





GP guide to the imaging of patients with vascular ultrasound

Vascular ultrasound, also known as Doppler ultrasound, is a special ultrasound technique that evaluates blood flow through a blood vessel, including major arteries and veins in the abdomen, legs and neck. A Doppler ultrasound study is usually part of a vascular ultrasound examination.

Vascular ultrasound is a first choice investigation to:

- Locate and identify blockages (stenosis) and abnormalities like plaque or emboli in carotid arteries
- Determine the extent of peripheral vascular disease in the lower limb
- Detect blood clots (deep venous thrombosis DVT) in the major veins of the legs
- Determine the source and severity of varicose veins

Wherever possible the GP should examine the patient before referring for a scan. The clinical indications are an important part of selecting the appropriate vascular study to be performed.

Please note that patients with an increased BMI or peripheral oedema may cause technical limitations during the examination.

We cannot examine the upper limb. Signs and symptoms in the arm, hand or shoulder should be referred to a specialist vascular clinic at your local hospital.

If you require only an examination and assessment of the abdominal aorta please refer your patient for a scan of the upper abdomen.

Referral Guidelines

| Presenting Complaint | Imaging Guidance |
|---|--|
| Cerebrovascular disease such as TIA | A Carotid Doppler study will show evidence of cerebrovascular disease. |
| Carotid bruit or pulsation | |
| Cardiovascular assessment for stroke risk | |

Referral Guidelines (continued)

| Presenting Complaint | Imaging Guidance |
|--|---|
| Intermittent claudication | Peripheral Arterial Doppler ultrasound is useful to assess the arterial system and to determine the stage of peripheral arterial disease. |
| Absent ankle or foot pulses | |
| Discolouration and/or leg ulceration | |
| Diabetic neuropathy | |
| Varicose veins as a result of venous insufficiency | Venous Doppler ultrasound is able to functionally assess the deep and the superficial system to evaluate the cause of venous disorders. |
| Pain in lower limbs | Venous Doppler is helpful to assess deep vein thrombosis (acute and chronic). |
| Ulceration or discolouration | |
| Suspected Deep Vein Thrombosis (DVT) | |
| Suspected recurrent DVT | |

How do I refer a patient?

To refer a patient for an ultrasound complete one of our referral forms available from our website (www.inhealthgroup.com).

References

iRefer. Royal College of Radiologists. 7th edition, 2012.

Right test, right time, right place; a Framework for Primary Care Access to Imaging. Royal College of Radiologists and Royal College of General Practitioners, 2006.