The Leeds Teaching Hospitals NHS Trust

Contrast-enhanced spectral mammography (CESM)

Information for patients

Leeds Breast Unit

Contrast-enhanced spectral mammography (CESM) is a type of mammogram which aims to 'highlight' any areas of concern within the breast.

The difference between CESM and a standard mammogram is the use of an x-ray dye (contrast medium) that is injected into a vein before the mammogram images are taken.

These contrast-enhanced images give more detailed information.

What happens during CESM?

The procedure will be explained to you and you will complete a contrast questionnaire. This enables us to ensure your suitability for the procedure. You will have the opportunity to ask any questions you may have.

A cannula (small plastic tube) will be inserted into a vein - usually the back of the hand or the crease of the elbow. You will then be given an injection of the contrast medium through the cannula. You may feel a little warm as the contrast medium flows around your body - this is normal and nothing to be concerned about.

After a short wait, you will have a mammogram taken of both breasts in two views.

What are the risks?

All x-rays involve radiation, the amount of radiation from a standard mammogram is small. The radiation dose from a CESM is slightly higher than that of a standard mammogram,

but still well within accepted safety guidelines. The dose of radiation from a CESM is equivalent to a flight to Australia.

The contrast medium that is used contains iodine which some people may be allergic to. We will check if you have had any previous allergies before the test. Some people may develop a rash and a few may get a mild asthma attack. Rarely the dye may result in a more serious allergic reaction, which may need to be treated with medicines.

There is a less than a 1 in 1000 risk of the contrast medium used for your examination coming out of the vein into the soft tissue. This usually causes discomfort and swelling at the site of the cannula requiring a cold compress. Very rarely a more extensive injury to the skin and soft tissue can occur. The radiographers are trained to look for early signs of this happening to minimise any discomfort this may cause.

Contraindications

- You are allergic to iodine
- You have renal impairment
- You are diabetic
- You are aged over 70
- You would be unable to tolerate a mammogram due to physical problems
- You cannot give informed consent

After CESM

You are advised not to drive or operate machinery for one hour after your injection.

You can eat and drink as normal and resume your usual activities.

Following CESM you should not have any adverse after-effects to cause concern. However, we have included contact numbers if you feel you need any advice.

Breast Imaging: 0113 206 4959

What did you think of your care?

Scan the QR code or visit **bit.ly/nhsleedsfft**

Your views matter

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