

## **Neck pain**

Neck pain due to cervical spondylosis is a common presentation to Australian GPs (0.8 per 100 encounters) and can lead to significant morbidity. Like low back pain, the cause of neck pain is usually non-specific, and sinister conditions are rare. However, serious pathology does occur, and clinicians need to be able to accurately identify and act on red flags. Cervical radiculopathy is due to compression or irritation of cervical nerve roots, and can lead to significant neurological deficits. GP registrars need to develop an effective and systematic approach to the assessment and management of neck pain.

### TEACHING AND LEARNING AREAS



- Common and serious causes of neck pain (including non-cervical spine causes)
- Classification of neck pain acute, sub-acute, chronic
- Red flags for potentially serious disease
- Yellow flags (psychosocial factors) predictive of chronicity
- Cervical spine and upper limb neurological examination techniques (including upper limb dermatomes)
- Indications for investigation, including MBS criteria for MRI
- General management of acute and chronic neck pain
- Indications for referral and appropriate pathways

### PRE- SESSION ACTIVITIES

Read the 2013 AFP article <u>An approach to neck pain for the family physician</u>

### TEACHING TIPS AND TRAPS



- Neck pain is frequently recurrent
- Avoid imaging for acute neck pain in the absence of red flags
- Radiological changes are poorly correlated with symptoms
- In patients with a history of trauma, radiography is indicated according the <u>Canadian C-Spine Rule</u> (<u>Choosing Wisely Australia recommendation</u>)
- MRI is indicated in patients with cervical radiculopathy AND red flags, persistent or progressive neurologic findings, or failure to improve after 4-6 weeks of conservative treatment
- About 20% of cervical nerve root compression is related to disc herniation, the remainder cervical spondylosis
- The most common nerve root affected is C7, followed by C6
- Resumption of normal activities is more effective than a collar and rest
- Most patients with cervical radiculopathy will improve regardless of treatment modality
- Ask the registrar to perform a neck examination on yourself

### **RESOURCES**



- 2016 AAFP article Non-operative management
- 2018 AJGP article Neck pain: What if it is not musculoskeletal?
- Nonoperative Management of Cervical Radiculopathy

### Watch

Read

• Cervical spine examination

### Listen

• Assessment and management of neck pain podcast

### FOLLOW UP/ EXTENSION ACTIVITIES

Registrar to undertake clinical reasoning challenge and discuss with supervisor



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## **Clinical Reasoning Challenge**

Gary is a 64-year-old truck driver who presents with a 2 week history of neck pain. He describes pain in the posterior neck, left arm and hand, with tingling and numbness in the fingers of the left hand.

QUESTION 1.	What are the MOST IMPORTANT key features of history in helping to identify potentially serious causes of this patient's neck pain? List up to SIX.
	1
	2
	3
	4
	6
	6
QUESTION 2.	All these features are absent. What is the MOST LIKELY diagnosis? Write in note form, your single diagnosis.
QUESTION 3.	What investigations (if any) would you order at this stage? List, in note form only, the MOST IMPORTANT two
	investigations you would order.
	1
	2
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QUESTION 4.	What are the next steps in Gary's initial management? Select up to FOUR initial management steps.
	1
	2
	3
	4



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### **ANSWERS**

### **QUESTION 1**

What are the MOST IMPORTANT key features of history in helping to identify potentially serious causes of this patient's neck pain? List up to SIX.

- History of trauma
- Fever/sweats
- Night pain
- History of immunosuppression
- Past history of malignancy
- Weight loss
- Features of non-MSk disease e.g. SOB

#### QUESTION 2

All these features are absent. What is the MOST LIKELY diagnosis? Write in note form, your single diagnosis.

Cervical radiculopathy secondary to cervical spondylosis/disc herniation

### QUESTION 3

What investigations (if any) would you order at this stage? List, in note form only, the MOST IMPORTANT two investigations you would order.

- No investigations are required at this point
- BMJ Best Practice states that MRI is indicated only if neck pain persists for 4 to 6 weeks, radicular pain does not subside with treatment, or more severe deficit suggestive of myelopathy is present.

### QUESTION 4

What are the next steps in Gary's initial management? Select up to FOUR initial management steps.

- Simple analgesia
- NSAIDs
- Physio and gentle neck exercises
- Review