PEDIATRIC GASTROINTESTINAL FLUOROSCOPY

What Parents Need to Know

For specific preparation instructions, please contact the Children's Imaging Center 48 hours prior to the exam at (512) 480-0761.

Pediatric Fluoroscopy
At Austin Radiological Association (ARA), we understand that medical tests can be stressful to both children and their parents. That is why we provide high quality imaging services in a caring, supportive environment to make the experience as pleasant as possible. We use state-of-the-art equipment and provide fast, accurate test results to your referring physician. At ARA, we all share a common goal: to keep children healthy.

ARA offers:
• On-site radiologists who specialize in pediatric radiology
• Technologists, paramedics and nurses who are trained and specialize in pediatric radiology
• Trained technologists to perform exams to ensure the lowest dose of radiation is administered

What is fluoroscopy?
Fluoroscopy is an imaging technique used by our radiologists and technologists to obtain real-time images of the internal structures of patients. There are multiple pediatric gastrointestinal fluoroscopy exams provided by Austin Radiological Association (ARA).

Exams
Click on these links to read descriptions of your child’s exam.
• upper gastrointestinal series (UGI)
• upper gastrointestinal series with double contrast
• G-tube upper gastrointestinal series
• upper gastrointestinal series with small bowel follow through
• small bowel series or small bowel follow through
• barium enema with single contrast
• barium or water-soluble enema with single contrast
• barium enema with air contrast

Upper gastrointestinal series (UGI) exam instructions
This exam visualizes the esophagus, stomach and the first part of the small intestine — the duodenum. The preparation instructions are as follows:
• Newborn to 1½ years: nothing to eat or drink 3 hours prior to the exam
• 1½ to 5 years: nothing to eat or drink 4 hours prior to the exam
• 6 years and older: nothing to eat or drink 8 hours prior to the exam

Once the patient arrives, the procedure is thoroughly explained to the patient and parent(s). The patient is placed on the exam table and imaged by the fluoroscopy machine in several different positions. The patient will also be administered oral contrast as needed. This exam will take approximately 30 minutes to complete. The study and images are reviewed and interpreted by a radiologist and the results are sent to the patient’s referring physician.
Upper gastrointestinal (UGI) series with double contrast exam instructions
This exam visualizes the esophagus, stomach and the first part of the small intestine — the duodenum. The preparation for patients 10 to 18 years of age is to have nothing to eat or drink, not even clear liquids, 8 hours prior to the exam.

Once the patient arrives, the procedure is thoroughly explained to the patient and parent(s). The patient is placed on the exam table and imaged by the fluoroscopy machine in several different positions. The patient will also be administered crystals in water and barium as needed. This exam will take approximately 30 minutes to complete. The study and images are reviewed and interpreted by a radiologist and the results are sent to the patient’s referring physician.

G-tube upper gastrointestinal (UGI) series exam instructions
This exam visualizes the G-tube portal entry, stomach and the first part of the small intestine — the duodenum. With consideration of the patient’s history and consultation with the patient’s physician, there may be additional studies of the esophagus, either by swallowing barium or using a nasogastric feeding tube. The preparation instructions are as follows:
• Newborn to 1½ years: nothing to eat or drink 3 hours prior to the exam
• 1½ to 5 years: nothing to eat or drink 4 hours prior to the exam
• 6 years and older: nothing to eat or drink 8 hours prior to the exam

Because these exams are ordered for different reasons, the radiologist will be consulted and the protocol will be determined before the patient’s arrival. Once the patient arrives, the procedure is thoroughly explained to the patient and the parent(s). The patient is placed on the exam table and barium is injected with a syringe into the G-tube under fluoroscopy and images are taken. If the radiologist instructs the technologist to give the patient barium by mouth, the barium will be given by bottle, straw or nasogastric tube. All images are reviewed by a radiologist before the patient’s departure from the site. The study and images are reviewed and interpreted by a radiologist and the results are sent to the patient’s referring physician.

Upper gastrointestinal (UGI) series with small bowel follow-through
There are instances when a referring physician requests a UGI with small bowel series or small bowel follow-through exam. If a small bowel series exam is to accompany at UGI series, upon completion of the UGI series, the patient is given more barium. The amount of barium is determined by the age and size of the patient. Images are obtained at intervals determined by the radiologist. The examination continues until the barium reaches the colon. This exam takes 2 to 5 hours to complete.

Small bowel series or small bowel follow-through exam instructions
This exam visualizes the entire small bowel. The preparation instructions are as follows:
• 0 to 2 years: nothing to eat or drink 3 hours prior to the exam
• 3 to 16 years: no solid foods after midnight; the patient may have clear liquids up to 5 hours prior to the exam

Once the patient arrives, the procedure is thoroughly explained to the patient and parent(s). If the patient is sufficiently prepped and the radiologist has given the approval to begin the exam, the patient is given the appropriate amount of barium dependent upon their age, placed on the exam table and exam images are taken in intervals until the barium reaches the large bowel which may take between 2 to 5 hours. Once completed, post exam instructions are given to the patient and parents. The study and
images are reviewed and interpreted by a radiologist and the results are sent to the patient’s referring physician.

**Barium enema with single contrast exam instructions (unprepped)**

*For specific preparation instructions, please contact the Children’s Imaging Center 48 hours prior to the exam at (512)480-0761.*

This exam is generally used for problems with constipation. It visualizes the entire large bowel of the patient. The preparation instructions for children of any age include:

- No rectal stimulation, suppositories or laxatives are to be used for 48 hours prior to the procedure
- The patient cannot have undergone a rectal biopsy or endoscopy within 5 days of having the procedure

Once the patient arrives, the procedure is thoroughly explained to the patient and parent(s). The patient is placed on the exam table and images are taken and given to the radiologist for review. The enema tip is inserted and taped in place. Contrast is given throughout the procedure as necessary while images are taken of the bowel. After all the necessary films are taken, the enema tip is removed and the patient is allowed to empty their colon. Post exam instructions are given to the patient and parents. After the exam, images are reviewed by a radiologist and the results are sent to the patient’s referring physician.

If deemed necessary by the radiologist, the patient may have to return for a follow-up abdominal x-ray 24 hours after the exam.

**Barium or water-soluble enema with single contrast exam instructions (prepped)**

*For specific preparation instructions, please contact the Children’s Imaging Center 48 hours prior to the exam at (512)480-0761.*

This exam visualizes the entire large bowel of the patient. The preparation instructions are as follows:

- 29 days to 2 years: nothing to eat or drink 4 hours prior to the exam
- 2 to 16 years:
  - Clear liquid supper after 3 p.m.
  - Clear liquids until 4 hours prior to the exam
  - Nothing to eat or drink 4 hours prior to the exam

Once the patient arrives, the procedure is thoroughly explained to the patient and parent(s). The patient is placed on the exam table and images are taken of the patient and given to the radiologist for review. The enema tip is inserted and taped in place. Contrast is given throughout the procedure as necessary while images are taken of the bowel. After all the necessary films are taken, the enema tip is removed and the patient is allowed to empty their colon. Post exam instructions are given to the patient and parents. After the exam, images are reviewed by a radiologist and the results are sent to the patient’s referring physician.

**Barium enema with air contrast exam instructions**

*For specific preparation instructions, please contact the Children’s Imaging Center 48 hours prior to the exam at (512)480-0761.*

This exam visualizes the entire large bowel of the patient. (We don’t do this exam below 2 years of age.) The preparation instructions for children 2 to 16 years old include:

- Low-residue diet for 24 hours prior to the exam (click here for diet details).
- Magnesium citrate (see chart below)
- Clear liquid supper after 3 p.m.
• Clear liquids until 4 hours prior to the study
• Nothing to eat or drink 4 hours prior to the exam
• For a double air contrast enema, if the stool is not clear or yellow at 6 a.m. the morning of the exam, give the patient 1 Fleet enema

Once the patient arrives, the procedure is thoroughly explained to the patient and parent(s). The patient is placed on the exam table and images are taken of the patient and given to the radiologist for review. Barium is initially instilled into the colon and much of it is drained out with subsequent instillation of air into the colon. The patient rolls on the table to coat the colon with barium. After all the necessary films are taken, the enema tip is removed and the patient is allowed to empty their colon. Post exam instructions are given to the patient and parents. After the exam films are reviewed by a radiologist and the results are sent to the patient’s referring physician.

**Magnesium Citrate Chart**

<table>
<thead>
<tr>
<th>Child’s age</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>No laxative</td>
</tr>
<tr>
<td>1-3 years</td>
<td>1½ ounces</td>
</tr>
<tr>
<td>4-5 years</td>
<td>2½ ounces</td>
</tr>
<tr>
<td>6-8 years</td>
<td>3 ounces</td>
</tr>
<tr>
<td>9-12 years</td>
<td>4 ounces</td>
</tr>
<tr>
<td>13-18 years</td>
<td>5 ounces</td>
</tr>
</tbody>
</table>

Scheduling: (512) 453-6100
Fax referrals: (512) 836-8869