

Jackie Walton Vascular Studies Unit

Vascular Ultrasound

Information for patients



This information sheet tells you about the different vascular ultrasound scans which come under the title 'Vascular Ultrasound'.

There are two different types of vascular ultrasound scans which are carried out at the Vascular Studies Unit.

1. Duplex scan
2. ABPI (Ankle Brachial Pressure Indices)

What is a duplex scan?

A duplex scan uses ultrasound (sound waves beyond our normal range of hearing) to produce pictures of blood vessels (veins and arteries) and blood flow.

These pictures can tell us where there may be blockages in arteries or veins, the size of the blood vessels and problems with the valves in veins. They can also tell us about any other structural abnormalities and the speed and direction of blood flow within the major blood vessels.

The procedure is carried out by a professionally trained clinical vascular scientist. It is quite painless and there are no side-effects or risks from the sound waves used.

What happens during the duplex scan?

The scan will take place in a darkened room to help us to see pictures of your blood vessels clearly on a screen. To allow the ultrasound to 'see through' your skin it is necessary for you to remove clothing from the area which is being scanned (trousers/skirt, shoes and socks/tights or shirt/blouse). You will be asked to lie on your back during the procedure, as this position usually gives the best views of the blood vessels.

The operator will hold a piece of equipment called a transducer, which is coated in a harmless gel, directly and quite firmly against your skin.

You will not feel the sound energy but you may hear the machine produce swishing noises. These noises represent blood flow through your blood vessels and help the operator to get the best pictures. The pictures of your blood vessels are checked on the screen.

ABPI (Ankle Brachial Pressure Indices)

This procedure involves taking your blood pressure by putting a cuff round the top of your arm and pumping it up. This can feel quite tight but shouldn't be painful.

A small amount of gel will be placed on your arm and a small 'pencil' device used to listen to the blood flow (you will hear some 'swishing' noises). The cuff is then placed around one or both of your ankles, pumped up again and the 'pencil' device is used to listen to the blood flow on top and on the side of your foot.

Sometimes we are asked by the consultant to perform this procedure after you have done a short exercise. This is usually one minute of stepping up and down on a step. If you have angina or other health problems which prevent you from doing this, please tell the vascular scientist before the test.

You will be asked to lie back down on the couch after the exercise and further blood pressure readings will be taken from your feet.

How should I prepare for the scan?

You will be asked to remove any clothing around the area to be examined. We would recommend wearing clothing that is loose and easy to remove when required.

Bandages and dressings

If you have bandages or dressings on your legs it is likely we will need to remove them. This is to make sure the scan is as detailed as possible. Unfortunately we are unable to reapply any dressings so please arrange to have your legs re-dressed either on the same or following day. It would be helpful if you could telephone us before your appointment to tell us if you have dressings so we can allow more time for the scan.

What happens afterwards?

You will be told the results of the scans on the day of your test. They will also be sent to your Consultant at the hospital who asked us to do the scan. Sometimes we ask one of our specialist doctors to talk to you about the results of the scan.

Questions or concerns

If you have any questions about your procedure please speak to a member of staff in the Jackie Walton Vascular Studies Unit at the time of your appointment or telephone us on:

Tel: **01865 223 091**

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

Vascular Studies Unit
September 2014
Review date: September 2017
Oxford University Hospitals NHS Trust
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www.ouh.nhs.uk/patient-guide/leaflets/library.aspx

