

Discover: An Introduction to the Thorax

| Date | Venue | Tutor |
|---|---------------------------------|--------|
| Fri 31 st Oct – Sun 2 nd Nov 2008 | Park House, Leatherhead, Surrey | LJ Lee |

Introduction to the course

Although estimated to be less prevalent than low back or neck pain, thoracic pain, when present, can be significant and disabling. Furthermore, the non-painful but dysfunctional thorax can greatly impact and contribute to the development of pain and dysfunction in neighbouring areas such as the cervical spine, lumbar spine, pelvis, and the shoulder girdle complex.

Whereas low back and pelvic pain have received considerable research interest, research on the thorax remains limited. However, biomechanical models have been developed and our understanding of integrated muscle and joint function for control and movement of the spine has increased. A client-centered model has evolved that considers the evidence, clinical expertise, and the interplay of multiple systems. This System-based Classification for Failed Load Transfer (“The Puzzle” - Lee & Lee 2007), will be highlighted and used extensively in this course to reveal how impairments in one or more of these systems can impact function and performance in the thorax and how that relates to integrated spinal function.

Course Description

Discover the Introductory Thorax is a 3-day evidence-based course (Sackett et al 2002) that reviews the current evidence and presents a clinical model for assessment and treatment of the thorax. This course presents a structural framework for clinical decision making which enables the therapist to decide when, where and why different treatment interventions should be applied for successful rehabilitation. Linking together a biomechanical approach, taking into consideration thoracic segmental stability, and incorporating new research on motor control and the deep muscle system in the thorax, a new integrated approach for assessing and treating the thorax has been developed.

Based on specific assessment tests, the clinician will learn how to integrate joint mobilisation techniques, myofascial release techniques, stabilisation exercises as well as functional integration exercises into a complete multimodal program which is patient specific i.e. prescriptive - and thus most effective. Novel concepts developed by LJ Lee for assessment and training of segmental thoracic control, including assessment and correction of integrated ‘ring’ function, will also be covered.

This 3-day course lays the foundation for understanding how to restore movement and control within the thorax and how this impacts the rest of the body. The 136 joints that make up the thorax play a key integrated role in how loads are transferred through the trunk while simultaneously ensuring mobility, stability & postural control, and optimal respiratory function.

Course Content / Objectives

This course will cover:

- Principles of the integrated approach and the evidence that supports it
- Anatomy & biomechanics of the thorax and how stability is achieved for effective load transfer through the thorax (with a focus on trunk rotation and rotational control)
- Clinical tests which examine:
 - position or posture of the thorax both as it relates to the rest of the spine and within the thorax
 - movement strategies & dynamic stability during key functional movements of the thorax, including the Sitting Arm Lift (SAL) for functional load transfer in the thorax
 - when the thorax is impacting lumbopelvic stability
 - joint mobility/stability (articular system analysis - specific mobility and stability tests for the spinal & costal joints), including tests for the 'ring complex'
 - intersegmental and 'inter-ring' thoracic control; function of the deep muscle system in the thorax (neural system analysis)
 - recruitment and synergistic function of the global trunk muscles; how to determine when there is 'too much' global muscle activity in specific tasks
 - breathing biomechanics and cues for optimal breathing
- Common patterns of dysfunction including those of excessive compression (stiff joints, hypertonic muscles, joint fixation) and insufficient compression (loose joints, insufficient recruitment of the local muscle system).
- Differentiation of articular from neuromyofascial causes of restricted mobility
- Development of an effective treatment program including when and how to use manual therapy, education and exercise.
- Specific mobilisation techniques for the zygapophyseal and costovertebral joints
- How to apply "Release with Awareness" (Lee & Lee) to the thorax and scapula and integrate with breath work
- Training intersegmental and 'inter-ring' thoracic control; practice cues to recruit the segmental thoracic stabilisers to train the 'thoracic float'
- The protocol for an evidence-based stabilisation exercise program including the role of prolotherapy and taping in restoring movement control
- How to cue and facilitate 'neutral' thorax posture
- Cues and techniques to facilitate optimal thoracic biomechanics and motor control in tasks that require thoracopelvic rotational control (key for most functional activities and sport)
- Taping techniques to correct and support specific 'ring' dysfunction in the thorax

At the conclusion of this 3-day course, the participant will have an understanding of how to design a multimodal, evidence-informed treatment program specifically for the restoration of function and performance of the thorax.

Time

9.00am Start
1.00pm LUNCH
5.00pm CLOSE

Registration on the first day will be at 8.45am.