Reducing diagnostic error

Diagnostic error is '*the failure to establish an accurate and timely explanation of the patient's health problem, or to communicate that explanation to the patient.*' Diagnostic error is common in general practice (estimated rate of 10-15%) and has the potential for significant patient harm. Causes of error are multifactorial, and include doctor, patient, presentation and system factors. It is known that many registrars find the uncertainty of general practice highly challenging and in particular, fear missing an important diagnosis. The GP supervisor thus has a critical role to assess their registrar's diagnostic skills and discuss practical strategies to help reduce the risk of diagnostic error.

TEACHING AND LEARNING AREAS	
	• Common and serious conditions prone to diagnostic error
	• Causes of diagnostic error – cognitive- and systems-based
	• Common cognitive biases
	• Heuristics and their role in diagnosis
	• Strategies to minimise diagnostic error e.g. comprehensive history and examination, development of a differential, diagnostic pause, Murtagh's paradigm, checklists, guidelines, gut feelings
	• Practice-based systems – clinical records, clinical handover, reminder and recall systems

PRE- SESSION ACTIVITIES	
	• Read the MJA Insight article – Diagnostic errors on the rise
	• Read the brief article on Diagnostic Error by the Society to Improve Diagnosis in Medicine

TEACHING TIPS AND TRAPS	
	• Diagnostic error is the cause of approximately half of the medical negligence claims involving Australian GPs
	• Diagnostic errors usually have multiple causes
	• Conditions especially prone to diagnostic error include malignancies, AMI, meningitis, dementia, and HIV, but otherwise are multiple and diverse
	• Patient/presentation factors contributing to diagnostic error include atypical and non-specific presentations, low prevalence conditions, and the presence of comorbidity
	• Discuss 'illness scripts' using typical and atypical case presentations
	• Challenge the registrar to always consider one alternate diagnosis
	• Encourage the registrar to reduce reliance on memory by routinely using checklists, clinical references and clinical decision support tools
	• Support the registrar to reflect on potential doctor factors underpinning diagnostic error – emotions, external demands, internal stresses
	• Share your own stories of near-misses and diagnostic error, and the factors that lead to error

RESOURCES	Read	• Clinical Reasoning Toolkit
		• GPSA Teaching Clinical Reasoning Guide
	Listen	• IM Reasoning Podcast – Biases
		• IM Reasoning Podcast – Drivers of Diagnostic Error
	Watch	• Reducing Diagnostic Error in Medicine

FOLLOW UP & EXTENSION ACTIVITIES	
	• Registrar to undertake the practice viva case and discuss afterwards with supervisor

Practice Viva Case

INSTRUCTIONS TO CANDIDATE

Your next patient is Daniel Bentham, a 57-year-old man who usually attends another GP in the practice. He complains of a large skin lesion on his right shoulder which has been present for about 6 months and getting bigger. About 3 months ago he said that he had a punch biopsy performed by your colleague but hadn't heard anything afterwards so presumed it was OK. You review the notes and see that the punch biopsy histology showed a high grade squamous cell carcinoma. You cannot see that this result was ever given to the patient. Your colleague is overseas on holidays.
A copy of the patient record summary sheet is attached.

- This is an 8-minute station
- Read the scenario
- Discuss your management of this situation with your supervisor, who will ask you a series of questions
- This is not a role-playing station and there will be no patient present

Health summary
- Married, 4 children
- Refrigerator mechanic
- Past Medical History:
  - Hypertension
  - GORD
  - Barrett's Oesophagus
  - Medications:
    - Ibersartan 150mg daily
    - Nexium 40mg daily
  - Smoking - nil
  - Alcohol - 4 beers/night

Questions

1. What are the main issues arising from this scenario?

2. How would you manage this situation?

3. What systems should be in place in a general practice to ensure that results are always given to patients and not missed?

4. This is a situation of delayed diagnosis due to a failure of recall. What are other causes of delayed diagnosis or diagnostic error in general practice?

Prompts

- *What would you actually say to the patient?*

- *How would you manage his dissatisfaction?*

- *What are the clinical implications of this delay?*

- *How would you manage the other GP?*

- *How should results be managed if a doctor is away?*

- *How does the recall system work in your practice?*

- *What do you think might have happened in this situation?*