drinks a liquid called barium. Barium shows up on X-rays, letting doctors see how it moves through the gastrointestinal tract. Patients who have ever had reactions to barium or other contrast dyes, should tell their doctors before having a UGI series.

Pediatric radiologists and radiology practitioner assistants (RPAs) perform a UGI series with the help of radiologic technologists. A UGI series takes place in the fluoroscopy exam room with an X-ray machine, a long table and a television screen. We often explain to patients that the X-ray machine is a large camera for taking pictures inside the body.

Before the Exam

Preparing at Home

Parents can help children prepare for a UGI series by helping them practice lying still for 10 to 15 minutes at a time. Parents can also help their children practice holding their breath for short periods. We sometimes ask patients to do this briefly when we take certain pictures.

Screening for Possible Pregnancy

Patients who are pregnant or who believe they could be pregnant should talk to their doctors before having a UGI series. Information discussed with a doctor is confidential. In addition, parents or caregivers who are pregnant or believe they might be pregnant shouldn't be in the room during a UGI series.

Guidelines for Oral Contrast Exams

Eating and Drinking

- Under age 5: Do not eat or drink anything during the 4 hours leading up to the exam. That includes any solids or liquids by mouth and /or feeding tube, unless approved by the fluoroscopy staff.
- Age 5 and up: Do not eat or drink anything during the 8 hours leading up to the exam. That includes any solids or

liquids by mouth and/or feeding tube, unless approved by the fluoroscopy staff.

Using Positive Distraction

We help our patients relax by creating a soothing environment. We offer positive distraction technology in our fluoroscopy room. Positive distraction technology helps patients relax during procedures and tests. Patients can choose from a variety of themes, such as baby animals or hot air balloons.

During the Exam

This section provides basic information about what to expect during a UGI series.

Getting Into Position

Patients remove their clothing and put on hospital gowns. We have private changing areas and lockers to store belongings. Once patients are ready, we help them get into the right position on the exam table.

Minimizing Radiation Exposure

Our practice is to perform imaging exams correctly and thoroughly, while exposing patients to the smallest amount of radiation possible. We'll cover parts of the body that don't need imaging with a protective apron whenever possible.

Drinking Barium

During a UGI series, patients drink barium. Barium looks like a milkshake, but it tastes unpleasant. We can add flavoring to the barium to make it easier to drink.

When patients are unable or unwilling to drink the barium, we sometimes insert a thin tube (called a nasogastric or NG tube) through the nose to get the barium into the esophagus.

The Exam

Taking Video X-Rays

As a patient drinks the barium, the radiologist or RPA will move the X-ray machine over the body. The machine will come close to, but not touch, the body. The machine allows the radiologist or RPA to see the barium move through the gastrointestinal system.

Patients continue drinking the barium until we tell them to stop. We also ask patients to roll from side to side during the exam.

Parent/Caregiver Role

Typically, a parent or caregiver can join a patient in the exam room. The most important thing parents and caregivers can do is to help children stay calm during imaging exams. They can do this by staying calm themselves. Parents and caregivers also can prepare the patient for the exam by following the home-preparation tips discussed earlier in this piece.

After the Exam

When we have seen the barium empty from the stomach and pass through the small intestine, the exam is complete. Completing a UGI series typically takes about 15 minutes to one hour

Follow-Up Care

After the exam, patients:

- Will be able to go to the bathroom
- Can return to normal activities and resume a normal diet
- Should drink plenty of liquids

Because of the barium, bowel movements will look white for a day or two after the test. If patients experience constipation (hard stool or difficulty passing stool), mild laxatives can help. If constipation continues, contact the primary-care doctor.

Receiving the Results

We'll send the results to the doctor who ordered it - usually within 48 hours. If the results are urgent, we'll contact the doctor immediately. Contact the doctor that ordered the test to get the results.

For More Information

For more information about imaging tests at Gillette, please call the Advanced Imaging Center at 651-229-3995.

Make An Appointment

[651-290-8707](tel:651-290-8707)

Refer a Patient

[651-325-2200](tel:651-325-2200)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](tel:651-229-3890).