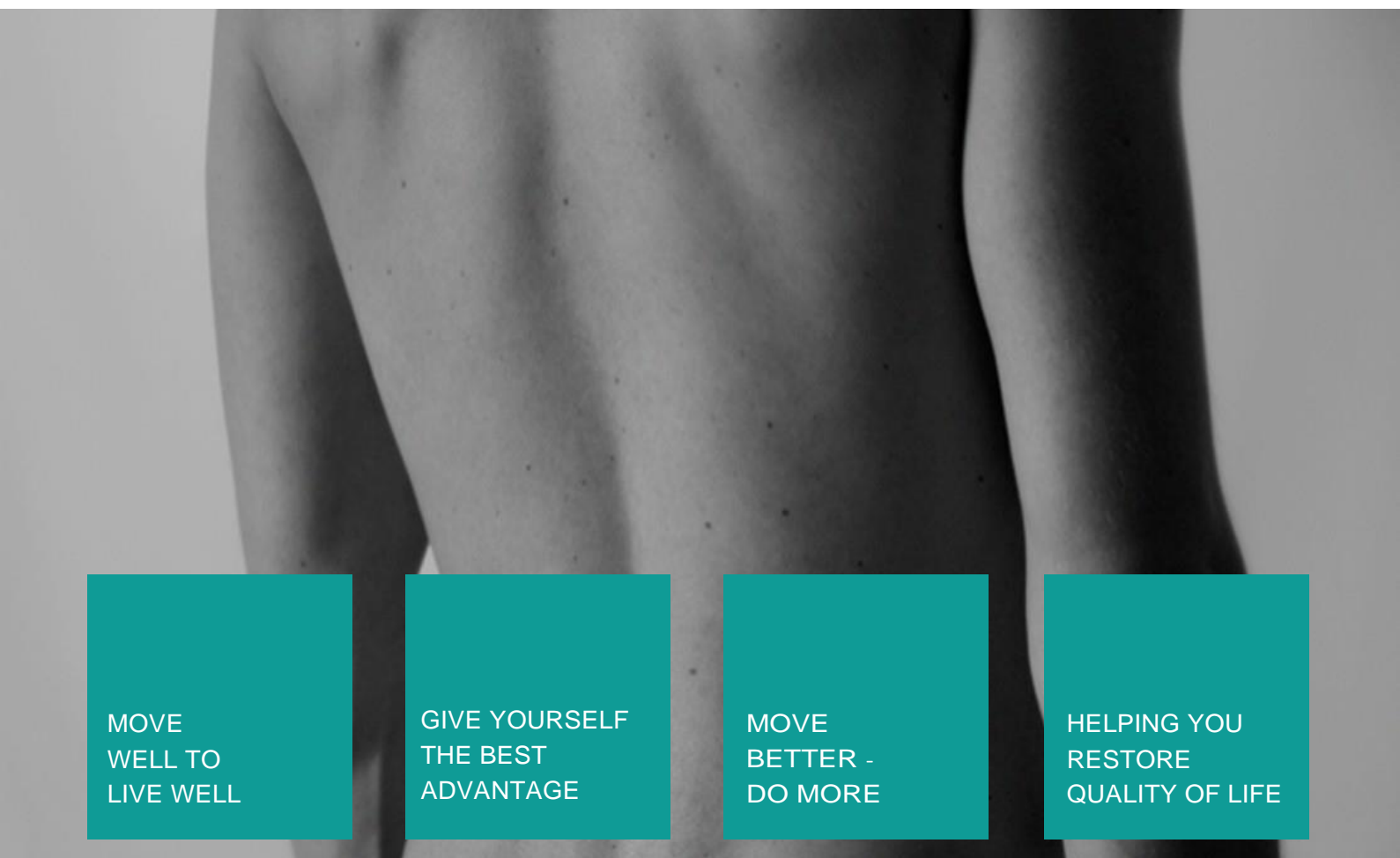


LECTURE

MOVEMENT SOLUTIONS FOR CERVICO-THORACIC- OUTLET IMPAIRMENTS



MOVE
WELL TO
LIVE WELL

GIVE YOURSELF
THE BEST
ADVANTAGE

MOVE
BETTER -
DO MORE

HELPING YOU
RESTORE
QUALITY OF LIFE

**KINETIC
CONTROL**

MOR THAN 20 YEARS OF MOVEMENT HEALTH

THE PROBLEM

Neck, shoulder, and arm pain can be complex with numerous contributing elements. Frequently clinicians faced with this challenge, assess and treat these areas both individually and seek to link presenting symptoms to underlying causal factors.

Musculoskeletal pain and movement disorders of the upper quadrant that are recurrent or persistent nearly always present with a complex combination of neck, shoulder girdle, arm, and upper chest pain. This seminar examines the interrelationships of movement impairments in these areas and details retraining strategies to better manage chronic and recurrent neck, shoulder, and arm pain.

Long standing and especially persistent musculoskeletal pain and movement disorders of the upper quadrant nearly always present with a complex combination of neck, shoulder girdle, arm, and upper chest pain. These presentations of recurrent in chronic neck, shoulder, and arm pain are essentially complex but atypical thoracic outlet impairments.

This problem typically a combination of complex concurrent impairments:

- Low cervical intervertebral segment restrictions
- Inter-scalene neuro-myofascial interface
- Thoracic intervertebral segment rotation restriction
- Ribs 1 or Rib 2 elevation
- Upper thoracic ribs (1-4) articular restriction
- Downwardly rotated 'dropped' scapula = clavicle
- Pectoralis minor neuro-myofascial interface
- Myofascial Trigger Point radicular pain
- Neuro-dynamic influences
- Superficial neuro-fascial neurogenic radicular pain

The management of this disorder needs to address restrictions to mobilise, loss of movement choices to stabilise, low and high threshold stabiliser muscle retraining, retrain appropriate phasic neck and shoulder girdle function, neurodynamic myofascial trigger point influences, and high-performance integration.



THE SOLUTION

This seminar will detail:

1. The nature and clinical presentation of this problem.
2. The use of movement assessment in functionally relevant multi-joint movement analysis of the upper quadrant.
3. Specific movement impairment tests to identify loss of movement choices to prioritise movement control retraining.
4. Identify and mobilise articular and myofascial restrictions that contribute to compromised movement control.
5. Re-establish dynamic control of the movement control impairments using low threshold direction control retraining and low and high threshold muscle specific retraining and reconditioning of shoulder girdle and neck stabiliser role muscles.
6. Restoring phasic recruitment of appropriate mobiliser role muscles for efficient reconditioning of high load and high-speed function around, shoulder girdle, and neck.
7. Identify for and treat the influence of myofascial trigger points in neuro facial pain.
8. Assess for and manage neurodynamic influences on pain and, movement impairment compensations.
9. Discuss the integration of movement reconditioning to high-performance function.
10. Discuss the importance of follow-up for maintenance of optimal movement control strategies to prevent recurrence.

LEARNING OUTCOMES

Following this seminar, the participants will be able to:

- Understand the contributing factors the influence the problem of intermittent cervico-thoracic-outlet impairments that produce persistent intermittent neck, thoracic, rib, and arm pain
- Recognise the features and presentation of many potential sources of pain in this region
- Become proficient at palpation and manual assessment of these structures to make a more detailed differential diagnosis of the structures and tissues that contribute to pain
- Perform a movement based biomechanical evaluation of the upper quadrant and analyse related impairments
- Test for and mobilise articular and myofascial restrictions that contribute to mechanical stress and movement compensation in this area
- Perform movement control tests to identify the site and direction of loss of movement choices in the cervical spine, upper ribcage, and shoulder girdle that are related to persistent upper quadrant pain
- Develop appropriate movement control retraining options to recover, low threshold (alignment and coordination) and high threshold (strength and speed) impairments identified in the movement control tests

- Assess for and treat related myofascial trigger point contributions to this problem
- Evaluate and manage potential neurodynamic influences
- Use a clinical reasoning strategy to develop priorities in management planning
- Understand the value and benefits in movement control rescreening to minimise recurrence of upper quadrant pain related to this intermittent cervico-thoracic-outlet impairment

