



Patient Information Tests and Procedures

X-ray

Diagnostic Radiology

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Barium Enema

What is the test?

- A barium enema is an x-ray test that is used to examine the lower digestive tract: the colon and rectum. Because these internal organs are normally not visible on x-rays, you will need to consume a liquid that does show up on x-rays (barium). The barium will temporarily coat the inside lining of the rectum and colon, allowing the outline of these organs to be visible on the x-ray pictures. This test is useful in diagnosing cancers and diverticula (small pouches that may form in the intestinal wall).

How do I prepare for the test?

- It is important for your colon to be completely empty of food and stool before the study. You will be given very specific instructions by your doctor or the Radiology Department to follow on the day before the test. Often you will be asked to limit your eating to a light breakfast and a liquid lunch and dinner (such as broth, fruit juice, or plain gelatin) on the day before the test. You may also be instructed to drink a large amount of clear liquid between meals and to avoid dairy products. You will be asked to take a laxative, a medicine that will stimulate your intestine to move things through more quickly, so that you have a bowel movement to empty the colon. It is a good idea to stay home or at least near a bathroom for a few hours after taking the laxative medicine- Fleet Kit #3, 24 hour prep which can be purchased at a local drug store.
- If you have diabetes and take insulin, you should talk to your doctor before your test.
- Also let your doctor know if you think you might be pregnant. Women from age 12 – 55 must have had their menstrual cycle within 21 days of the x-ray.

What happens when the test is performed?

- In the radiology department, you will be wearing a hospital gown and lie on a table. You will have an “enema” administered. For the enema, a technologist will push a small tube an inch or two into your rectum, which will be used to fill your colon and rectum with barium liquid. You will find the sensation of the filling of your colon somewhat strange (you might feel you need to have a bowel movement) but it is not painful.

Barium Enema

What happens when the test is performed? (Continued)

- The x-ray will be taken by a large camera positioned over your abdomen. Usually the room will be darkened for the time that the x-ray video is taken so that the doctor can watch the picture on a TV screen. He will pick out a few “freeze-frame” pictures to save and develop for a closer look later. You will be asked to hold your breath for a few seconds each time the doctor wants to save a picture, so that your breathing movement does not blur the image. A few more pictures may be taken after the lights are turned back on by the technologist. After this, you will be asked to empty your bowels in a nearby bathroom.
- Usually one picture is taken of your abdomen after you had your bowel movement, to make sure that the bowel has emptied well.

Must I do anything special after the test is over?

- In some cases, if there was some stool still present in your large intestine despite your preparation the day before, the test will need to be repeated.

How long is it before the result of the test is known?

- Typically, you can get the results from your doctor within 24 hours.

If there is anything we can do to make you more comfortable while in the Radiology Department, please do not hesitate to ask.

Barium Swallow or Upper GI Series

What is the test?

- A barium swallow or “Upper GI Series” is an x-ray test used to determine the upper digestive tract (the esophagus, stomach and small intestines). Because these internal organs are normally not visible on X-ray, you will be asked to swallow a liquid that does show up on x-rays (barium). The barium will temporarily coat the inside lining of the esophagus, stomach and intestines, allowing the outline of these organs to be visible on the x-ray pictures. This test is useful in diagnosing cancers, ulcers, problems that cause narrowing of the esophagus, some causes of inflammation in the intestine, and some narrowing problems.

How do I prepare for the test?

- You will be given instructions to stop eating and drinking on the night before your test. This is important because food in your stomach or intestine could prevent the doctors from seeing a clear outline of these structures when they are reviewing the x-rays. Usually, it isn't a problem for you to take your regular pills, but you should consult your doctor.
- If you have diabetes and take insulin, you should talk to your doctor before your test.
- Also let your doctor know if you think you might be pregnant. Women from age 12 – 55 must have had their menstrual cycle within 21 days of the x-ray.
- If a small bowel is also being performed, be prepared to stay for several hours.

What happens when the test is performed?

- You will be asked to change into a hospital gown for the test. Right from the start of the test, you will be asked to drink barium, a liquid that looks like a milkshake but unfortunately doesn't taste nearly as good (most patients say it tastes like chalk). You might also be given some tablets to swallow that “fizz” causing air bubbles to be released in your stomach. This might make you feel like burping, but try not to because the pictures will be better.

Barium Swallow or Upper GI Series

What happens when the test is performed? (Continued)

- The technologist may ask you to stand or lie in different positions over the next few minutes, because it is helpful to spread around the liquid you have swallowed. Most often, the actual x-ray pictures are taken while you lie on your back on a table. The x-ray machine or the table will be moved a few times so it can take pictures of all of the internal structures. You will be asked to hold your breath for each picture so that your breathing movement does not blur the image.

Must I do anything special after the test is over?

- After this test, you can eat normally and do normal activities. You should drink more water than usual to help clear out the barium and to prevent constipation, which might be a side effect of the test. Your stool may appear light in color for a couple of days.

How long is it before the result of the test is known?

- Typically, you can get the results from your doctor within 24 hours.

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Chest X-ray

What is the test?

- A chest x-ray gives a black-and-white picture of your lungs, ribs, heart and diaphragm muscle.

How do I prepare for the test?

- For a chest x-ray, you will usually be asked to remove your shirt and bra, and to wear a gown. You will be asked to remove any necklaces. You should tell the Radiologic Technologist if you think you might be pregnant.

What happens when the test is performed?

- Most of the time, chest x-rays are done with the patient standing. A technologist will help position you against the film (which looks like a large board) so that the clearest picture may be obtained. Usually pictures from both a front view are taken. You will be asked to take a deep breath just before the picture is taken. The technologist will leave the room or stand behind a screen while your x-ray is taken.

How long is it before the result of the test is known?

- Typically, you can get the results from your doctor within 24 hours.

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Intravenous Pyelogram

What is the test?

- The “intravenous pyelogram” or “IVP” is an x-ray study that uses contrast media, also referred to as “dye”, to show your urinary organs (the kidneys, ureters and bladder). The contrast is injected through an IV (intravenous) line. Since your body clears away the contrast by moving all of it into your urine, the organs that make or hold urine show up very brightly on the x-rays. This test is useful for finding kidney stones, tumors or blockages in the urinary tract.

How do I prepare for the test?

- Tell your doctor before the test if you have ever had an allergic reaction to contrast (“IV contrast dye”). Also let your doctor know if you think you might be pregnant. Women from age 12 – 55 must have had their menstrual cycle within 21 days of the x-ray.
- On the day before the test, you should drink plenty of fluids. This will help prepare your kidneys for the job of clearing out the contrast the next day.
- You will be asked to eat a special diet the night before the test; so that you have less solid stool in your large intestine (large amounts of stool in the intestine can make it harder to interpret your x-rays). Typical instructions might include using a laxative (Fleet Kit #2- an 18 hour prep- can be purchased at your local drug store) in the afternoon before your test and limiting your dinner the night before to clear liquids such as broth and juice.
- If you are taking a medication called Metformin (Glucophage) to control diabetes, you should talk to your doctor and discontinue the drug before your test.

What happens when the test is performed?

- You will need to have an intravenous (IV) line placed in a vein in your arm or hand. In the x-ray department, you will lie on your back on a table and an x-ray camera will take some initial pictures from above. X-ray contrast will be injected through the IV. You might feel some warm tingling in your arm when the contrast is injected. During the next 30 minutes to one hour, a new x-ray will be taken every few minutes. These x-rays show the contrast in different stages as it moves through your kidneys and ureters and into your bladder. Each time an x-ray is taken, you will be asked to hold your breath. Before the last x-ray, you will be sent to a bathroom to empty your bladder.

Intravenous Pyelogram

Must I do anything special after the test is over?

- It is a good idea to drink plenty of fluids after this test to help clear the last bit of contrast out of your system.

How long is it before the result of the test is known?

- Typically, you can get the results from your doctor within 24 hours.

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X-rays of the Spine

What is the test?

- These x-rays give a black-and-white picture of a particular area of your spine (neck and back).

How do I prepare for the test?

- For these x-rays, you might be asked to remove your shirt and bra, or shirt, bra and pants and to wear a hospital gown. You will be asked to remove any necklaces.
- Women from age 12 – 55 must have had their menstrual cycle within 21 days of the x-ray. You should tell the Radiologic Technologist if you think you might be pregnant.

What happens when the test is performed?

- These x-rays may be taken with the patient standing up or lying down. A technologist will help position you against the film (which looks like a large board) so that the clearest picture may be obtained. Usually pictures from both a front view and a side view are taken.
- For cervical spine x-rays (neck x-rays), you will be instructed at times to open your mouth as wide as you can. This is so that your teeth are moved out of the way in some pictures and don't block the view of the bones that are the highest up in your spine.
- The technologist will leave the room or stand behind a screen while he or she controls the x-ray camera.

How long is it before the result of the test is known?

- Typically, you can get the results from your doctor within 24 hours.

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Upper GI with Small Bowel Follow Through

What is the test?

- An “Upper GI series” with *Small Bowel* follow through is an x-ray test used to examine the upper digestive tract (esophagus, stomach and small intestine). Because these internal organs are normally not visible on x-rays, you will be asked to swallow a liquid that does show up on x-rays (barium). The barium will temporarily coat the inside lining of the esophagus, stomach and intestine, allowing the outline of these organs to be visible on the x-ray pictures. This test is useful for diagnosing cancers, ulcers, problems that cause narrowing of the esophagus, some causes of inflammation in the intestine, and some swallowing problems.

How do I prepare for the test?

- You will be given instructions to stop eating and drinking on the night before your test. This is important because food in your stomach or intestine could prevent the doctors from seeing a clear outline of these structures when they are examining the x-rays. Usually it isn't a problem for you to take your regular pills, but you should check with your doctor.
- If you have diabetes and take insulin, you should talk to your doctor before your test.
- Also let your doctor know if you think you might be pregnant. Women from age 12 – 55 must have had their menstrual cycle within 21 days of the x-ray.

What happens when the test is performed?

- You will be asked to change into a hospital gown for the test. Right at the start of the test, you will be asked to drink barium; a liquid that looks like a milkshake but unfortunately does not taste nearly as good (most patients say it tastes like chalk). You might also be given some tablets to swallow that “fizz” causing air-bubbles to be released in your stomach. This might make you feel like burping, but try not to. You will get better pictures if you can keep from burping.
- The technologist may ask you to stand or lie in different positions over the next few minutes, because it is helpful to spread the liquid you have swallowed. Most often, the actual x-ray pictures are taken while you lie back on a table. The x-ray machine or table will be moved a few times so it can take pictures of all internal structures. You will be asked to hold your breath for each picture so that your breathing movement does not blur the image.

Upper GI with Small Bowel Follow Through

What happens when the test is performed? (Continued)

- Since your doctor requested a small bowel follow through study, we will need to take pictures of your abdomen every ½ hour until the barium passes through to the very last part of your intestines. Depending on your digestive system, this could take several hours. A second cup of barium is usually administered at this time.

Must I do anything special after the test is over?

- After the test, you can eat and drink normally and do your normal activities. You should drink more water than usual to help clear out the barium and to prevent constipation, which might be a side effect of the test. Your stool may appear light in color for a couple of days.

How long is it before the result of the test is known?

- Typically, you can get the results from your doctor within 24 hours.

If there is anything we can do to make you more comfortable while in the Radiology Department, please do not hesitate to ask.