

Title: The Sports Thorax - Connect the Whole Body and Optimize Performance with Connect Therapy and the Thoracic Ring Approach

Tutor: Dr Linda- Joy (LJ) Lee

Location: London

Date: October 28-31st, 2015

Cost: £857

This course has been on my to-do list for a number of years. Having read some of Dr LJ Lee's work, I was intrigued by the Thoracic Ring Concept. Having a specialist interest in the upper limb, I was particularly keen to explore the relationship between the thorax and shoulder dysfunction. I felt that despite the thoracic spine being the largest region of the vertebral column, it was the area of the spine that was relatively overlooked in both my under-graduate and post-graduate studies.

Among numerous accolades as a clinician and researcher, Dr LJ Lee is an honorary senior fellow at the University of Melbourne, an associate editor for the British Journal of Sports Medicine and a specialised consultant for Rowing Australia. Her experience in treating pelvic girdle pain, treating athletes with movement dysfunction as well as her own personal experiences allowed her to explore the thorax for 10 years before undertaking a PhD in this area. This course was held over 4 days and was delivered by Dr LJ Lee with support from her assistants in the practical sessions.

Day 1 was an introduction to kinematics of the thorax spine. Dr LJ Lee delivered an argument for the need of a broader framework to assess and treat the thorax. She highlighted the importance of assessing movement of the entire 'thoracic ring' rather than the thoracic spine in isolation of the ribs and rib cage. By way of example of the Thoracic Ring Concept, the fifth thoracic ring comprises the right and left ribs, their anterior attachments to the sternum, the T4-5 thoracic vertebra and the T4-5 intervertebral discs. Each ring contains approximately 13 articulations and there are 136 joints of the thorax in total. Dr LJ Lee put forward the case to shift the paradigm of thought from the thorax being inherently stiff and stable and requires mobilisation to one where the thorax is in fact inherently flexible and requires optimal neuromuscular control to restore normal movement. Dr LJ Lee encouraged us to view the thorax as a dynamic stack of 10 rings (with the lower rings floating), similar to a shock absorbing spring rather than a stiff box. When the thoracic rings do not follow the optimal osteokinematics and arthrokinematics for a task, it can result in non-optimal loading of different segments of the body. Day 1 had already left me questioning my own current clinical practice.

Day 2 began with a theory session about thoracic osteokinematics, ring palpation and position. The morning quickly moved into skill acquisition and a practical session on ring palpation. The ring palpation skill focused on a very different skill to what I had been previously taught and involved palpation of the rings laterally on the rib cage, furthest from the axis of rotation. As the group was large and material was new to me, it was extremely useful to have the assistants on standby to help in the practical sessions. The afternoon session was primarily practical looking at identifying rings that have non-optimal neuromuscular control, correcting them manually and then reviewing the impact of the correction on the patient's meaningful task and on the rest of the body. This clinical reasoning

framework, i.e. that a whole body assessment is needed to determine how thorax dysfunction relates to the presenting problem is a key feature of the Dr LJ Lee's Thoracic Ring Approach and the Integrated Systems Model which was developed by Dr LJ Lee and Diane Lee. I found day 2 to be more complex due to the amount of new information. I was questioning my ability to palpate the thoracic rings and how to fit this new information into my clinical practice. However I was determined to remain open-minded as I knew my current practice was not sufficient in the assessment of the thorax.

The focus of day 3 was on the ability to clinically reason when to treat the thorax. The presence of a thoracic ring shift does not necessarily mean that the thorax is the driver behind the patient's symptoms. Dr LJ Lee emphasised that the location of pain or changes in local tissue does not always direct us to the primary driver. Again the emphasis was put on assessing the whole body to identify the relationship between the thorax and presenting complaint. We used The Meaningful Task Framework to help determine if the thorax is the driver behind the patient's presenting problem. If the thoracic ring correction positively changes the patient's meaningful task then there is support to say the thorax may be a primary or secondary driver in the patient's presenting condition. I found the framework somewhat similar to the use of 'improvement tests' to guide clinical practice and found it easy to identify with. We were also provided with clinical reasoning charts to help aid the clinical reasoning process.

The final day focused on treatment techniques for patients who present with a thorax driver. The treatment techniques were based on the concept of down training hypertonic muscles and retaining neuromuscular control of the thorax. Specific techniques covered included stack and breath, stack and release and thoracic ring taping. The primary aim of treatment was to maintain neutral stacking of the rings and train dissociation of ring control from shoulder girdle, head, lower limb etc. Reassuringly the exercises Dr LJ Lee used were very similar to exercises I used in my own practice except with the emphasis on maintaining segmental control and the careful introduction of each building block to work up towards more complex movements.

The main take home points for me from the course were that the thorax is not inherently stiff; there is a need to assess and treat the thorax as an integrated ring rather than just the thoracic spine and that a painful or painless thorax can be a primary driver of pain in other areas.

I found the course both exciting and challenging, in particular the ability to use the new palpation skills that I had acquired and the clinical challenge of using the Integrated Systems Model. It questioned how I treat the thorax and my ability to rule it in and out as a source of the patient's symptoms. It left me with a lot to reflect upon and the need to formulate a plan of how to introduce the thoracic ring approach into my assessment. Unfortunately this course formulates part of a bigger 15 day course called The Connect Therapy Series. I felt that I was left with questions that could only be answered in the larger module and felt this course was an intriguing appetiser to the main 15 day course. On the same note, I did leave the 4 day course with some new clinical skills, lots of reading material and a framework to begin to explore the role of the thorax. The course is expensive and does require a number of days leave to be able to attend. However, if one is looking for a more effective and efficient way

to be treating our patients then it is certainly worth exploring some of Dr LJ Lee's work. The paper below provided a good introduction into some of her work.

Lee LJ. Thoracic Ring Control: A missing link? MPA In Touch magazine, an official publication of Musculoskeletal Physiotherapy Australia, a national group of the Australian physiotherapy Association. Issue 4, 2013: 13-16.

I would like to take this opportunity to thank the MACP society for facilitating my attendance on this course and aiding my continued professional development.

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