

# Information for patients and carers

## Multi Gated Acquisition (MUGA) Scan



## What is a MUGA Scan?

This is a test to look at the efficiency of the pumping mechanism of the heart. The procedure involves 2 injections followed by a scan using a gamma camera similar to the one shown in the image below.



### **Please inform us before you attend:**

- If you are or think you may be pregnant
- If you are breast/chest feeding
- If you weigh over 25 stone (158 Kilograms)
- If you have problems standing or need a hoist to transfer

## Preparation for the Scan

There are no special preparations for a MUGA scan so you can eat, drink and take any medication as normal.

## Can you bring a relative or friend with you?

A relative or friend can accompany you to the hospital but usually they will not be allowed into the room when you have your examination. Please note that we have limited seating and do not have childcare facilities, therefore small children should not attend your appointment.

## Your scan

The procedure involves 2 injections followed by a scan. A radiographer will inject the first injection into a vein in your hand or arm; this contains a material that attaches itself to your red blood cells, tagging them. There is then a wait of approximately 20 – 30 minutes while this takes effect. You will then be given a second injection, which contains of a small amount of radioactive tracer (in a liquid form) and this will then attach to the tagged red blood cells. The images are taken straight after this second injection.

You should drink extra fluids for the rest of the day to help reduce the radiation in your body. We will tell you how much to drink when you come and if you are on restricted fluids, we will give you further advice.

You will be asked to empty your pockets and remove any metal objects such as belts, braces and jewellery. Ladies that use removable breast prosthesis may also be asked to remove this for the scan.

You will be attached to a heart monitor during the scan via ECG leads on your chest area.

Special cameras which are about the size of a large suitcase will come very close to you during the scan but you will not be enclosed in a tunnel.

You will not be left on your own as there will be someone close by at all times. The scan usually takes approximately 30 minutes.

## Are there any side effects?

We do not expect any side effects from the injection.

## Are there any risks?

All medical procedures and tests carry both risks and benefits, your doctor has requested this scan as they feel the information that we will gain is a greater benefit than the risk from being exposed to radiation. Our injections contain a small amount of radioactivity that emits gamma rays (these are similar to x-rays). We use the smallest dose possible, in line with national regulations to provide as much information as we can about your condition.

The results of your scan will give your doctor useful information about your condition and will help to plan your treatment.

## After the Scan

After your scan you must continue to follow the advice about drinking that you were given after the injection. You are free to go home or go back to work. Please avoid spending a long time in close contact with young children or pregnant women for the rest of the day. You should aim to spend no more than 15 minutes each hour cuddling or sitting next to them. It is also best if you do not share a bed with a child or a pregnant woman on the evening of your scan.

## Travel abroad

Please inform the radiographer on arrival if you intend to travel abroad within 7 days of your scan. Radiation monitoring at security in airports or ports may detect some of the radiation you have received during your scan. We will give you a letter that will state what test you have had and this can be used when travelling.

## Your results

The images will be reviewed by our radiologists after your visit. You will be advised when and how you will receive your results at this time. You will not receive any results on the day of the scan.

## Contact details

Should you require further advice or information please contact:  
Nuclear Medicine on **01772 522381**.

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.patient.co.uk](http://www.patient.co.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

<https://www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice/exposure-to-ionising-radiation-from-medical-imaging-safety-advice>

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[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone 08081962638

**Please ask a member of staff if you would like help in understanding this information.  
This information can be made available in large print, audio, Braille and in other languages.**

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