Somatic Education Australia T.T.L.E.

Head & Neck Pain
Indirect & Direct Approaches
With Steven Goldstein

Slide 1 Introduction

With limited time, we can only look at a few of the culprits that we see in our practice.
The cause alone for head and neck pain is numerous and multifaceted.
Therefore we will confine ourselves to those that are soft-tissue related either muscular or myofascial in origin creating pain patterns to the soft-tissue or articulations of the head and neck.

Slide 2

A technique sequence or protocol order for alleviating symptoms of head & neck pain can be approached in variety of ways, however here is an approach that you may consider.

- MFR Indirect & Direct Myofascial Release
- PRT Positional Release Techniques
- MET Muscle Energy Techniques
- GTO Golgi Tendon Organ or
- Orgin/Insertion Releases
- Focusing Awareness Exercise for the Spine

Slide 3 Organizing your Approach

Most authors in manual soft-tissue offer a wide array of approaches to organize your techniques.
There are several schools of thought that utilize a systematic approach: either from superficial to core to superficial, OR from
Global to Local to Global approach
This is how we will organize our approach using differing modalities.

Slide 4 Technique Sequence

Assess soft-tissue & range of motion restrictions
Release Myofascial restrictions
Awareness exercises
Apply Golgi tendon organ approach combined with Pin & Shift technique
Positional Release Technique
Apply MET techniques
Apply DTM approaches: longitudinal stripping

Slide 5 Myers Superficial Back & Superficial Front Line Relationship

In relationship, these two lines when under fascial tension: SFL shifts down SBL shifts up
This shifting can be referred to as "Lock Short for the SBL and "Lock Long" for the SFL

Slide 6 Janda's Upper & Lower Crossed Syndrome

Slide 7 High Leverage Points in the Myofascial Net

7th Cervical

Lumbodorsal Junction
T10-T12

Trigonum Lumbale
Lateral margin of external obliques & latissimus dorsi

Multifidis Triangle
Roots of the erectors
Illiosacral & Illiolumbar ligaments

Slide 8 SFL Releases for: Pubis/Inguinal

Slide 9 SFL Releases for: Sternum

Manubrium
SC Joint
External Obliquus
Rectus Sheath

Slide 10 SFL Releases for: Pectorals

Coracoid Process
Clavicular
Sternal Fibres

Slide 11 Infra & Supra Hyoid Musculature

Slide 12 Floor of the Mouth Musculature

Slide 13 Assessment of OA & AA Joints

Cradle patients head from a supine position taking it to a comfortable fully flexed position. This insures C3-6 are stabilized.
Lateral translation for OA joint
Rotation for AA Joint
Assess restrictions noticing which direction is ease & bind.

Slide 14 IFR Hyoid Release

Slide 15 Supra Hyoid Releases

Slide 16 Cranial Base

Slide 17 Spinal Awareness Exercise

Limbic system is at the centre of the body's postural control system.
Gamma motor neurons interface with alpha motor neurons through muscle spindle cells & golgi tendon organs to regulate tonus control & reflexes.

Slide 18 Spinal Awareness Exercise

We can co-opt this mechanism by the use of intention & visualization
In supine position, place caudal hand between legs to cradle sacrum.
Cephalad hand will start at C7 & move segmentally inferiorly to L4
Ask patient to image the curves of their spine.
You will work three dimensionally, that is you will focus your patient's awareness on three planes of motion.

Slide 19 Sagittal Plane

First awareness of the sagittal plane by asking the patient to image anterior (lordotic)-posterior (kyphotic) curves of the spine, then…
Imaging or pretending that this plane of motion actually moves. They think about movement with out actually using voluntary control of motion.
Practitioner will usually feel some subtle change either energetically or physically

Slide 20 Sagittal Plane

Your ability to have your patient participate depends on your dialogue you have with them
"Imagine that your spine can move or that you are floating horizontally or vertically. As you float allow for the slightest of 'wave-like' motion to occur.

Do not force this motion, just allow it in your mind's eye to have gentle motion."

Slide 21 Frontal Plane Motion

Next have your patient image side to side motion, that the vertebral segments of the spine can move side to side.
Decide whether to start at the head or the sacrum. If in doubt ask your patient which 'feels' better. Or just decide by starting in one area & then reverse it by doing the other.
I use metaphors such as imaging a snake slithering along in that plane of motion. Most patients pick up the imagery quite easily.

Slide 22 Rotational Plane Motion

Finally we image that the spine can move in a spiral.
I ask the patient which do they prefer, clockwise CW or counter-clockwise CCW? Then where they wish it to begin, C1 or Sacrum?

Slide 23 Sequence IFR/MFR Approach

Supine: Myers SFL & SBL with MFR by cradling occiput with one hand.
Place superior hand at symphysis pubis with light pressure awaiting release in the form of fascial gliding with a simultaneous relaxing of posterior cervical fascia.
Then move to Sternum, Pectorals & SC Joint applying same principles.
Relax Thoracolumbar fascia at sacrum & along illiac crest.
Release posterior scapula along lateral margin and spine of the scapula
Release C7 fascial restrictions.

Slide 24 MET Sequencing

Normally a sequence is indicated regionally to successfully release posterior cervicals & suboccipitals.
These include release to postural muscles that are "locked short" that is hypertonic & shortened when under stress or dysfunction.

Slide 25 MET Postural Muscles

Pectoralis Major & Minor
Upper Trapezius
Latissimus Dorsi
Scalenes
Sternocleidomastoid
Levator Scapula

Slide 26 Scalene & Pre-Vertebral Muscles

Slide 27 Entrapment Site

Along with pectoralis minor, the scalenes offer a unique perspective regarding impingement of neurological and vascular pathways.
Whenever symptoms beyond head & neck pain correspond with arm pain, numbness or pins & needles, we look to scalenes as a possible cause.
Obviously many other factors can be involved.

Slide 28 Scalenes

Travell's referral pain pattern for scalene group
Scalenes are controversal because they both seem to be postural & phasic.
Spasm & weakness can both be present

Slide 29 Scalene Treatment

Slide 30 Suboccipital Triangle

Slide 31 Suboccipital Information

Slide 32 Posterior Cervicals

Slide 33 Suboccipital Group

Slide 34 Action of the Right Suboccipitals

Slide 35 Suboccipital Star

Trigger Point Pain Pattern
Rectus Capitis Posterior Minor
Rectus Capitis Posterior Major
Oblique Capitis Superior
Oblique Capitis Inferior

Slide 36 Suboccipital Trreatment

IFR/MFR Approach is first to release global myofascial restrictions that effect the tension of the underlying soft-tissue
MET all postural muscles of the area.
MET specific for suboccipitals with focus on Occipital Atlas movement which is rocking, tilting & lateral rotation.

Slide 37 PRT for Suboccipitals

Hold ischaemic tender point and assess for greatest degree of pain versus head position in least amount of pain on a scale from 0 to 10.
Usually found by shortening muscle

Slide 38 Static Compression for Suboccipitals

Static compression to suboccipitals.
Find TP or Tender Pt
Rotate head back upon point towards practitioner, pause 7 to 10 seconds.
Roll head away to neutral

Slide 39 References

- Chaitow, Leon Muscle Energy Techniques 2nd Ed. Pp 126-130 Churchill-Livingston, 2001
- Interactive Atlas of Human Anatomy Version 3 Artwork: Frank H. Netter & Carlos A.D.Machado M.D.
- Thomas Myers Anatomy Trains, Harcourt Publishers Ltd., 2001
- Travell & Simons, Myofacial Pain & Dysfunction, the Trigger Point Manual Volume 1 pp 344-367
- Travell & Simons, Myofacial Pain & Dysfunction, the Trigger Point Manual Volume 1 Chapter 17 pp 321-332
- Chaitow & DeLany, Clinical Application of Neuromuscular Technique Vol.1 Churchill-Livingston, p.56
- Lowe, Whitney, Orthopedic Massage, Theory & Practice, Mosby, 2003 p153