

Having a radiotherapy CT scan with intravenous contrast

Information for patients

This leaflet answers common questions about having a radiotherapy CT scan with intravenous (IV) contrast.

If you would like further information, or have any particular worries, please do not hesitate to ask your radiotherapy radiographer or radiotherapy review specialist.

A radiotherapy radiographer will explain the procedure to you and answer any questions you may have.

What is IV contrast?

Contrast is a type of dye that allows veins, arteries and some organs and structures in your body to be displayed more clearly and helps with your radiotherapy planning. An IV contrast means that the contrast is injected into a vein.

At your CT planning visit

When you arrive for your CT planning scan a radiotherapy radiographer will explain the procedure to you. You may be asked to change into a hospital gown.

The radiographer will also complete a questionnaire with you. This aims to identify patients who may be at risk of developing a reaction to the contrast dye. On very rare occasions reactions may occur. Information is included below about risks and side effects.

Prior to having the CT scan one of the radiotherapy radiographers will place a needle in your arm to allow the contrast to be injected.

How is the CT planning scan done?

A CT scanner consists of a doughnut-shaped machine (gantry) about two feet thick with a hole at its centre through which you will pass while lying on a couch.

As you pass through the hole, the scanner takes a complete 360 degree image of you that is then sent to a computer. The scan takes approximately 10-15 minutes. During a specific point during your CT scan you will be given an injection of the contrast. It may cause you to experience mild symptoms, such as a strange metallic taste in your mouth, feeling like you have urinated or a hot flushed feeling. These side effects will be explained to you before the injection is administered.

After your CT planning scan

The radiographers will ask you to wait in the department for 30 minutes to make sure you have no reaction to the contrast. If you are feeling okay you may go home. It is important that you keep yourself hydrated after the procedure and for the next 48 hours.

Risks and side effects

Contrast reactions

Reactions to IV contrast are rare but they can happen and range from mild to severe. These may happen immediately or several hours after you have left the department.

Mild reactions	Severe reactions
Rash	Swelling around the face/neck/throat
Itchy feeling	Difficulty breathing
Sneezing	
Nausea	
Vomiting	

What should I do if I think I am having a reaction but have left the hospital?

Mild reaction

Call the radiotherapy department and explain that you recently had an IV contrast CT scan and describe the symptoms you are having. The radiographer will provide you with follow up instructions.

Outside of these hours call your GP or NHS direct on 111.

Severe reactions

Go to your nearest emergency department and explain that you recently had CT scan with an IV contrast injection.

Do you have any further questions?

Please speak to one of the radiographers or the radiotherapy review specialist.

Contact us

Radiotherapy department reception:
020 7830 2919 (between 8.45am-5pm)

Radiotherapy review specialist:
020 7830 2919

More information

For more information about the radiotherapy department at the Royal Free London visit our website:

www.royalfree.nhs.uk/services/services-a-z/cancer-services.

Your feedback

If you have any feedback on this leaflet or for a list of references for it, please email:

rf.communications@nhs.net.

Alternative formats

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please speak to a member of staff.

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