Breast Magnetic Resonance Imaging (MRI)

Having a Breast MRI Scan

Exceptional healthcare, personally delivered
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This information leaflet tells you about the scan, how to prepare and what will happen during your scan. We also have a short film on our website which can be found at www.nbt.nhs.uk/breastmri. The film follows the journey of one of our patients from their arrival at reception to their departure following their scan.

What is an MRI of the breast?

Magnetic resonance imaging (MRI) is a non-invasive medical imaging test with no radiation (no X rays). By using a magnetic field, radio frequency pulses and a computer, it produces detailed pictures of the breasts.

When is breast MRI used?

MRI of the breast is used for a number of reasons. It is not a replacement for mammograms (breast X rays) or ultrasound, but is used to provide extra information about your breasts.

Some of the indications are:

- To provide additional screening for some women who have an increased risk of breast cancer.
- To investigate abnormalities detected by mammograms and ultrasound.
- To assess the extent of a diagnosed cancer prior to planning treatment.
- To measure the effect of chemotherapy on breast cancers.
- To check the condition of breast implants.

Essential Information

Because of the powerful magnets used in MRI scanning, it is not suitable for everyone. Before the MRI, a member of the MRI Team will go through a safety checklist with you.
It is very important that you tell us if you have:

- Any form of surgical implant.
- Pacemakers.
- Cochlear implants.
- Internal electronic devices.
- Artificial heart valves.
- Clips on arteries especially following brain surgery.

If any of the above applies to you we may have to defer your MRI until we can get more information about your medical history but this is for your safety.

Clips are often used in breast imaging to mark an area in the breast at the time of a biopsy. If you have one of these clips in your breast it is unlikely to prevent you from having your MRI, but please tell us.

What happens when I arrive?

- You will be met by a member of the MRI Team, who will check your personal details and go through a safety checklist with you.
- They will explain the procedure to you. Please feel free to ask any questions at this time.
- You will be asked to undress and change into a gown. A locker will be provided for your clothes.
- It is very important that you do not bring anything containing metal into the scanning room. Please leave all jewellery, credit cards, piercings, watches, mobile phones, and any other metal objects in the locker provided. Gold wedding bands will not affect the scanner and can be worn.
- Do not wear makeup on the day of the scan, as some makeup contains metal as part of the ingredients.
What happens during the scan?

- Breast MRI uses a special contrast medium which helps to take detailed pictures of the breast. This is called gadolinium-DTPA.

- The radiographer will use a needle to introduce a small flexible plastic tube into a vein in your arm so that the contrast medium can be given at the appropriate time during your scan.

Please note the injection will not be necessary if you are having the breast MRI purely to assess your breast implants.

- You will then be asked to lie on your front on the MRI couch.

- The radiographer will place your breasts through two holes in the couch.

- Please let us know if you are not comfortable as it is important that you lie absolutely still.
The couch then slowly slides through the MRI scanner and the images are taken.

The radiographer operates the MRI scanner from behind a partition. She will be able to see you throughout the procedure and you will be able to talk to each other through an intercom in the MRI scanner.

**How long does a breast MRI take?**

The procedure takes approximately 30 minutes but please allow one hour 30 minutes for the appointment.

**Can I eat and drink on the day of the MRI scan?**

Yes, please eat and drink as normal. Please also take all your medication as you normally would. Please drink plenty of water after the scan because the contrast medium injection can sometimes dehydrate you.

**Does having a breast MRI hurt?**

No, MRI scans do not hurt.

Some women may find the injection uncomfortable. It is also normal to feel a slight flushing sensation when the injection is given.

Some women may find lying on their front uncomfortable.
I have heard MRI scans are noisy, is this true?

The action of a large magnet in the MRI makes a knocking or drumming noise. The character of the noise changes several times during your scan. This is perfectly normal. We have recorded a film of the experience of a breast MRI scan that includes some of the various noises that you will hear and these can be listened to via a link on our website at www.nbt.nhs.uk/breastmri. You will be given headphones to reduce the noise. You will still be able to hear what the radiographer says. If you would like, we can play the radio through these headphones.

I’m feeling worried about having the scan. What can I do?

It’s normal to feel a bit anxious about having a MRI scan especially if it’s your first one. Here are some tips that you may find helpful to prepare for your scan, and while you are having it:

Preparing for the scan

As they say ‘knowledge is power’. So the more information you have before the scan, the more familiar it will be. The film on the website (at www.nbt.nhs.uk/breastmri) gives lots of helpful information on what to expect, including what the machines look and sound like. It will also give you an opportunity to see if there’s anything you don’t understand, or anything you would like more information on to prepare you.
You have the option to listen to music or relaxation tracks during the scan. If you have a favourite CD please bring this with you. It can be helpful to listen to it a few times before the scan so it’s familiar, including in the waiting room.

**During the scan**

If you are feeling anxious during the scan:

- **Remind yourself why you are having the scan** (e.g. to review your health / get the best treatment possible) - knowing there are good reasons for having this MRI can help you to get through it.

- **Know that it’s normal to feel some anxiety during a procedure.** Breathing slowly and gently can help relax your mind and body. It’s important not to take deep breaths as this can affect the quality of the scan pictures.

- **Distract yourself** e.g. think of a relaxing place you have been to e.g. a beautiful beach or a country walk and think about all the details (e.g. the colours, sounds, smells, etc.).

- **Be kind to yourself** (a bit like being your own cheerleader) e.g. ‘I can do this’, ‘I’m doing really well’, ‘I’m in safe hands’

- **Remember that it will pass.** Your radiographer will be able to give you an idea of how long the scan will be. If you would like time updates of how long you’ve been in the scanner and time remaining please let them know when you arrive on the day.
Getting a good picture - the radiographer will encourage you to be quiet during the scan to get the best picture possible (as speaking causes small movements in your body which can affect the pictures). However they are there to support you and will give you regular updates on how you are getting on. **If you need to stop the scan**, there is a ‘help button’ which will be available to you. You may have to rebook the scan for another time but the team can support you with this.

If possible, organise something to do afterwards that you find relaxing or enjoyable, as part of taking care of yourself after the scan.

If you have any questions or concerns, please contact the MRI department, on 0117 414 9003, in advance. It’s more helpful to contact the team beforehand so you can get support to make your experience of having a scan go as smoothly as possible.

**Can I have a breast MRI if I am pregnant or breast feeding?**

MRI is not advised in the first three months of pregnancy.

Pregnancy and breast feeding make the MRI pictures much more difficult to read. We would not routinely do a breast MRI if you are pregnant or breast feeding unless there was a specific clinical problem that has been discussed with you and your doctor.

It is very important to tell the radiographer if you are pregnant, think you may be pregnant or are breast feeding.

**How will I get my results?**

How you receive the results of your MRI scan will depend on the reason for your scan and may be by letter, telephone or at an appointment in person. How you receive your results will have been arranged with you prior to your scan. A copy of your results will also be sent to your GP.
Are there any side effects?

There are no after-effects of the MRI scan itself, and you will be free to drive and return to work should you wish. In very rare cases, some women can have an allergic reaction to the contrast medium used in breast MRI. The radiographer and doctors are all trained to deal with such reactions.

How to contact us

MRI Department Southmead Hospital 0117 414 9003
Bristol Breast Care Centre 0117 414 3700
Avon Breast Screening, Breast Care Nurses 0117 414 7072
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- MRI Department Southmead Hospital
  0117 414 9003

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- www.nbt.nhs.uk/breastmri

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.