

Breast services

Having a contrast-enhanced spectral mammogram (CESM)

Information for patients, relatives and carers

Introduction

This leaflet is designed to give you information about having a contrast-enhanced spectral mammogram (CESM). We hope that it will answer some of the questions that you and those important to you may have. 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. If you have any questions or concerns, please let us know.

What is a CESM?

A mammogram is an X-ray of the breast. It is performed by a specially trained radiographer called a mammographer and takes place in the outpatient department. In NHS breast screening, your mammogram will always be performed by a woman.

A CESM is a technique in which a dye is injected into a vein in your hand or arm before the mammogram is taken. This dye is called a contrast medium. It makes it easier to see any areas of uncertainty within the breast. It helps make the images clearer and makes it easier for your doctor to look at specific areas in more detail.

Why do I need a CESM?

A CESM forms part of a more detailed breast clinic assessment. It provides images that will give your doctor more detailed information than would be available using standard mammography.

You may need to have a CESM if we need a more detailed image of the breast than we can get using regular mammogram.

What happens during a CESM?

When you arrive at the clinic you will be asked to complete a short questionnaire to confirm that you are suitable to have the test.

The mammographer will then call you into the X-ray room and explain the procedure to you. You can ask the mammographer any questions you may have. Some people find it useful to bring a list of questions they've written down in advance and you're welcome to do this.

When you are ready, the mammographer will put a small needle attached to a flexible plastic tube (cannula) into a vein in your hand or arm. She will then inject the dye into the tube. This may cause a warm sensation for a short while as the dye flows around your body.

You will then be asked to undress from the waist up. We recommend that you wear separates, such as a top and skirt or trousers, to help you undress more easily.

Deodorant, antiperspirant and talcum powder may affect the quality of the X-ray, so please do not use them on the day of your appointment or wash them off before the mammogram is taken.

The mammographer will position your breasts, one at a time, in the mammogram machine, apply some compression and take the X-rays. The compression is necessary to obtain the best images and you may find it uncomfortable. Our mammographers are trained to ensure that the minimum pressure is used for a few seconds only.

A number of X-rays will be taken of each breast from different angles. The number taken will depend on your individual circumstances.

When the X-rays have been taken, you will be able to get dressed and return to the waiting room. Once the doctor has checked the quality of the images, the cannula will be removed.

You will be asked to remain in the department for observation for approximately 30 minutes to make sure you are safe to go home.

How long will the test take?

The test itself should take no longer than 30 minutes.

Will I be able to resume my normal activities right away?

You can eat and drink normally and return to your usual activities straight away.

You can continue with your normal medication as usual. If you are taking diabetes medicine containing metformin you may need to stop this for two days after this type of mammography. Your consultant will discuss this with you during your appointment.

When can I expect my results?

The images will be looked at immediately by a breast radiologist (a doctor trained to analyse breast imaging) to ensure the quality of the image.

The image will then be discussed in a multidisciplinary team meeting, where further recommendations will be made. You may then need further tests, for example an ultrasound scan and or a biopsy.

Your consultant will let you know when you will receive the results of any tests you have, and if we need you to attend for any further investigations.

What are the risks of having a CESM?

Radiation

All X-rays involve radiation. A mammogram uses very small doses of radiation but the benefit of detecting breast cancer at an early stage outweighs the risk of harm from the radiation exposure. The radiation dose from a CESM is slightly higher than that of a standard mammogram but is still well within the accepted safety guidelines.

Allergic reaction

The dye is safe and usually has no after-effects, but a small number of people can experience an allergic (anaphylactic) reaction or other side-effects. This can happen as soon as the dye is injected or up to a day later.

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

The mammographers are trained to recognise these reactions.

We will check whether you have had any allergic reactions in the past before we give you the injection.

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

Who can I contact for further information?

If you have any further questions about anything covered in this leaflet, please contact the breast admin team on 020 3313 0477, between 08:00 and 17:00, Monday to Friday. They will be able to connect you with someone who can answer your question.

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 pals@imperial.nhs.uk. 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

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