

## **Prognosis**

### **Short Term Outcomes after TIA**

#### **Objectives:**

To assess the validity and applicability of an article attempting to predict the prognosis associated with a given condition.

These include:

- Acquire the skills necessary to appraise the methodology of a case control or cohort study examining an issue of prognosis.
- Determine how information from a prognosis study can be incorporated into clinical reasoning and hence decision-making.

#### **Assignment:**

1. Read the attached scenario.
2. Read the attached guidelines for reading articles concerning prognosis.
3. Critically appraise the attached article using the accompanying worksheet.
4. Describe how you would address the patient's concerns and management options taking into account your review of the article.

#### **Clinical Scenario:**

You are working a busy evening shift in the Emergency Department (ED) of a university affiliated tertiary care hospital. You see a 64 year old right-handed male patient who presents with a history of a 5 minute episode of right sided numbness affecting his upper and lower extremity, not associated with weakness or dysarthria. The episode occurred while he was driving and caused him to slow down without pulling over. There was no associated headache, diplopia or dysarthria. He has a history of hypertension, which he states has been 'fairly well controlled on diet' but no history of previous episodes similar to this one or of stroke. Physical examination reveals a healthy looking male in no distress, with BP 170/95 and otherwise normal vitals. He has no carotid bruits or cardiac murmurs on cardiovascular exam and the neurological exam is normal. Laboratory tests, ECG and head CT are normal. Your plan is to discharge the patient on daily ASA and a diuretic and to arrange for follow-up with the neurologist on call within the next two weeks. However, his wife is apprehensive. Her elderly father presented in a similar fashion and 6 hours after being sent home from the ED developed a hemiplegic stroke from which he did not recover. You try to reassure her but she becomes increasingly adamant about him being admitted. You are not completely certain about her husband's prognosis and decide to admit the patient, but subsequently decide to explore the issue. A narrow search of PubMed Clinical Queries using 'transient ischemic attack early' under the 'Prognosis' category yields several recent relevant citations among the first 197 citations. You select an additional article to review. Searching PubMed Clinical Queries under Systematic Reviews, still using the same search terms and the Prognosis question type yields 47 recent meta-analyses. For the purpose of this exercise we are concentrating on 2 of the individual studies included in that review.

**Citations:**

1. Guyatt G, Rennie D, Meade MO, Cook DJ Editors, The Users' Guides to the Medical Literature, A Manual for Evidence-Based Clinical Practice. 3rd Edition. McGraw-Hill 2015, Chapter 20.
2. Johnston SC, Gress DR, Browner WS et al. Short-term prognosis after emergency department diagnosis of TIA. *JAMA* 2000;284(22): 2901-2906. (Article 1)
3. Coull AJ, Lovett JK. et al. Population based study of early risk of stroke after transient ischemic attack or minor stroke: Implications for public education and organisation of services. *BMJ* 2004;328:326-328. (Article 2)
4. Wu CM, McLaughlin K, Lorenzetti DL et al. Early risk of stroke after transient ischemic attack: a systematic review and meta-analysis. *Arch Intern Med* 2007;167:2417-2422. (not used for this exercise)
5. Giles MF, Rothwell PM. Risk of stroke early after transient ischaemic attack: a systematic review and meta-analysis. *Lancet Neurology* 2007;6:1063-1072. (not used for this exercise)
6. Worksheet for evaluating an article on prognosis.