

Having a CT enema scan

This leaflet aims to answer your questions about having a CT enema scan. It explains the benefits, risks and alternatives, as well as what you can expect when you come to hospital.

If you have any further questions, please speak to a member of staff in the CT department – contact details are at the end of this leaflet.

What is a CT enema scan?

CT stands for computerised tomography. A CT enema is a test to look at your large bowel. It involves putting a small tube into your back passage (rectum) to inflate the large bowel with carbon dioxide. An injection to relax your bowel and a special contrast dye that helps the large bowel show up better on x-rays are usually used during the CT enema. A series of x-rays are then taken to produce a detailed image of the inside of your body.

The pictures show cross-sections or slices of your body. They are put together by a computer and can be viewed on a screen. The radiologist (a doctor who uses x-rays to diagnose and treat illnesses) will review and report on these images.

The CT enema scan is also called a **virtual colonoscopy**. It is performed in the x-ray department by either a radiographer (a person who takes the x-ray images) or radiologist.

This examination needs special preparation. It is important that you follow the preparation instructions starting on page 2.

Why should I have a CT enema scan?

A CT enema scan can help your doctor to find the cause of your problem and your doctor feels it is the best treatment option for you.

What are the risks?

As with x-rays, CT scans use radiation. The level of radiation used is very small and the benefits of the scan are thought to outweigh any risks.

The contrast dye that is used contains iodine, to which some people are allergic. We will check whether you have any allergies before the scan. If you have an injection of contrast dye, it may give you a metallic taste in your mouth and a 'hot-flush'. Some people may also feel as if they are wetting the bed. All of these sensations are perfectly normal and pass within a couple of minutes.

The injection we give you to relax your bowel is not suitable for all patients. We will decide whether it is suitable for you following a pre-scan checklist and a discussion with the doctor. If you do not have the injection, it should not affect your scan.

The carbon dioxide given to inflate the bowel is not suitable for all patients and we will use your pre-scan checklist to determine if it can be used. If it can not, we will use conventional air.

If you are or think you could be pregnant, or have had an allergic reaction to contrast dye or iodine in the past, you must tell your doctor. Alternatively, contact CT reception at Guy's on 020 7188 5574 or St Thomas' on 020 7188 5464, Monday to Friday 9am to 5pm.

Are there any alternatives?

The alternatives to the CT enema scan are a colonoscopy or sigmoidoscopy. Please speak to your doctor if you have any questions or concerns about this examination or if you would like further information on the alternative options.

How can I prepare for the CT enema scan?

If you have diabetes, please make sure that you have a morning appointment. If you take insulin, you should be given a 9am appointment. Please call us if this has not been done – contact details are at the end of this leaflet. **If you are taking medicines for diabetes, such as metformin, these may need to be altered around the time of the procedure. Call the CT department at Guy's on 020 7188 5574 or St Thomas' on 020 7188 5464, Monday to Friday 9am to 5pm, for advice.**

If you are or think you may be **pregnant**, you must call us as soon as possible.

Your bowel needs to be empty for the scan to make sure the examination is effective. To achieve this, you will need to change your diet and take a laxative preparation, called sodium picosulphate, on the day before the scan.

You should have been sent two sachets of sodium picosulphate – please take them as described below. If you have not received the sachets and/or have any questions about the directions below, please contact the x-ray department.

Please make sure that the doctor is aware of all of the medicines that you are taking, in case any of them interact with the sodium picosulphate. Please also let them know of any allergies you have to any medicines.

If you are taking the contraceptive pill, it may not be effective once you have taken the bowel preparation, so you must use other precautions. Please speak to your GP, pharmacist or family planning clinic for further advice on contraception.

The day before your scan:

Please take your regular morning medicines at least one hour before you take the first dose of sodium picosulphate, and your evening medicines after 8pm. Medicines taken between these times may not be fully absorbed. If you would like further advice on when to take your medicines, please speak to your doctor or contact the Pharmacy Medicines Helpline (contact details are at the end of this leaflet).

Only have small meals made up of foods called 'low residue foods', which will help the sodium picosulphate work properly. These include:

- fats such as butter and margarine – these should be used sparingly
- eggs, especially boiled and poached
- cereals including cornflakes and crisped rice cereal, **but not bran**
- cream, cottage cheese or cheese sauce

- potatoes without the skins, boiled, creamed, mashed or baked, but not roasted or deep fried
- plain white pasta, noodles or boiled rice
- meat or fish – for example minced, well cooked, tender, lean beef, lamb, ham, veal, pork, poultry, fish and shellfish
- gravy made from stock cubes (white flour or corn flour can be used to thicken)
- white bread/toast
- sugar or sweetener
- clear jelly.

Do not eat vegetables, fruit, brown bread, brown rice, brown pasta, jam, nuts, biscuits or crisps, or drink alcohol.

The table below gives an example of what you can eat and drink the day before the procedure, and explains how you should take the sodium picosulphate.

8am: before breakfast

Take the first sachet of sodium picosulphate:

- **Step 1:** mix the contents of the sachet in 150 millilitres (about one cupful) of cold tap water. Do this in a large glass or jug, as the mixture may fizz over.
- **Step 2:** stir the solution for two to three minutes. If it becomes warm when you stir it, wait until it has cooled down before drinking the whole solution. Once the solution is ready, drink it immediately. The solution will appear cloudy.

8am – 9am: breakfast

Tea/coffee (with milk and sugar/sweetener, if needed) or other clear fluids such as water, clear soups, herbal tea, black tea or coffee, or diluted cordials/fruit juice.

Choose ONE of the following:

- 30 grams crisped rice cereal or cornflakes with 100 millilitres of milk
- two slices of white bread/toast with a small spread of butter/margarine and honey
- one boiled/poached egg and one slice of white toast/bread with a thin spread of butter/margarine
- 50 grams of cottage or cream cheese and one slice of white toast/bread with a thin spread of butter/margarine.

Mid morning: Tea/coffee (with milk and sugar/sweetener, if needed).

12pm – 1pm: lunch

Choose ONE of the following:

- 75g meat/fish with gravy
- two boiled/poached eggs
- 100g cream or cottage cheese.

Add ONE of the following:

- two slices of white bread/toast with a small spread of butter/margarine
- two egg-sized potatoes without skins with a small amount of butter/margarine
- two tablespoons of plain white pasta/rice.

Drink plenty of clear fluids, preferably water. Tea and coffee should now only be black (no milk).

2pm – 4pm: Take the second sachet of sodium picosulphate (preparing it the same way as before).

After you have had the second dose of sodium picosulphate, you must not have any solid food, milk or other dairy products until after the scan.

6pm – 8pm: early evening

- Do not have any solid food.
- Clear soup or a meat extract drink and clear jelly are allowed.

After 9pm:

Do not eat any more food until after you have had the scan, but continue to drink plenty of clear fluids (for example water, squash, fizzy drinks, clear strained soup, clear stock).

Stay near a toilet once you have started taking the sodium picosulphate. You should expect frequent bowel movements and eventually diarrhoea, starting within three hours of the first dose. You may have some bloating or stomach cramps – this is normal. You can use a barrier cream, such as zinc and castor oil on your bottom, to prevent soreness.

Important: If you have an allergic reaction to the preparation such as a rash, itchiness or redness, call the CT department or your GP.

In very rare cases a reaction can cause swelling of the face, lips, tongue or throat. If this happens, go straight to your local A&E department.

Remember to keep drinking clear fluids to stop you becoming dehydrated. As a guide, try to drink about one glass every hour (during waking hours). Signs that you are dehydrated include dizziness, headache and confusion.

On the morning of your exam:

On the morning of the exam drink clear fluids only. You can take your usual morning medicines by 8am with a glass of water.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment, and the staff caring for you will ask your permission to perform the scan. It is important that you understand the benefits, risks and alternatives. If there is anything you do not understand or you need more time to think about it, please tell the staff caring for you.

You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask a member of staff caring for you for a copy.

What happens during a CT enema scan?

When you arrive in the x-ray department we will ask you to complete a short pre-scan checklist to confirm your medical history.

You will also be asked to change into a hospital gown. You may find it more comfortable to bring a dressing gown and slippers with you but this is not essential. A small needle will be put into a vein in your arm. This will be used to give medicines (a bowel relaxant and the contrast dye).

You will meet both the radiographer and the radiologist, and they will explain what is involved in the procedure. Either of them may perform the scan.

The scanning machine is like a large doughnut (ring). You will need to lie on a motorised bed which moves slowly through the 'ring' of the machine as the scan is taken. Unlike some other scanning machines, the CT scanner is not enclosed.

We will help position you on the CT table and give you the bowel relaxant medicine. You will then be asked to roll onto your left side so we can put a small flexible tube into your back passage. Carbon dioxide will be put into the bowel using the tube, which will allow us to see the bowel better. The carbon dioxide will be absorbed by the body and breathed out via the lungs without any harm to you.

Once enough carbon dioxide has been inserted, we will ask you to turn onto your back for the first scan. The contrast dye will be given during this scan. You will then be asked to lie on your tummy for the final scan while the tube remains in place.

You will need to lie very still while each picture is taken. We will also ask you to hold your breath for about 10 seconds at a time. This helps to prevent blurring of the images.

How long will the scan take?

The scan will take 20 to 30 minutes but you will be in the department for about one hour. We will try to keep to your appointment time but occasionally we have to scan patients urgently at short notice. This means that your appointment could be delayed – we will let you know if this is the case.

Will I feel any pain?

The tube may feel a little strange in the back passage. You should not feel any pain, but please tell the radiographer or radiologist if you do.

The most difficult part is keeping still. Try to relax as much as possible. If you find it uncomfortable to lie still, please tell the radiographer or radiologist.

What happens after the scan?

In most cases, as soon as the scan is finished you can go home, or back to your ward if you are staying in hospital. If you have had a contrast dye injection, we may ask you to wait for 10 minutes before you leave the department to make sure there are no immediate side effects from the dye.

You may have some blurred vision from the injection to relax the bowel. Please do not drive or operate machinery for four hours. It may be best to have a friend drive you home if you arrived by car.

When will I get the results?

The pictures taken during the scan are carefully studied by the radiologist, who will produce a detailed report. The report will be sent to the doctor who referred you for the scan. They will discuss the results with you and any treatment you may need.

If you were referred by a consultant at Guy's and St Thomas', they will normally receive the results within four working days. If you were referred by a consultant at another hospital or your GP, you should allow two weeks from the day of your scan before making a follow-up appointment to discuss your results.

What do I need to do after I go home?

You can eat and drink as normal, and resume your usual activities straight after the scan.

If you take metformin, it may have to be stopped for two days after the scan. We will give you further advice about this on the day of your scan.

Please contact your GP or go to your nearest A&E department if you feel unwell or think you may have an allergic reaction to the contrast dye, such as rash, itchiness or redness.

Contact us

If you have any questions or concerns about having a CT scan, please contact the CT department at Guy's on **020 7188 5574** or St Thomas' on **020 7188 5464**, Monday to Friday 9am to 5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

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