

Neck and Upper Back Pain & Disability Module

- *the second module of the Certificate in Musculoskeletal Medicine*

Aims

This module aims to outline an efficient and careful approach to the assessment and management of patients with cervical and thoracic spinal pain seen in a General Practice, Pain Medicine or Rehabilitation setting. It aims to teach the clinical features that offer the best route to a specific diagnosis and will discuss current management options. It aims to cover the key elements of history taking and examination by providing registrants with the opportunity to practice examination tests on each other under supervision. Tests will include movement assessment, palpation of key surface anatomy landmarks in the spine and special tests to make an accurate diagnosis. There will be also be discussion of the benefits and limitations of spinal investigations and general and condition-specific management strategies for use in general practice. Small group case discussions and personal feedback on examination techniques will be used to enhance learning.

Learning Outcomes

1. Develop a systems based approach aimed at avoiding missed clinical features in the assessment of neck and upper back complaints that may lead to misdiagnosis and inappropriate/unnecessary investigations and/or management
2. Utilise evidence-informed history taking methods for patients with neck and upper back complaints
3. Conduct a reliable and valid physical examination of patients with neck and upper back complaints
4. Utilise investigations for neck and upper back pain judiciously and interpret the results in light of existing evidence about them.
5. Outline clinical reasoning skills utilised in the diagnosis of neck and upper back complaints
6. Effectively and appropriately manage patients with neck and upper back complaints, including the provision of evidence based advice

Detailed Schedule for Workshop on 11 November, 2017

| TOPIC | ELEMENTS | LEARNING METHOD | TIME ALLOCATION |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------|
| Introduction | <ul style="list-style-type: none"> • Housekeeping • Outline of LOs and schedule for the day • Emphasise requirement to examine each other | Lecture | 10 minutes |
| Basic knowledge and principles | <ul style="list-style-type: none"> • Diagnostic frameworks <ul style="list-style-type: none"> ○ Dysfunction ○ Pathoanatomical • Dwyers and Bogduk diagrams • Pain referral patterns <ul style="list-style-type: none"> ○ dermatomal/myotomal/peripheral nerve /myofascial ○ shoulder/head/upper limb/chest/abdomen • Mechanisms and pathology of whiplash • Non-musculoskeletal symptoms associated with spinal dysfunction | Interactive discussion of prereading | 30 minutes |
| History | <ul style="list-style-type: none"> • Introduction of neck and upper back pain cases • Pain diagram • Red flags • Yellow flags • Best questions for mechanical symptoms • Best questions for neurological symptoms • Present and past treatments and responses to them • Past investigations/blocks • Occupation/hobbies/sports • Psychosocial assessment – questions and questionnaires • Assessment of disability/loss of function - questions and questionnaires | Interactive discussion of prereading Case discussions | 45 minutes |
| Morning tea | | | 15 minutes |

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|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Examination | <ul style="list-style-type: none"> • Inspection • Gross range of movements +/- overpressure • Provocative tests - quadrant test, Spurling's test, brachial plexus tension test • Neurological – power/reflexes/sensation • Palpation- landmarks/muscle/trigger points/skin/stiffness/tenderness • Debrief on positive findings after completion of examinations • Explain examination findings of neck and upper back pain cases but introduce alternative examination findings to illustrate differences between somatic referred pain and radicular pain etc | <p>Limited demonstration followed by practice of examination techniques on each other with review by tutors. Discussion of signs found on participants.</p> <p>Case discussions</p> | 90 minutes |
| Investigation | <ul style="list-style-type: none"> • Guiding principles <ul style="list-style-type: none"> ○ Benefits vs risks ○ pretest probabilities ○ tailoring investigations to specific presentations ○ Interpretation of results in context • Xray vs CT vs MRI vs other – WA guidelines • Blood tests • Investigation of whiplash • Workcover and medicolegal aspects • Use of injections as an investigation after briefing patient about them • Explain investigation findings of neck and upper back pain cases but introduce illustrative alternatives | <p>Interactive discussion of prereading</p> <p>Case discussions</p> | <p>10 minutes</p> <p>30 minutes</p> <p>15 minutes</p> |
| Lunch | | | 30 minutes |

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|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Clinical reasoning and diagnosis | <ul style="list-style-type: none"> Flow diagrams illustrating key features of common and/or important syndromes Trials of treatment informing diagnostic probabilities | <p>Interactive discussion of prereading</p> <p>Case discussions</p> | 30 minutes |
| Management | <ul style="list-style-type: none"> Education Manual techniques - teach PA mobses and indirect rotational mobilization, post-isometric relaxation with stretching. Include limitations. Exercises 5-6 targeted exercises. What not to do Medication Ttrigger point injections and greater occipital nerve block – indications and techniques Others | <p>Interactive discussion of prereading Demonstration and practice of manual techniques and exercises on each other</p> <p>Demonstration of injection techniques</p> <p>Case discussions</p> | <p>10 minutes</p> <p>30 minutes</p> <p>20 minutes</p> <p>20 minutes</p> |
| Afternoon tea | | | 15 minutes |
| Followup and monitoring | <ul style="list-style-type: none"> Illustrations of simple tools that can be used efficiently in general practice Discussion of timing of followup | Lecture | 10 minutes |
| Review of the workshop and next steps | <ul style="list-style-type: none"> Key learning points in each section Outline of post workshop activities and ALM and certificate requirements Future modules and learning opportunities Completion of evaluation forms | Lecture and evaluation form completion | 20 minutes |
| Assessment of competency | <ul style="list-style-type: none"> Examination skills assessed on the day. Need to participate to pass. Offer supplementary teaching at end of day. 15 MCQs on theoretical material including prereading | <p>During physical examination segment</p> <p>Test</p> | 20 minutes |

Proposed timeframe – 8.30 am to 5 pm (8 ½ hours) including time for questions and an hour for mealbreaks

Prereading will include resources on

- Basic definitions including diagnostic framework
- Pathoanatomical causes
- Whiplash associated disorder – pathology and guidelines
- Prognosis for neck and upper back pain
- cervical and thoracic spinal referred pain syndromes
- History taking
- Physical examination and surface anatomy videos
- Radiology guidelines
- Manual therapy
- Injection techniques
- Use of medications
- Pain and disability outcome measures for use in practice