

ransient Ischaemic Attack (TIA) and Stroke

Transient ischaemic attacks (TIAs) are uncommon presentations in general practice and can be difficult to diagnose. However, it is essential that registrars are competent in the assessment of symptoms suggestive of a TIA, as early intervention is critical to reduce the risk of stroke. Stroke affects 40,000 Australians each year, 30 per cent of whom are under 60 years of age. Evidence suggests adherence to guidelines for management of TIA is poor. As a high-risk presentation, supervisors need to ensure that registrars are competent in assessment of patients presenting with a possible TIA or stroke.

TEACHING AND LEARNING AREAS



- Clinical features of TIAs, including typical and atypical presentations (posterior circulation)
- Differential diagnoses and TIA mimics
- How to undertake a neurological assessment of the patient with possible TIA
- Immediate investigations for TIA (blood tests, brain and carotid imaging, ECG)
- Immediate management of TIA
- Mechanism for referral e.g. rapid access TIA clinic, ED etc
- Screening for stroke risk

PRE-SESSION ACTIVITIES



Read the 2012 AAFP article TIA - diagnosis and evaluation

TEACHING TIPS **AND TRAPS**



- Ensure practice staff use the FAST mnemonic to triage patients with possible TIA/CVA
- ~40% of patients with a diagnosis of TIA have evidence of infarction on MRI
- The average duration of TIA is approximately 10 minutes and most resolve within one hour
- TIA is a medical emergency and precedes stroke in about 20% cases
- Taking a very careful history is critical in the assessment of possible TIA
- Regard all possible TIAs as high risk use of the ABCD2 score in isolation to determine the urgency of investigation may delay recognition of AF and carotid stenosis and should be avoided
- Early management strategies for TIA can reduce the relative risk of stroke by 80 per cent
- Dual antiplatelet therapy should be given to patients with TIA or ischaemic stroke for 3 weeks minimum
- Treat lipids to target (LDL<1.8mmol/L)
- Consider 'clopidogrel resistance' in treated patients with recurrent events

RESOURCES



- Read
- Stroke Foundation Clinical Guidelines
- 2022 MJA article Living clinical guidelines for stroke: updates, challenges and opportunities.
- 2022 Aust Preacriber article Drugs in secondary stroke prevention

Watch

Neurological examination video

FOLLOW UP/ **EXTENSION ACTIVITIES**

Ask the registrar to complete the role play



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Role Play

INSTRUCTIONS FOR SUPERVISOR

You are Fred Rathmines, a 69-year-old retired university lecturer, who has come to the doctor because last night you noticed that your speech was slurred.

You have been attending the practice for about seven years since moving to the area but have not met the registrar before.

"I had some slurred speech last night and thought I should get my blood pressure checked"

Story

- The episode of slurred speech came on suddenly while having dinner. You felt like you could not speak properly but had no problems thinking of what words to use. Your wife wanted to call the ambulance but you decided to wait a while and the slurred speech settled completely after about 25 minutes
- There were no other features at all i.e. weakness, visual disturbance, CVS symptoms etc.
- Nothing like this has ever happened before
- You started tablets for 'mild blood pressure' about two weeks before and despite not having any side effects so far, you wonder whether it was related to these
- You currently feel completely well, but thought that you should have a check of your BP
- You are not overly concerned about the event
- You have no significant medical problems apart from blood pressure and gout
- You had back surgery 15 years previously
- You only take the new BP medicine (ramipril) and Panadol Osteo occasionally for your back
- You don't smoke or drink
- You are married with grown up children
- The registrar is expected to elicit the important aspects of history, and institute an immediate management plan. When asked about examination, you can state that BP is 138/82, HR 72, BMI 28, BSL 4.1, ECG normal SR, and the remainder of the examination is completely normal.

Assess				
•	Communication skills			
•	History taking – comprehensive			
•	Problem definition – TIA likely, explanation of problem			
•	Management – urgent brain imaging, carotid dopplers, medication, urgent referral			
•	Follow-up and safety netting			



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Role Play

INSTRUCTIONS TO REGISTRAR

Your next patient is Fred Rathmines, a 69-year-old retired university lecturer. He has been attending the practice for about seven years since moving to the area but you have not met him before.

- Take a focused history
- Request the results of the physical examination
- Outline your diagnostic impressions and discuss management options.

Health summary

- PMHx
- 2002: L5 discectomy
- Hypertension
- Gout

Medications

- Ramipril 5 mg daily
- Panadol Osteo

Social History

- Non-smoker
- Very occasional alcohol
- Married, two grown up children
- Retired lecturer in physics
- Nil significant FHx
- Nil allergies

Relevant Past Information

- Attended two weeks previously for review of chronic mild hypertension (BP ~ 150/90) and commenced on ramipril 5mg daily
- Recent investigation show BSL 5.0, lipids (TC 5.1, TG 2.1, LDL, 2.7, HDL, 1.0)