EXPLORING HVLA

Millicent King Channell, DO, MA, FAAO
Assistant Dean of Curriculum
Associate Professor OMM
Rowan University- School of Osteopathic Medicine
OBJECTIVES

• Regarding HVLA:
  • Students should be able to:
    • Define the modality
    • Explain its mechanism of action
    • State its indications and contraindications
    • List potential adverse reactions
  • Be more effective in performing HVLA of the typical cervical spine and thoracic spine
HIGH VELOCITY LOW AMPLITUDE (HVLA)

• Definition
  • An Osteopathic technique employing a rapid, therapeutic force of a brief duration that travels a short distance within the anatomic range of motion of a joint and that engages a restrictive barrier in one or more planes of motion to elicit release of restriction.

• Type: Passive, Direct

• AT Still
PROPOSED MECHANISM

- Returning the structure to its full range of motion in a direct manner by disrupting articular/periarticular adhesions or releasing entrapped synovial folds and
OVERVIEW OF BONY AND LIGAMENTOUS ANATOMY
INDICATIONS

- Palpable somatic dysfunction of a joint
- Firm distinct barrier

Clinical Applications
  - Overall
    - Pain
    - Loss of ROM
    - To affect subsequent compensation
    - Motor innervation
  - Thoracic- Sympathetic Autonomics
Contraindications

- **Absolute**
  - Upper Cervical
    - Rheumatoid Arthritis
    - Down Syndrome
    - Achondroplastic dwarfism
    - Chiari Malformation
  - Fracture/dislocation or joint instability
  - Fusion
    - Surgical
    - Pathologic
  - Klippel-Feil Syndrome-joint fusion
  - Vertebrobasilar insufficiency
  - Joint Infection
  - Bony Malignancy
  - Patient Refusal

- **Relative**
  - Acute herniated nucleus pulposus
  - Acute whiplash
  - Severe muscle spasm, strain or sprain
  - Osteopenia or osteoporosis
  - Spondylolisthesis
  - Metabolic bone disease
  - Hypermobility syndromes
POTENTIAL SIDE EFFECTS

• Cervicals
  • Vertigo
  • In high risk patients
    • Vertebral/ Dens dislocation
    • Vascular compromise

• All
  • Increased soreness
  • In high risk patients
    • Fracture
OVERVIEW

• Accurate diagnosis

• Force will be applied at level of restriction
  • Short Lever- Cervical, Thoracic, often Lumbar
  • Long Lever- sometimes Thoracic and Lumbers

• Engagement of barrier
  • All involved planes of motion
  • Do not overload the tissues
  • Do not cause patient to guard

• Maintain above through application of thrust
  • Balance and control
  • Do not back off or wind up

• Apply thrust
  • Rapid acceleration, small amount of force without hesitation over a short distance

• Reassess
CLINICAL PEARLS

• Screen for contraindications

• Have Control of the patients body
  • Adjust table height
  • Reposition yourself

• Exact positioning will vary for each patient.
  • The barrier has a hard feel
  • Do not hold at the barrier- reach it and move threw it
TO THE TABLES !!!
Typical Cervical

Legend:

Cervical Region: C2-7 Dysfunctions Example: C5 ESRRR

From: High-Velocity, Low-Amplitude Techniques

Atlas of Osteopathic Techniques, 2e, 2011
SUPINE THORACIC HVLA
QUESTIONS? COMMENTS. CONCERNS.