

Gastrointestinal examinations

Radiology





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In order to make our brochures easier to read, we always use the third person singular male "he", regardless of the gender of the subject of the sentence.

What are gastrointestinal examinations?

The information in this leaflet is meant to help you prepare for the digestive tract examination you are about to have. Should you still have questions after reading it, please ask your doctor or the health care team. Of course, you can also ask the radiologist and the nurse who will be performing the examination. They will try to help you as best they can.

In an X-ray of the digestive system, the various organs are hardly or not at all visible. However, as these are hollow organs, their lumen can easily be filled with a contrast medium, which makes it possible to examine them.

The first option is to use barium sulfate and water. This is a radiopaque medium, which means that it is visible on X-ray pictures and is not altered by contact with the digestive system. The other option is to use a contrast product. The choice of either option will depend on the answers given to the radiologist's questions.



These examinations are all painless. However, they involve some discomfort, such as lying down and turning on a hard table. The contrast agent (barium sulfate) can also cause constipation. You are therefore advised to take an oral laxative and drink plenty of water after any examination of the digestive system in which this substance has been use.

Most of these tests require fasting as leftover food or fluids can cause unfortunate errors in the assessment of the results.

In case fasting is not required, you will find this specifically mentioned in the preparation section of the test description.

These tests can only be performed if you have made the necessary preparations, so make sure you follow the instructions given for each of them.

X-ray of the oesophagus

Definition

X-ray of the oesophagus with use of a contrast medium.

Preparation

You don't have to fast for this examination.

Duration of the examination

15 minutes

Procedure

You will be given a cup containing a contrast agent, the choice of which will depend on the answers given to the radiologist's questions. The radiologist will then ask you to take a sip. Pictures will be taken while you are drinking. You will remain standing on the X-ray table throughout the test.

Aftercare

As barium sulfate can cause hardening of the stools, we advise you to drink plenty of water. You can also take an oral laxative.

X-ray of the swallowing process

Definition

Assessment of the functioning of the swallowing mechanism.

Preparation

You don't have to fast before this examination.

Duration of the examination

15 minutes.

Procedure

You will be given a cup containing a contrast medium, the choice of which will depend on the answers given to the radiologist's questions. Take a sip whenever the radiologist tells you to. Several X-ray pictures will be taken per second.

Two sets of pictures will be taken: one when you are lying on your back, the other on your side. It is very important that you do not move while the pictures are being taken. We need your cooperation for the success of the examination.

Aftercare

As barium sulfate can cause hardening of the stools, we advise you to drink plenty of water. You can also take an oral laxative.



Upper gastrointestinal series

Definition

Examination of the oesophagus, stomach and duodenum (first part of the small intestine).

Duration of the examination

15 à 30 minutes

Preparation

For this examination, you must not have eaten since midnight. You must not smoke or take any medication that could affect the functioning and peristalsis of your stomach. You must also not have any residual contrast material in your body, i.e. you must not have undergone an examination with use of contrast material in the last 2 or 3 days.

Procedure

You will stand on the X-ray table and be given a cup containing barium. You will be asked to take a few sips of it so that the lining of the stomach will be covered with a thin layer of contrast. This is called double contrast method. You will then drink more of the barium solution until your stomach is completely filled.

You will regularly be asked to turn from your back to your stomach and back again while the picture are being taken. The examination is carried out both in a lying and in a standing position.

Sometimes contrast medium Telebrix Gastro is used. It may cause diarrhea.

Aftercare

As barium sulfate can cause hardening of the stools, we advise you to drink plenty of water. You may also take an oral laxative.

Intestinal transit

Definition

X-ray of the small intestine after ingestion of a barium-based suspension.

Duration of the examination

The examination may last a whole morning, and exceptionally into the afternoon.

Preparation

For this examination, you must not have eaten since midnight. You must not smoke or take any medication that could affect the functioning and peristalsis of your stomach. You must also not have any residual contrast medium in your body: in other words, you may not have undergone an examination with use of a contrast medium in the last 2 or 3 days.

Please remember that the examination may last all morning, and in some very rare cases into the afternoon.

Procedure

You will stand on the X-ray table and drink 3 full cups of the contrast material within 15 to 20 minutes.

About 15 minutes after drinking the first cup, a first picture of your belly will be taken. After that, further pictures will be taken at intervals of about 15 to 20 minutes, at least until your caecum (i.e. beginning of the large intestine) is filled.

If your bowel movement is slow, the time intervals will be extended. Pictures are always taken in two planes: one where you are lying on your stomach, the other where you are lying on your back. To prevent the small intestine from "collapsing" into the pelvis, you will be asked not to urinate during the examination. If your bowel movement is too slow, you will be asked to drink a cup of cold water. If this is not enough, you will go and eat something in the cafeteria.

The examination ends with an X-ray picture of the end section of the ileum, i.e. the last part of the small intestine.

Aftercare

As barium sulfate can cause hardening of the stools, we advise you to drink plenty of water. You can also take an oral laxative.

Lower gastrointestinal series

Definition

A lower gastrointestinal series or barium enema consists of making the colon (or large intestine) and possibly the terminal section of the ileum visible through the use of a contrast medium.

Duration of the examniation

45 minutes

Voorbereiding voor een dubbel contrast onderzoek

Two days before the examination: low-residue diet (no vegetables, no fruit. no brown bread).

The day before the examination: drink two extra liters of water spread over the day. Also drink the whole content of one bottle of Prepacol diluted in half a glass of water, preferably before the evening meal, which must not include solid food. Take the tablets (Dulcolax, Wylaxine) with a bit of water and without chewing, preferably after the evening meal.

On the day of the examination: For this examination, you must have been fasting since midnight. You must also not have any residues of contrast material in your body: in other words, you must not have undergone an examination with use of contrast material in the last 2 or 3 days.

Procedure

The radiologist will give you all necessary information before starting the examination. You will be asked to undress, put on an operating gown, and then lie on your left side on the examination table.

The nurse will insert a rectal cannula through your anus. Contrast material will be administered through this rectal tube.

Pictures will be taken while your colon (i.e. large intestine) is being filled, until your caecum (i.e. beginning of the colon) is filled up. Some of the contrast material will then be drained off.

If the enema has been performed with Telebrix Gastro, it is now complete. The rectal cannula will be removed and you can go to the toilet.

If the enema has been done with a barium solution, an antispasmodic (Glucagon, Buscopan) will now be administered to you intravenously in order to relax your bowels and prevent cramps.

Air will be blown in very slowly through the rectal cannula to spread the barium left in your colon all around it, so that the intestinal mucosa can be examined

New pictures will then be taken of the entire colon up to the caecum (i.e. beginning of the large intestine).

Some of the barium will finally be removed and the rectal tube as well. You can now go to the toilet.



Aftercare

As barium sulfate can lead to hardening of the stools, we advise you to drink plenty of water (2 extra liters on the day of the test). You can also take an oral laxative.

Conclusion

As most of the examinations of the digestive system require a very specific preparation, we would like to emphasize the following point:

These medical examinations can only be performed if you have made the necessary preparations.

To diabetic patients:

You must inform the doctor requesting the examination as well as the radiologist or nurse of your diabetes. Your doctor can also mention this information on the request form.

Should you still have questions or concerns, we will be glad to help you.

We wish to thank you in advance for your cooperation. We will do our utmost to ensure that your examination runs smoothly and wish you a speedy recovery.

Useful contact details

Radiology

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