Module III
Differential Diagnosis and Treatment of the Thoracic Spine

Format: 3 day onsite lecture/lab, 6 week online learning module including discussion board, videos of technique, power point Presentations of related material and anatomy, course manual, and descriptive anatomy text.

Moderators: Jim Meadows BSCPT, MCPA, FCMT, lecturer; moderator; Gail Molloy PT, OCS, COMT Moderator/Lecturer, Fred Stoot PT, COMT, MCPA, FCMT  Scott Gallant, PT, FAAOMPT

Contact: Dave Bender 410-258-4721, d1d1b@aol.com

Grading: Module testing will be conducted thought the MTII online learning and testing platform. Completion of the program online testing with a grade >80% is requires for passing. Clinical skills performance assessment will be used to evaluate performance and clinical reasoning, Passing is a grade of 70%.

Duration: 6 weeks

Course syllabi, course description, educational objectives, requirements for successful completion, and teaching methods.

Description: This course is designed to prepare the Physical Therapist in advanced differential diagnosis, biomechanical assessment and treatment of the thoracic spine. Online learning will portion will provide a background in descriptive anatomy, biomechanics, Differential diagnosis, and current research relevant to the thoracic spine and introduce Assessment and treatment techniques. Attention will be given to selected manual therapy interventions, indications and contraindications. The 3-day clinical intensive will focus on clinical evaluation and treatment skill covered in the online module.

Education methods will include: 24hrs classroom didactic training and lab. 25 additional hours will be required to review power point material, course manual, videos, and descriptive anatomy material. Written testing and clinical skills assessment will also be performed On completion of the course the therapist will be able to identify the common condition scripts for all extremity joints, pass a clinical skills evaluation, and written/online test covering the didactic and course manual material with a grade of 80% or better.

Syllabi:
Thoracic Spine Table of Contents

Principles of Diagnosis.................................................................Error! Bookmark not defined.
Examination ..............................................................................Error! Bookmark not defined.
    Basis of the Cyriax Examination.............................................Error! Bookmark not defined.
Analysis of the Data and Making the Diagnosis

Systems Examination

General Neuro-musculoskeletal Examination

The Scan Examination

The Subjective Examination

Pain

Pain Quality

Pain Severity

Questions to Ask About Pain

Neurological Symptoms

Summary of Subjective History Taking

Observation

Selective Tissue Tension Testing

Active Movements

Passive Tests

Resisted Isometric Tests

Neurological Tests

Special Tests

Cancer

Orthopedic Clinical Presentation of Neoplastic Disease

Bone Metastases

Neurological Metastases

Prostate Cancer

CNS Malignancy

Lung Cancer

Pancoast Syndrome

Breast Cancer

Osteoporosis

Pathology

Clinical Features

Diagnosis

Medical Management

Thoracic Differential Diagnostic Examination

Subjective

Objective Examination

Observation

Musculoarticular Tests

Neurological Tests

Dural (Neuromeningeal) Tests

Examination Overview

Medical Conditions

Thoracic Disc Injuries

The Thoracic Outlet Syndrome

Tietze’s Syndrome
Herpes Zoster ................................................................. Error! Bookmark not defined.
Thoracic Tumors ............................................................ Error! Bookmark not defined.
Intraspinal Tumors ........................................................... Error! Bookmark not defined.
Tumors Of The Nervous System ........................................ Error! Bookmark not defined.
Viscerogenic Pain ........................................................... Error! Bookmark not defined.
Summary of Medical Conditions ....................................... Error! Bookmark not defined.
Thoracic Biomechanics ....................................................... Error! Bookmark not defined.
Biomechanical Dysfunctions .............................................. Error! Bookmark not defined.
Combined Subluxation/Instability Model ............................... Error! Bookmark not defined.
Movement Dysfunction States ........................................... Error! Bookmark not defined.
Symmetry of Dysfunctions ................................................ Error! Bookmark not defined.
Biomechanical Assessment ................................................ Error! Bookmark not defined.
Spinal Assessment ............................................................. Error! Bookmark not defined.
Spinal Assessment ............................................................. Error! Bookmark not defined.
Rib Assessment ................................................................. Error! Bookmark not defined.
Screening Tests ............................................................... Error! Bookmark not defined.
Conditions .................................................................... Error! Bookmark not defined.
Mechanical Spinal Pain Syndromes ...................................... Error! Bookmark not defined.
Zygopophyseal Joint .......................................................... Error! Bookmark not defined.
Segmental ...................................................................... Error! Bookmark not defined.
Rib Subluxation ................................................................. Error! Bookmark not defined.
Treatment ..................................................................... Error! Bookmark not defined.
Treatment Technique Selection and Application ................. Error! Bookmark not defined.
Indications and Contra-indications to Manual Therapy ........ Error! Bookmark not defined.
Spinal Manipulation - Risks ............................................... Error! Bookmark not defined.
  What are the Risks: ......................................................... Error! Bookmark not defined.
  Risk Factors ................................................................ Error! Bookmark not defined.
  Risks .......................................................................... Error! Bookmark not defined.
Rehabilitation Aims .......................................................... Error! Bookmark not defined.
Rehabilitation Means ........................................................ Error! Bookmark not defined.
Onsite intensive: 24 didactic/Lab hours. 25 hrs pre/post independent study.

Day 1 Topics
1. Differential Dx Thoracic region
   a. Reg Flags
   b. Safety considerations
   c. Contraindications to specific treatments
2. Biomechanical assessment and treatment of the thoracic spine
   a. Active, passive, and resistive testing
   b. Stability testing and joint glides
   c. Interventions
      i. Treatment Flexion subluxation
      ii. Treatment Extension subluxation

Day 2 Topics
1. Interventions
   a. Traction manipulation to thoracic region
   b. Traction manipulation the Thoracocervical Region
2. Condition scripts for Thoracic and Thoracocervical region
3. Biomechanical assessment and treatment of the Ribs
   a. Interventions
      i. Mobilization and manipulation techniques for selected conditions
      ii. Therapeutic exercise and HEP

Day 3 Topics
1. Thoracic interventions
   a. Intro to Inter-segmental and Intra-segmental units and syndromes
   b. Integrated thoracic and upper quarter examination and treatment

SPECIFIC COURSE OBJECTIVES:
Module II objectives
1. Perform and interpret results of the biomechanical assessment for the thoracic spine.
   a. Interpreting active passive, and resistive testing
   b. Performing and interpreting Passive physiological motion testing
   c. Stability testing of the Thoracic spine.
   d. Neurologic testing
   e. Red and yellow flag recognitions and interpretation.
   f. Selected intervention for condition scripts.
2. Condition Scripts
a. Identification of typical presentation of selected pathology and subluxations
b. Apply Hypothesis testing for illness scripts as part of the differential diagnosis
c. Select and perform appropriate manual therapy intervention based on subjective and objective data.
d. Select appropriate Interventions: Ther ex, NM reed modalities and HEP for illness scripts

3. Manual therapy interventions
   a. Apply appropriate manual therapy intervention based on clinical exams
   b. Demonstrate proper technique with manipulation taking into account:
      i. Proper treatment selection
      ii. Integrate proper neuromuscular reeducation and therapeutic exercise prescription.
      iii. Appropriate force for selected treatment
      iv. Evaluation of response to treatment