



Chiropractic BioPhysics
CBP—The Science of Spinal Health

June 25, 2024

Module 10. CBP® Scoliotic Deformity Analysis & Management

Course Title: Scoliotic Deformity Analysis & Conservative Management Strategies

Instructors: Dr. Deed Harrison and Dr. Joe Betz

Course Objective: This course provides an integrated education for the Doctor of Chiropractic in the science and art of understanding, evaluating, and management of scoliotic deformities in adolescents and adults. The link between genetic triggers, biomechanical growth modulation, environmental risks, and age development will be explained as they related to scoliotic deformities. Categories of scoliosis will be explained with emphasis on understanding risk factors for curve progression in both adolescent and adult scoliotic deformities. Cutoff curve values and age of onset will be explained to aid the Chiropractic clinician in deciding to management or refer the scoliosis patient for surgical consultation. The details of conservative management of scoliotic deformities are a major emphasis of this conference where new flexible bracing concepts and devices as well as rehabilitative procedures will be thoroughly explored. Evaluation of important curve variables as well as outcome assessments will be used to determine conservative management strategies and successful intervention. The details of case management using conservative bracing, adjusting and rehabilitative methods will be covered using a variety of case studies for a comprehensive picture of clinical application of this course material. Last, a survey of research material will be reviewed supporting the utilization and efficacy of the course materials.

Total Hours: 10

Tuesday

9am – 11am Chiropractic Evaluation of the Scoliosis Patient & Outcome Variables

- Thoracic Posture & Thoraco-Lumbar Coupling Kinematics
- Differentiation of Thoraco-lumbar Scoliotic Pattern From ‘Simple’ Postural Spine Displacements
- Postural Evaluation of the Scoliotic Patient: Rotations and Translations
- Non-commutative Property of Finite Rotation Angles Under Addition
- Postural & Stress Bending Views to Assess Potential for Scoliosis Reduction

11am – 1pm Scoliosis Development Considerations, Indications for Surgical Referral, & Bracing

- The genetic role in development of scoliosis
- Genetic trigger, growth modulation, growth maturation, spinal growth and curve progression
- Categories of scoliosis: juvenile, neurologic, adolescent, adult onset, etc.
- Indicators for conservative treatment vs. surgical interventions for adolescent vs. adult scoliosis.
- Indicators for SpineCor bracing in Adult scoliosis vs. Adolescent Idiopathic Scoliosis
- Pain and progression factors in Adult scoliosis

- 1pm – 2pm** **Biomechanics of Curve Progression**
- Euler Buckling & Scoliosis Progression
 - Understanding Thoracic Spinal Kinematics and Scoliotic Deformities
 - Evaluation of the Scoliotic Spine: Reliability & Validity of Important Measures
- 2pm – 4pm** **CBP Technique Principles of Management of Thoraco-lumbar and Thoracic Scoliosis**
- Leg Length Inequality & Sacral Anomalies: Orthotic Intervention
 - Mirror Image® Scoliosis/Postural Stress Views: Indications and Contraindications for CBP® Technique Management of Scoliotic Deformities
 - Conservative Management of Thoraco-lumbar Scoliosis: CBP® Technique Case Presentations
 - Conservative Management of Thoracic & Complex Scoliosis: CBP® Technique Case Presentations
- 4pm – 5pm** **Health Disorders that May Positively Respond to Chiropractic Intervention and Management of Sagittal Plane Deformities:**
- Indications and contra-indications for the ScoliRoll orthotic.
 - Chiropractic and Scoliosis Reduction: A Review of the Literature
 - Indications and contraindications for the use of home orthotics: Denneroll, Compression extension traction wedge.
- 5pm – 7pm** **Continue---CBP Technique Principles of Management of Thoraco-lumbar and Thoracic Scoliosis**
- Thoracic Posture & Thoraco-Lumbar Coupling Kinematics
 - Differentiation of Thoraco-lumbar Scoliotic Pattern From ‘Simple’ Postural Spine Displacements
 - Non-commutative Property of Finite Rotation Angles Under Addition
 - Mirror Image® Scoliosis/Postural Stress Views: Indications and Contraindications for CBP® Technique Management of Scoliotic Deformities
 - Conservative Management of Thoraco-lumbar Scoliosis: CBP® Technique Case Presentations
 - Conservative Management of Thoracic & Complex Scoliosis: CBP® Technique Case Presentations