

Carotid Duplex Ultrasound in Cerebrovascular Disease:

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Clinical Indications:

- TIA with unilateral hemispheric symptoms (contralateral Middle Cerebral /Anterior Cerebral Artery territory)
- Amaurosis Fugax or Central/branch retinal artery occlusion (Ipsilateral Internal Carotid Artery territory)
- Non-disabling stroke in the Carotid artery territory (Anterior circulation)

Imaging criteria:

All people with suspected non-disabling stroke or TIA, who after specialist assessment are considered as candidates for carotid endarterectomy should have carotid imaging within 1 week of onset of symptoms (Local variation depending on resource availability).

People who present more than 1 week after their last symptom of TIA has resolved should be managed using the lower-risk pathway.

Imaging required:

1. Initial investigation: Carotid Duplex (requested by stroke team)
2. Following referral and review of patient by vascular team, if felt to be a candidate for carotid endarterectomy: CT Angiogram carotids and circle of Willis to be arranged by vascular team prior to surgery (alternatively 2nd Carotid Duplex by a different operator)

In cases of uncertain pathology or vascular territory, clinicians should consider a diffusion-weighted MRI except where contraindicated, in which case CT (computed tomography) scanning should be used.

Qualifying Criteria:

The patient must be suitable and willing for surgery if a significant (>50% NASCET criteria) stenosis or unstable plaque is identified on the clinically symptomatic side.

People with stable neurological symptoms from acute non-disabling stroke or TIA who have symptomatic carotid stenosis of 50– 99% according to the NASCET (North American Symptomatic Carotid Endarterectomy Trial) criteria, or 70–99% according to the ECST (European Carotid Surgery Trialists' Collaborative Group) criteria, should:

- be assessed and referred for carotid endarterectomy within 1 week of onset of stroke or TIA symptoms
- undergo surgery within a maximum of 2 weeks of onset of stroke or TIA symptoms
- receive best medical treatment (control of blood pressure, antiplatelet agents, cholesterol lowering through diet and drugs, lifestyle advice).

Method of Referral:

Telephone referral to be followed by online referral:

<https://sbushare.cymru.nhs.uk/sites/Surgery/VN/Pages/Vascular%20Network%20Referrals.aspx> via share point, filling all the information requested.

Once submitted, you will get a confirmation email to the referrer and the consultant in charge of the patient. Updates of vascular review sent via email.

References:

National Clinical Guideline for Stroke 2023

ESVS 2023 Clinical Practice Guidelines on the Management of Atherosclerotic Carotid and Vertebral Artery Disease



Swansea Bay University Health Board

Authorisation Form for Publication onto COIN

PLEASE ENSURE THAT ALL QUESTIONS ARE ANSWERED – IF NOT APPLICABLE PLEASE PUT N/A

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