1. You CANNOT diagnose TIA prospectively. ALL objective and subjective neurological symptoms and signs must have resolved before you can safely make the diagnosis. Otherwise treat as a STROKE.

2. TIA is frequently misdiagnosed. If you are unsure, discuss with a senior colleague or stroke specialist.

3. It is never an error to admit a TIA if you are unsure of diagnosis or future risk.

**Suggestive Clinical Features of TIA:**
- Acute/ sudden onset / maximum at onset
- Lasting less than 24 hours (but usually less than 1 hour); spontaneous resolution
- Anterior circulation signs typically unilateral i.e. weakness, sensory loss, hemianopia
- Focal features
- Negative symptoms

**Initial investigations**
- CT or MRI of brain within 24 hours, if TIA suspected ( MRI preferable)
- Imaging of carotid arteries as soon as possible, but no later than 72 hours, if TIA suspected
- 12 lead ECG, lipids and glucose, FBC, U+E, coagulation profile
- Consider continuous cardiac monitor x 24 hours (in patient or out patient)

**Admission Criteria**

**Discharge Criteria**

**TIA Mimics (see p2)**
- Migraine
- Syncope (hypotension)
- Seizures
- Psychological (functional)
- Sugar (hypo or hyper)
- Sepsis
- Space occupying lesions

**Vascular Risk Factors**
- Previous TIA or Stroke
- Atrial fibrillation
- Known Carotid artery disease
- Hypertension
- Type 2 Diabetes Mellitus
- Hyperlipidaemia
- Age > 65
- Smoking
- Coronary artery and peripheral vascular disease

**ABCD2 Score**
- A — age: 60 years of age or older, 1 point.
- B — blood pressure at presentation: 140/90 mmHg or greater, 1 point.
- C — clinical features: unilateral weakness, 2 points; speech disturbance without weakness, 1 point.
- D — duration of symptoms: 60 minutes or longer (2 points), 10-59 min (1 point); history of diabetes (1 point)

**ABC2D is a prognostic and not a diagnostic tool**

**Managing someone with TIA**
- Start Aspirin (if symptoms resolved (150 – 300mg one-time loading unless contraindicated), statin medication & treat hypertension (seek advice if carotid stenosis) prior to discharge from hospital.
- Review by Consultant Geriatrician/Neurologist, if available, is considered best practice.
- Advise patient not to drive x 1/12

- Other cause identified (not requiring admission)
- ABCD2 score <3 and access to Ambulatory TIA service within 1 week

**Consider hospital admission for the following patient groups:**
- Recurrent TIA’s or recent neck injury
- Symptomatic carotid stenosis >50%
- Atrial Fibrillation on or off anticoagulation
- ABCD > 3 or Focal motor/speech symptoms & long symptom duration (>1 hour)
- Unavailability of rapid access to brain and carotid imaging
- Young patient with likely TIA due to non-atherosclerotic disease
- Poor social supports to alert emergency services in event of recurrent event

Pathways cannot cover all clinical scenarios. Ultimate responsibility for the interpretation and application of these guidelines, the use of current information and a patient’s overall care and wellbeing resides with the treating clinician.

Date: August 2017  Review Date: August 2019
Transient Neurological Events

Most episodes of transient neurology are not TIAS and taking a careful history and a neurological examination is important before arriving at a diagnosis. The treatment of different TNEs varies. Treating some TNEs as TIAS in error may be harmful.

### Transient Ischaemic Attacks (TIAs)

- Sudden onset and rarely progressive symptoms.
- Typically focal, unilateral symptoms with consciousness preserved.
- ‘Negative symptoms’ are characteristic e.g. loss of vision in one eye, hemiparesis aphasia, hemisensory loss, hemianopia.
- Typically resolve within a few minutes.
- Headache, loss of consciousness and positive symptoms (e.g. unusual movements, visual phenomena) are relatively unusual.
- Where ANY neurology is still present diagnosis is a STROKE.

### Migraine

- Atypical Migraine / Migraine with aura frequently presents as ‘TIAs.’
- Many people with migraine have never had it diagnosed. Take a careful headache history.
- May not have headache at this presentation, can develop later or never (Acephalgic Migraine).
- Headache typically less common / severe in older people.
- Characteristically progressive / developing symptoms (e.g. numbness moving from face to arm)
- Positive symptoms e.g. fortification spectra, scintillating scotomas, ‘odd ‘sensations.
- Sudden severe (Thunderclap) headache or ‘new type’ headache with neurological symptoms is an indication for admission

### Focal Seizure

- May have history of epilepsy, stroke or head injury, recent excess alcohol, new psychotropic medication
- Frequently progressive and/or positive symptoms, e.g. twitching, hallucination, etc.
- Recurrent and stereotypical episodes.
- May be associated with reduced level of consciousness, appear vacant or confused.

### Syncope / Pre syncope

- Lack focal signs but might have vague neurology (e.g. mild dysarthria, ‘disorientation’).
- Systemic symptoms e.g. pallor, sweating, nausea (without vertigo).
- May have gradual vision loss in both eyes (‘greying out’, ‘receding down tunnel’).
- Associated loss of / reduction in level of consciousness.
- Often situational: Standing, warm environment, fasting or after a large meal.
- History of fainting (including in childhood) or taking antihypertensive medication.

### Other causes

- ‘Dizziness’: Less than 5% of people attending hospitals with dizziness have a stroke or TIA. Require detailed history and examination to assess. Consider using HINTS assessment to differentiate Peripheral from Cerebellar cause of vertigo.
- **Functional weakness**: Variable, inconsistent neurology. ?History of anxiety/ psychiatric illness
- ‘Amyloid Spells’: Small surface SAHs causing transient neurology. Like ‘migraine auras’ in older people.
- Sensory symptoms, transient confusion, speech or visual disturbances common.
- **Transient Global Amnesia**: Lasting 1-8 hours, Global amnesia but biographical facts preserved, new repetitive questioning, often after activity involving valsalva.
- Bells palsy, Hypoglycaemia, Delerium, Sepsis, MS, Drug overdose, SOL
- Patients with new, focal neurological events need urgent brain imaging no matter the diagnosis.
References:

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- A simple score (ABCD) to identify individuals at high early risk of stroke after transient ischaemic attack. Rothwell, PM et al. The Lancet, Volume 366 , Issue 9479 , 29 – 36
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