



**Australian Association of Musculoskeletal Medicine**

**CERTIFICATE IN MUSCULOSKELETAL MEDICINE**

**MODULE 1**

**ASSESSMENT AND MANAGEMENT OF LOW BACK PAIN**

### **Aims**

- to outline an efficient and careful approach to the assessment and management of patients with low back pain seen in a General Practice, Pain Medicine or Rehabilitation setting
- to teach the clinical features that offer the best route to a specific diagnosis, highlighting key elements of history taking, examination, investigation and current management options through case based discussions and supervised practice of hands-on skills
- to teach movement assessment, palpation of key surface anatomy landmarks in the spine and special tests to make an accurate diagnosis
- to discuss the benefits and limitations of spinal investigations
- to demonstrate and practice general and condition-specific management strategies for use in general practice
- to use small group case discussions and personal feedback on the approach to history, examination, investigation and management techniques to enhance learning

### **Learning Outcomes**

1. Implement a systems based approach to assessment of low back complaints, minimise misdiagnosis and unnecessary investigations and improve management
2. Apply evidence-informed history taking methods for patients with low back complaints
3. Apply reliable and valid physical examination tests in patients with low back complaints
4. Defend the choice of investigations for low back pain and interpret the results in light of existing evidence about them.
5. Explain clinical reasoning skills utilised in the diagnosis of low back complaints
6. Implement effective and appropriate management strategies in patients with low back complaints, including the provision of evidence based advice

**Detailed Workshop Schedule –14 November 2020 (Brisbane)**

TOPIC	ELEMENTS	LEARNING METHOD	TIME ALLOCATION
1. Introduction	<ul style="list-style-type: none"> <li>• Housekeeping, including allocation to small groups for remainder of workshop</li> <li>• Outline of learning objectives and schedule for the day</li> <li>• Emphasise requirement to examine each other</li> </ul>	Presentation by convenor	8.30 – 8.50 am (20 minutes)
2. History	<p>Targeted history for:</p> <ul style="list-style-type: none"> <li>• Low back pain</li> <li>• Low back + lower limb pain</li> <li>• Low back + lower limb pain + neurological symptoms</li> <li>• Red flags</li> <li>• Yellow flags/psychosocial assessment – questions and questionnaires</li> <li>• Assessment of disability/loss of function - questions and questionnaires</li> <li>• Present and past treatments and responses to them</li> <li>• Past investigations/blocks</li> <li>• Occupation/hobbies/sports</li> </ul>	Interactive discussion of cases and pre-reading	8.50 – 10.00 am (70 minutes)
Morning tea			10.00 - 10.15 am (15 minutes)
3. Examination	<ul style="list-style-type: none"> <li>• Inspection</li> <li>• Gross range of movements +/- overpressure</li> <li>• Provocative tests (eg quadrant tests/SIJ stress tests)</li> <li>• Slump test/femoral nerve stretch test/straight leg raise test</li> <li>• Neurological – power/reflexes/sensation</li> <li>• Palpation- tissue texture change/spinous processes/paraspinal tissues/SIJs/muscle/trigger points</li> <li>• Discussion of clusters of signs seen with               <ul style="list-style-type: none"> <li>• low back pain</li> <li>• low back + lower limb pain</li> <li>• low back + lower limb pain + neurological symptoms</li> <li>• red flags</li> <li>• yellow flags</li> </ul> </li> <li>• Debrief on positive findings in participants after completion of examinations</li> </ul>	Limited demonstration followed by practice of examination techniques on each other supervised by tutors. Discussion of signs found on participants.	10.15 am – 11.45 am (90 minutes)

TOPIC	ELEMENTS	LEARNING METHOD	TIME ALLOCATION
4. Investigation and clinical reasoning	<ul style="list-style-type: none"> <li>• Benefits vs risks</li> <li>• Tailoring investigations to specific presentations               <ul style="list-style-type: none"> <li>• low back pain</li> <li>• low back + lower limb pain</li> <li>• low back + lower limb pain + neurological symptoms</li> <li>• red flags</li> </ul> </li> <li>• Interpretation of results in context</li> <li>• Xray vs CT vs MRI vs other – West Australian guidelines</li> <li>• Blood tests</li> <li>• Workcover and medicolegal aspects</li> <li>• Use of injections as an investigation after briefing patient about them</li> <li>• Reaching a working diagnosis based on history, examination +/- investigations</li> </ul>	Interactive discussion of pre-reading applied to cases discussed earlier.	11.45 – 12.30 pm (45 minutes)
Lunch			12.30 – 1.00 pm (30 minutes)
5. Management	<ul style="list-style-type: none"> <li>• Education</li> <li>• Manual techniques - teach non-specific indirect rotational mobilisation</li> <li>• Exercises 3-4 targeted exercises. What not to do</li> <li>• Medication</li> <li>• Injections               <ul style="list-style-type: none"> <li>○ Types</li> <li>○ Indications</li> <li>○ Focus on muscle trigger points</li> </ul> </li> <li>• Others</li> </ul>	Interactive discussion of pre-reading. Demonstration and practice of manual techniques on each other. Trial of exercises. Demonstration and practice of injections using capped needles.	1.00 - 3.00 pm and 3.15 - 4.00 pm (165 minutes)
Afternoon tea			3.00 – 3.15 pm (15 minutes)

TOPIC	ELEMENTS	LEARNING METHOD	TIME ALLOCATION
6. Follow-up and monitoring	<ul style="list-style-type: none"> <li>• Illustrations of simple tools that can be used efficiently in general practice</li> <li>• Discussion of timing of follow-up</li> </ul>	Interactive discussion.	4.00 – 4.10 pm (10 minutes)
7. Case discussions	<ul style="list-style-type: none"> <li>• Cases provided by participants and tutors</li> <li>• Case details revealed progressively with questions to encourage participants to apply their knowledge and skills about low back pain</li> </ul>	Interactive discussion of cases.	4.10 – 4.40 pm (30 minutes)
8. Review of the workshop and next steps	<ul style="list-style-type: none"> <li>• Key learning points in each section</li> <li>• Outline of post-workshop activities and ALM and certificate requirements</li> <li>• Future modules and learning opportunities</li> <li>• Completion of evaluation forms</li> </ul>	<p>Presentation by convenor.</p> <p>Completion of evaluation forms by participants</p>	4.40 – 5.00pm (20 minutes) including 10 minutes completion of evaluation forms