

Breast Services

Breast magnetic resonance imaging (MRI)

Information for patients, relatives and carers

Introduction

This leaflet is designed to give you information about breast magnetic resonance imaging (MRI). We hope it will answer the questions that you, or those important to you, may have at this time. This leaflet is not meant to replace the consultation between you and your medical team but aims to help you understand more about what is discussed.

What is an MRI scan of the breast?

MRI uses magnetic fields and radio waves to produce detailed images of the breasts. It does not use radiation.

An MRI scanner is a large cylinder (tube) that contains powerful magnets that create these magnetic waves and radio waves.

During an MRI scan of the breast, you lie on a couch on your front. This couch then moves slowly through the scanner and images are taken. You are given an injection of a dye, called a contrast medium, during the scan to help make sure these images are clear.

Why do you need a breast MRI scan?

A breast MRI is not a replacement for mammograms (breast X-ray) or a breast ultrasound scan, but it is used to provide extra information about your breasts. Women who are at high risk of developing breast cancer (such as gene carriers and women who have had supradiaphragmatic radiotherapy (radiotherapy above the diaphragm)) are eligible for an annual MRI, at least until the age of 50, as part of their breast screening protocol.

Who cannot have a breast MRI scan?

The powerful magnets used in MRI scanning mean that it is not suitable for some people with metal implants. **You must tell us before your appointment if you have any of the following:**

- a heart pacemaker
- aneurysm clips

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- metal implants, such as hip replacements
 - a previous history of metal fragments in your eyes
 - had brain or spinal injury in the past

Please also let us know if you:

- weigh more than 18 stone (114 kg) as we may need to make alternative arrangements for your appointment
- are, or you think you may be, pregnant
- are breast feeding
- are claustrophobic (the fear of having no escape and being enclosed in small spaces or rooms)
- are unable to lie on your front
- have recently had an MRI

What are the advantages and disadvantages of having a breast MRI?

A breast MRI scan is a safe, painless, and relatively quick procedure. Some people may find it uncomfortable when the dye used during the procedure is injected into their arm. A very small number may have an allergic reaction to the dye. Some people find it uncomfortable to lie on their front.

Although the scanner is open at both ends, some people find it claustrophobic. Please let us know in advance if this is a problem for you. The scanner makes a loud noise during the procedure, so we can give you earplugs to wear or headphones to listen to music if you wish.

What happens when I arrive for my appointment?

Breast MRI scans are done in the imaging department and not in the breast screening department.

When you arrive in the imaging department, please check in with a member of staff at the reception desk. They will give you two forms to complete which will ensure that we have all your relevant details. You will then be met by the radiographer who will do your MRI scan. They will explain the procedure, answer any questions you may have and ask you to sign a consent form. No medical treatment or diagnostic test can be given or undertaken without your consent.

You will be shown to a private cubicle and given a gown to put on. You will be asked to undress from the waist up and to remove your watch, jewellery and any other metallic items. You might be asked to fully undress if your trousers have metal fixings. You will also be given a locker and key for your clothes and personal items.

When you are ready, the radiographer will put a small needle attached to a flexible plastic tube (cannula) into a vein in your hand or arm. Some patients may find this painful.

Please let us know if you have a fear of needles.]

The cannula is put in so you can have an injection of a dye (called a contrast medium) during the scan to help make the images clearer.

What happens during the scan?

You will be taken to the MRI room and asked to lie down on your front on a special couch. Your breasts will fit into specially designed holes in the table, which contain coils that detect the magnetic signal. The coils do not cause any discomfort and the radiographer will aim to make sure you are as comfortable as possible.

When you are ready and lying in place, the radiographer will go behind a glass partition. This is where they operate the scanner remotely. From here, they will slowly move the special couch you are lying on into the MRI machine.

They will be able to see you throughout the procedure and you will be able to talk to each other through an intercom in the machine. You can let the radiographer know at any point if you feel unwell.

It is very important that you keep still during the scan to ensure the image is very clear.

After taking several images, the radiographer will inject the dye (contrast medium) through the cannula. This may cause a warm sensation for a short while. Further images will then be taken.

The dye is safe and usually has no after-effects. However, a small number of people can experience an allergic (anaphylactic) reaction or side effects. These can happen as soon as the dye is injected, or during the following day.

Reaction to contrast may include nausea (feeling sick), vomiting, headache, a rash and itchy skin. You may also experience feeling lightheaded or faint, breathing difficulties, wheezing, a fast heartbeat (tachycardia), clammy skin, swelling or abdominal pain.

If you are concerned you are having a reaction, please seek urgent medical advice or attend A&E.

What happens afterwards?

Once the radiographer has all the images they need, they will bring you out of the MRI machine on the couch. You can then sit up and your cannula will be removed. You can then get dressed and can leave the hospital.

How long does a breast MRI take?

The procedure takes approximately 30 minutes, but you should allow one hour and 30 minutes for the appointment.

When can I expect my results?

You will receive your results by letter approximately ten working days after your screening. If you have been waiting more than two weeks from the date of your scan, please contact the **high risk coordinator** on the number below.

Who can I contact for more information?

For general information about your screening, when or how you will receive your results, or when your next screening is due, please contact the high risk coordinator: **020 3313 0333**, Monday to Friday, 08:00 to 16:00 except bank holidays.

For more information about having a breast MRI scan, please contact one of the Imaging / Radiology departments:

- **020 331 30077** (Charing Cross Hospital)
- **020 331 26418** (St Mary's Hospital)
- Monday to Friday, 09:00 – 17:00, except bank holidays:

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any suggestions or comments about your visit, please either speak to a member of staff or contact the patient advice and liaison service (PALS) on 020 3312 7777. You can also email PALS at imperial.pals@nhs.net. The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department: Complaints Department, Fourth Floor, Salton House, St Mary's Hospital, Praed Street London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:

imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Department name: Breast services

Published: January 2024

Review date: January 2027

Reference no: 2331

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