

Neurodynamic Solutions

Course Outlines

All courses on neurodynamics are based on Michael Shacklock's international best seller physical therapy text book, Clinical Neurodynamics, Elsevier, Oxford, 2005. They also internationally standardised and transferable to other countries.

General

Course Highlights - General

- 65:35 practical-theory
- strong hands-on and discussional elements
- many new manual techniques for the most significant neural problems seen in musculoskeletal practice
- systematic treatment progressions for radiculopathy (cervical and lumbar), shoulder, elbow and wrist, hip/piriformis, hamstrings and ankle and foot pain.

What You Learn

- understand how nerves move
- painless nerve root mobilisations
- how to exclude neurodynamic disorders
- differentiate between musculoskeletal and neurodynamic components - make a neurodynamic diagnosis
- technique progressions from low to high functional levels
- how to create, select and perform the best techniques for your patients - manual precision of neurodynamic technique
- how to detect contraindications for neurodynamic treatment

Course Objectives

Improve and develop:

- - manual skills, specifically the ability to feel abnormalities in movement related to the nervous system in the upper quarter
- - abilities in diagnosis and interpretation of neurodynamic testing and musculoskeletal relationships
- - clinician's repertoire of diagnosis and treatment of techniques safety in relation to neurodynamics
- - ability to diagnose functional disorders in neurodynamics

- - ability to select appropriate treatment for specific functional disorders in neurodynamics
- - ability to progress treatment from low to high functional levels
- - ability to detect contraindications to neurodynamic treatment and when to stop treatment for safety reasons.

NDS Upper Quarter 1 Course

Highlights

General neurodynamic principles applied to the entire body and specifically the upper quarter, including the cervical spine, shoulder/brachial plexus and other upper limb nerves at the elbow and wrist

Classifications of structures and mechanisms for diagnosis and treatment
neurodynamic sequencing - a mechanism that can be used to make neurodynamic technique more specific than in the past

How to differentiate nerve from other tissues with mechanical testing How to make diagnosis and treatment more specific than before. Concept of neurodynamics

General neurodynamic principles applied to the entire body and specifically the upper quarter, including the cervical spine, shoulder/brachial plexus, and other upper limb nerves at the elbow and wrist

Neurodynamic sequencing - a mechanism that can be used to make neurodynamic technique more specifically than in the past

how to differentiate nerve from other tissues with mechanical testing

Neurodynamic sequencing method used to select and create progressions for patients appropriate for patients with severe neural pain progressed to the athlete, performing artist and sports person

Bilateral and contralateral neurodynamic testing

Upper limb neurodynamic tests for cervical nerve root and acute dural pain
progressional system to reduce force on nerve roots and progressively load them for more advanced patients

Acute care for the cervical nerve root utilising newly validated neurodynamic mechanisms.

NDS Upper Quarter 1 Course Programme

16 hours

DAY 1 - 8:30 am - 6.00 pm

8.30-10.30

Concept of neurodynamics - theory

- convergence, sliding, tensioning, neurodynamic sequencing, linking mechanics and

10.30-11.00

Break

11.00-12.30

Nerve palpation - practical

- median nerve at wrist and elbow, motor branch median nerve - ulnar nerve at wrist and elbow

- posterior interosseous nerve at elbow

- radial sensory nerve

- brachial plexus lower cervical spinal nerves

12.30-1.30

Lunch

1.30-3.00

Standard Neurodynamic Testing: - practical

- median nerve 1 and 2, brachial plexus and nerve roots - ulnar neurodynamic test

- radial neurodynamic test

3.00-3.20 Break

3.20-6.00

Diagnosis with neurodynamic tests - theory/practical

- musculoskeletal, normal, abnormal covert and overt responses

Planning physical examination and treatment - levels/types 0, 1, 2, 3a, b, c

DAY 2 - 8:30 am - 6.00 pm

8.30-10.00

Diagnostic categories - theory

- interface - reduced closing, reduced opening - neural tension dysfunction and their causes
- mechanisms of pathophysiology

10.00-10.30

Break

10-30-11.00

Method of treatment - theory - pathophysiology

- pathomechanics
- progression system
- static openers, dynamic openers, dynamic closing techniques - neural offloaders sliders, tensioners
- systematic of application and technique schema

11.00-12.30

Treatment - practical

- neck pain and cervical radiculopathy
- opening and closing dysfunctions
- combined opening and closing dysfunctions with neural tension - multistructural

12.30-1.30

Lunch

1.30-3.00

Treatment (cont) - practical

- cervical neural tension dysfunction, contralateral level 1 nerve root techniques
- level 2, 3 neurodynamic technique
- progressions from protect to mobilisation strategies- complete cervical spine dysfunctions

3.00-3.20

Break

3.20-6.00

Treatment - practical

- lateral elbow pain (supinator tunnel syndrome) opening, closing sliders, tensioners
- carpal tunnel syndrome, openers and closers, sliders and tensioners, multistructural

Total contact time - 16 hours