

Having a contrast enhanced ultrasound scan of an abdominal endovascular aneurysm repair

Vascular Studies Unit

Information for Patients

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Introduction

Your appointment letter will tell you the **date and time** of your appointment. It will also tell you **the hospital you need to go to**. This leaflet tells you about your examination. Please read it carefully as it gives important information and instructions.

You have had an endovascular aneurysm repair (EVAR) using a device called a stent. This is because the main blood vessel in your tummy (abdominal aorta) was swollen. Your consultant has referred you for a contrast enhanced ultrasound scan to check for any problems.

What is a vascular ultrasound scan?

Your body's network of blood vessels are called the vascular system. This includes all of your veins and arteries.

A vascular ultrasound scan uses sound waves that are beyond our normal range of hearing (ultrasound). The ultrasound probe (transducer) is part of the machine that touches your skin during the scan. The transducer makes the sound waves that make pictures of the blood vessels. This will be seen on a screen. This scan is painless.

The machine also uses something called the Doppler effect. This is to measure blood flow through the blood vessels which at times you may hear as a 'whoosh-whoosh' sound. The blood flow is also seen on screen as colour or waveforms.

There are no known side effects from having an ultrasound scan.



**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

What is a contrast enhanced ultrasound scan (CEUS)?

A routine ultrasound scan lets us check blood flow through the stent. It lets us see if there are any other problems.

A contrast enhanced ultrasound scan uses contrast liquid to give a more detailed picture. We use this to check for any problems that may not be seen on a routine ultrasound scan.

The contrast liquid is given through a vein (blood vessel) in your arm. It has 'microbubbles' which can be picked up more strongly by ultrasound.

What happens during the scan?

We will take you into the room. Here we will explain the scan to you. You can ask any questions that you have about the scan. We will ask you to remove clothing from around your tummy area. We will ask you to lie down on the couch.

The scan will take place in a slightly darkened room. This is so we can see the pictures clearly on the screen.

We will put a water-based gel on your tummy. We will pass the ultrasound probe over the tummy with some pressure. The scan is not painful. We will need to use some pressure to get a good picture.

After the first scan, we will put a small needle (cannula) into a vein in your arm. We give the contrast liquid (called SonoVue) through the cannula. The contrast liquid is mostly made up of sterile water with salt (saline solution) and tiny bubbles of gas (microbubbles). These microbubbles will leave your body quickly and naturally each time you breathe out.

We will then do another scan right away after giving the injection. We will keep the cannula in your arm for the rest of the scan. We will remove it 30 minutes after having the contrast injection.

How do I prepare for the scan?

You cannot eat for 4 hours before the scan. You may drink a small amount of water, fruit juice or tea/ coffee without milk.

If you have diabetes please speak to your diabetes specialist nurse about the eating and drinking instructions. You can contact the Vascular Studies Unit to ask for an early morning appointment if needed. The phone number will be in your appointment letter or at the end of this leaflet.

If you are on medication from your doctor, please continue to take this as normal.

Hearing aids and pacemakers are not affected by this scan.

You should wear loose fitting clothing which can easily be removed or moved away from the area to be scanned.

Who will be doing the scan?

A specialist in vascular ultrasound (clinical vascular scientist) and/ or a doctor who specialises in medical imaging (radiologist) will carry out the scan.

As we are a teaching hospital, students may also be in the room. If you do not want any students to be in the room during your appointment, please let us know.

How long will it take?

This is different for each patient. The scan takes around 30 minutes to do.

You will need to wait in the department for at least 30 minutes after the contrast injection was given to you. This is to make sure you feel well and have no reaction to the contrast liquid before going home.

What happens after the scan?

We will wipe off the gel. You can then get dressed.

We may ask you to stay in our waiting room to make sure that you are feeling well after the contrast injection. We will remove the cannula and check the area injected. We will then let you go home.

You may eat and drink normally after you leave.

How do I get the results?

We will send the results to the consultant who referred you. Where possible, the clinical vascular scientist will explain the results to you. If you do not know how to get your results please ask a member of staff.

Are there any risks with having a contrast enhanced ultrasound?

There are no known side effects from having a routine ultrasound scan.

You may have slight bleeding or bruising at the injection site. This is because of the insertion and removal of the cannula. We will check this before you leave.

Possible side effects of SonoVue contrast liquid:

Like all medicines, this can cause side effects but not everyone gets them. Most side effects are often not serious, and serious side effects are rare. Patients who experience serious side effects or reaction may need treatment.

Please tell medical staff straight away if you notice any of these side effects, as you may need medical treatment:

- swelling of the face, lips, mouth or throat that makes it difficult to swallow or breathe.
- skin rash
- hives
- swelling of the hands, feet or ankles

The following side effects have been reported with SonoVue:

Common side effects (may affect up to 1 in 100 people):

- headache
- numbness
- dizziness
- strange taste in the mouth
- redness
- chest discomfort
- feeling sick (nausea)
- tummy (abdominal) pain
- skin rash
- feeling hot
- a reaction from the injection like pain or an unusual sensation at the site.

Uncommon side effects (may affect up to 1 in 1,000 people):

- blurred vision
- low blood pressure
- itching
- back pain, chest pain, pain in general
- tiredness
- Serious and less serious allergic reaction. This can be redness of the skin, lower heart rate, low blood pressure, breathlessness, problems in breathing and dizziness, fainting, cardiac/ cardiorespiratory arrest.

Frequency not known (frequency cannot be estimated from available data):

- Chest pain spreading to the neck or the left arm. This can be a sign of a serious allergic reaction called Kounis syndrome.
- Feeling faint or fainting.
- In some cases of allergic reactions in patients with cardiac blood vessel disease, lack of oxygen supply of the heart or cardiac arrest were reported.
- Vomiting

You **must not have an ultrasound contrast** injection if you:

- are allergic (hypersensitive) to sulphur hexafluoride or other ingredients (excipients).
- have had a heart attack (myocardial infarction) and still suffer from frequent and/ or repeated angina or chest pain.
- have had frequent and/ or repeated angina or chest pain in the past 7 days.
- have had a recent coronary artery intervention.
- have heart failure.
- have bad heart rhythm disorder.
- have right-to-left shunts of the heart.
- have serious increase in pulmonary artery blood pressure (pulmonary artery hypertension).
- have uncontrolled high blood pressure (not on medication).
- have respiratory distress syndrome.

Can I bring a friend or relative with me to my appointment?

You may want to bring a friend or relative with you. They can also be the person taking you home after the appointment. Having this person can be useful if you do not speak or understand English very well. It can be helpful if you have any special needs. But they may not always be allowed into the test room.

Special requirements

Please call us if you have any special needs like a disability or language and communication need. Call the number on your appointment letter as soon as possible. We will make arrangements to help support you.

Shops and refreshments

You can get hot or cold drinks and snacks at the hospital. Please ask a member of staff for directions

Contact details

Vascular Studies Unit: Level 1, Glenfield Hospital, Groby Road, Leicester LE3 9QP

For queries and appointments: 0116 258 5440 (Monday to Friday, 8.30am to 4.30pm)

More information

Our webpage on the Leicester's Hospitals website can be viewed here:

<https://www.leicestershospitals.nhs.uk/aboutus/departments-services/vascular-studies-unit/>

How to give us your feedback

If you wish to make any comments about your visit to the Vascular Studies Unit or if you have any suggestions about how we can improve our services, please write to us or speak to a member of staff. You can also complete a comments card available in our reception.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

જે કુર્મીં દિગ જાજવારી વિમે હેર જામ્મા વિચિ ચાહુંદે હે, ઝાં વિરખા વચકે હેઠાં દિંતે ગાષ્ટે નંબર 'ઝે ટેલીફોન વચે।
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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