

GP MANAGEMENT OF TRANSIENT ISCHAEMIC ATTACK (TIA)

Ask yourself:

Am I confident of the diagnosis?

TIAs typically present with sudden-onset of focal and 'negative' neurological symptoms with deficit maximal at onset and resolution within 30 minutes (definition allows for resolution within 24 hours).

- TIA will typically have 'negative' symptoms (loss of vision, loss of power, loss of sensation)
- Carotid-territory TIA presents as one or more of the following: dysphasia, unilateral weakness/numbness, true unilateral amaurosis fugax (transient monocular blindness)
- Generalised symptoms (confusion, faintness, generalised weakness or numbness, bilateral blurry vision, isolated dizziness) are rarely caused by TIAs unless also accompanied by focal symptoms.
- Positive symptoms (pins and needles, scintillating visual field abnormalities, limb shaking), amnesia and incontinence are not typical of TIA.
- A progressive onset or march of symptoms from one part of the body to another is more typical of seizure (over seconds to 1-2 minutes) or migraine (over several minutes).
- Always rule out hypoglycaemia when considering TIA or stroke.

Making a firm clinical diagnosis of TIA is important, especially of carotid territory TIA as this may warrant further investigation (see below).

If in doubt discuss with Mr Murray Ogg, vascular surgeon, or Dr Malcolm Clark, neurologist.

Does the patient need admission?

Assess stroke risk using **ABCD²** score:

Age \geq 60yrs (score 1)

BP > 140 systolic or > 90 diastolic (1)

Clinical features - unilateral weakness (2), speech affected without weakness (1)

Duration of TIA - > 60 mins (2), 10-59 mins (1)

Diabetic on diabetic medication (1)

Scores of 4 or more indicate high-risk patients (stroke risk up to 11.7% in 7 days) **and require hospital admission.**

Also consider admission for TIA patients with **atrial fibrillation, crescendo TIAs** (2 or more TIAs in a week) or **on anticoagulant therapy**

Scores < 4 are low-risk patients (stroke risk 1.2% in 7 days)

These can generally be investigated and managed by the GP (see below).

Patients who present more than a week after TIA are considered as low-risk.

GP investigation of low risk patients

- FBC, ESR, electrolytes, creatinine, glucose, fasting lipids
- ECG

Imaging:

- Dr Murray Ogg (vascular surgeon) is interested in identifying patients who would benefit from urgent carotid endarterectomy. These patients will have very clear symptoms of: amaurosis fugax (transient monocular blindness) or transient ischaemic attack clearly localising to a single hemisphere in the carotid territory (dysphasia, unilateral weakness/numbness). If you have a patient with these symptoms, and they are a suitable candidate for carotid surgery (take into account life expectancy, existing co-morbidities and patient's willingness to undergo carotid surgery), please phone Murray at the first opportunity via Nelson Hospital switchboard Tuesday to Friday to authorise carotid U/S and brain CT. (If Murray away, can D/W Dr Malcolm Clark).
Results: If ultrasound shows >50% carotid stenosis the patient needs to be seen in the very next vascular surgical clinic (Tuesday afternoon, Thursday afternoon) – ph. 539 3702 to arrange appointment
- Brain CT alone is sufficient for other cases and these patients should be discussed with Dr Malcolm Clark.
- Echocardiogram - consider only if cardio-embolic source likely, eg. AF

Secondary prevention and other management in primary care

- **Smoking cessation** - the most effective measure for TIA and stroke prevention
- **Aspirin + dipyridamole** - all cases unless contraindicated
 - Give aspirin 300mg stat then 100-150mg daily for first event (commence as soon as neurological features resolved, otherwise wait for CT scan)
- **Clopidogrel** - if aspirin-allergic
 - Give 300mg stat then 75 mg daily (preferably after CT scan)
- **Lower blood pressure** (NB. Do not reduce BP rapidly)
 - Choose drug according to co-morbidities
 - ACE inhibitors, angiotensin-receptor blockers and thiazides have been shown to reduce recurrent stroke and other vascular events
- **Reduce cholesterol** - recommended for most cases
 - Statin unless contraindicated
- **Warfarin** - only for patients in AF or if other cardiac source of emboli identified.
 - Must have brain CT first to exclude haemorrhagic CVA
- **Minimise alcohol intake**
- **Advise re. driving**
 - Private licence:
 - single TIA, no driving for 1 month
 - multiple TIAs, no driving for 3 months
 - Commercial licence:
 - single TIA - no driving for 6 months and then only when cause has been identified and treated by specialist;
 - multiple TIAs - no driving indefinitely unless specialist over-rules.
- **Provide patient information about stroke**
 - Give contact details for Stroke Foundation (0800 STROKE) or www.stroke.org.nz