

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

Vascular Studies Unit

Information for Patients

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Introduction

Please read your appointment letter carefully to check the time, date and which hospital you must go to for your appointment. This leaflet tells you about your scan. Please read it carefully as it contains important information and instructions.

You have had an endovascular aneurysm repair (EVAR) of the main blood vessel in your tummy (abdominal aorta), because of swelling in this artery, using a device called a stent. You have been referred by your consultant for a contrast enhanced ultrasound scan to check for any problems.

What is a vascular ultrasound scan?

Your body's network of blood vessels is called the vascular system, which includes all of your veins and arteries.

A vascular ultrasound scan is a painless examination of the blood vessels using sound waves which are beyond our normal range of hearing (ultrasound). The ultrasound probe (transducer) is the part of the machine that is in contact with your skin during the scan. The transducer produces the sound waves that build up pictures of the blood vessels and stent which can be seen on a screen.

The machine also uses something called the Doppler effect 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.



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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 allows us to check blood is flowing through the stent and if there are any other problems.

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

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

What happens during the scan?

You will be taken into the room where the scan will be explained to you and you may ask any questions that you have about the scan. You will be asked to remove clothing from around your tummy area and asked to lie down on the couch.

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

A water-based gel will be placed on your tummy and the ultrasound probe will be passed over this area with some pressure. The scan is not painful, but some pressure is needed to obtain a good picture.

After the first scan, a small needle (cannula) will be put into a vein, usually in your arm. The contrast liquid (called SonoVue) is given through the cannula and 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.

You will then have another scan immediately after the injection. The cannula will be kept in your arm for the duration of the scan and removed 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 above. You can contact the Vascular Studies Unit to request 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.

It will help to 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 will vary for each patient but the scan usually takes about 20 minutes.

However, you will need to wait in the department for at least 30 minutes from when your contrast injection was given, to make sure you feel well and have no reaction to the contrast liquid before going home.

What happens after the scan?

The gel can be wiped off and you can get dressed.

You may need to stay in our waiting room to make sure that you are feeling well after the contrast injection. The cannula will then be removed and the site of injection checked, and you will then be allowed to go home.

You may eat and drink normally after you leave.

How do I get the results?

The results will be sent to the consultant who referred you. Where possible, the clinical vascular scientist will explain the results to you. If you are unsure 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 due to insertion and removal of the cannula. This will be checked before you leave.

Possible side effects of SonoVue contrast liquid:

Like all medicines, this can cause side effects, although not everybody gets them. Most side effects are usually 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 the following side effects, as you may need medical treatment:

- Swelling of the face, lips, mouth or throat which may make 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)
- Abdominal pain
- skin rash
- Feeling hot
- A reaction where the injection was given such as pain or an unusual sensation at the site

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

- Blurred vision
- Decrease in blood pressure
- Itching
- Back pain
- Pain in general
- Chest pain
- Fatigue
- Severe and less severe allergic reaction (including redness of the skin, decrease in heart rate, decrease in blood pressure, breathlessness, or more severe reaction with difficulties in breathing and dizziness, loss of consciousness, cardiac/ cardiorespiratory arrest)

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

- Chest pain, spreading to the neck or the left arm, which can be a sign of a potentially 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 severe heart rhythm disorder.
- have right-to-left shunts of the heart.
- have severe 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 wish to bring a friend or relative with you, or to take you home from the Vascular Studies Unit. This may be useful if you do not speak or understand English very well or if you have any special needs. However, they may not always be allowed into the test room.

Special requirements

If you have any special needs relating to a disability or need language or communication support, please call the telephone number given in your appointment letter as soon as possible so we can make appropriate arrangements to help support you.

Shops and refreshments

Refreshments including hot/ cold drinks and snacks are available in 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)

Further 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

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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