

Program Syllabus / Outline Format

Program Date: On-Going

Title of Program: The Cox Technic System of Spinal Pain Management: Biomechanics, Examination, Diagnosis and Treatment

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Total CE hours: 23

Program Description:

In this series of presentations, Cox Technic Flexion Distraction is described from its inception to its current form. Supporting research and associated federal grants (HRSA, NIH, Veteran's Administration) will be discussed. Clinical applications including examination, imaging treatment options (including adjunctive therapies), treatment frequency, documentation and patient education will be presented. Differential diagnosis of common and complex spinal conditions will be highlighted. Treatment options will be demonstrated through means of video of actual patients with the clinical conditions. This series of presentations is for the spinal pain clinician who enjoys hearing the latest research and seeing its clinical application.

Program Goals / Objectives:

At the end of this program, the registrant will be able to:

1. Identify the examination findings that differentiate spinal cysts (discal, Tarlov, synovial).
2. Understand the relationship between Bertolotti's Syndrome and Transitional segments.
3. Learn an evidence-based system to determine instability in spondylolisthesis.
4. Recognize pathologies seen on MRI films that come through a chiropractic clinic.
5. Appreciate the dilemma of the post-surgical patient who has continued pain and offer reasonable options.
6. Understand the different approaches that may be available to idiopathic vs. degenerative scoliotic patients.
7. Recognize when to refer patients with findings (pathological) that indicate such referral.
8. Educate patients about reasonable clinical outcome expectations for their specific condition(s) based on evidence and research.
9. Realize that nutrition plays a large part in the health as well as the degeneration of the spine.
10. Better understand when it is appropriate to recommend a support belt for back pain patients.
11. Better understand that simple exercises that are done easily are better adhered to by patients.
12. Know the history behind the development of Cox Technic as it is the link to its future growth and clinical success by the back pain specialist.
13. Know the HRSA and NIH granted research findings regarding the biomechanical effects of Cox Technic.
14. Define the cervical spine biomechanical factors that influence its pain-generating conditions.
15. List the lumbar spine and cervical spine conditions appropriate for Cox Technic care.
16. Differentiate Protocol I and Protocol II type patients be they lumbar or cervical patients.
17. Describe how Protocol I patients are treated.
18. Describe how Protocol II patients are treated.
19. Know when to incorporate long-y-axis distraction.
20. Accept that 100% improvement may not always be attained which should be communicated to patients.
21. Recognize the significance of the cervical spinal column elements.
22. Describe application of treatment to the upper thoracic spine using a cervical restraint.
23. See back pain and neck pain as significant, costly conditions demanding effective care.
24. Differentiate special application of Cox Technic for ulnar radiculopathy from other cervical spine treatment.
25. Recognize pain patterns emanating from facet joint irritation in the neck, head and shoulder areas.
26. Define a subluxation and its place in chiropractic
27. Describe rotation's effects on spinal elements
28. Describe the chemical influence of disc material on spinal nerves.
29. Describe the autonomic nerve innervation and circulation.
30. Define neurogenic pain and radiculitis.

Program Outline:

1 ½ Hour: Idiopathic vs. Degenerative Scoliosis
Dr. James Cox presents a discussion of the various options for managing scoliosis, both degenerative and idiopathic. He demonstrates treatment options for these conditions, shares patient case videos, and the latest research information on scoliosis care.

1 Hour: Pathologies I

Dr. James Cox presents patient cases from his clinical practice, featuring historical and examination findings, imaging and treatment (chiropractic and other) outcomes. Presentations to improve diagnostic awareness and one's ability to appropriately refer if necessary will include the following topics:

- aortic aneurysm
- multiple myeloma
- lymphoma (Hodgkins' and Non-Hodgkins')
- ivory vertebra of Pagets Disease
- prostate METS
- eosinophilic granuloma
- aneurysmal bone cyst
- ochronosis
- metastatic disease
- spinal tumors and synovial cyst seen in clinical practice

1 Hour: Pathologies II

- scleroderma
- fractures of the spine
- x-stop
- IDET
- cage fusion
- other common pathologies seen in clinical practice

1 Hour: Pathologies II (cont.) & Failed Back Surgery Syndrome (FBSS)

- bone tumors
- ankylosing spondylitis
- neuroblastoma
- TB of the thoracic spine
- other common pathologies seen in clinical practice
- post-surgical cases
 - fusion
 - x-stop
 - arachnoid cyst
 - laminectomy
 - scar tissue
 - plate fusion
 - disc prosthesis

1 Hour: FBSS (cont.)

Dr. James Cox presents a discussion of current surgical procedures as well as past procedures that have been discontinued; yet these postoperative chronic pain patients are still seen in a clinical setting demanding care. In working with our medical and surgical colleagues, the preferred term of "persistent post-surgical back pain" is not utilized as commonly as "failed back surgical syndrome," but chiropractors can offer options for pain that continues after back surgery. Cox Technic protocols are gentle and controlled, providing an option for these patients whom have exhausted all other options in many cases. The degree of relief realistically expected must be communicated to the patient at the outset of care. Clinical cases will be presented. Chiropractic flexion distraction and long y axis decompression is presented as an option for treating the post-surgical spine.

1 Hour: History & Research Support of Cox® Technic

- Evolution of the technique
- HRSA research projects since 1994
- NIH grants
- Veterans' Administration grants
- FCER grants
- Case Reports by chiropractic clinicians
- Biomechanical effects of Cox® Technic

2 Hours: Patient Documentation in the Cox® Technic System of Spinal Manipulation

Dr. Cox presents the necessary documentation of the patient encounter from examination to the report of findings and spinal nutrition. He further shares how he builds a rapport with patients from the moment they walk into his practice, working toward their pain relief and cooperation toward that goal. Documentation and patient care also includes scheduling, therapies, exercise, back school and much more. With nearly 50 years experience, Dr. Cox shares key clinical pearls on how to keep patients on track with care.

1 Hour: Spinal Nutrition

This discussion focuses on clinical nutrition for spine syndromes with documented research papers about the nutrients essential to spinal health, bone health, bowel health, immune enhancement, and non-drug pain relief. Osteoporosis and disc degeneration will be discussed with regards to their nutritional demands and influences. How the combination of supplementation and spinal manipulation can be more beneficial to the patient vs. spinal manipulation alone will be presented.

1.5 Hours: Spondylolisthesis, Bertolotti's Syndrome, Transitional Segment

This is a full discussion on the biomechanics, diagnosis and treatment of spondylolisthesis, its stability vs instability, transitional segment and Bertolotti's Syndrome. Common diagnoses in chiropractic clinical practice, these three spinal conditions call for careful examination and treatment to relieve and control the pain caused by these conditions. Dr. Cox shares some of the latest published findings about these conditions, demonstrate their findings radiographically, and give some insights into their treatment which may include flexion distraction, lumbar support belt, exercise, etc.

1 Hour: Cervical Spine I – Biomechanics, Diagnosis, Treatment

Dr. Cox presents this discussion on key biomechanical factors that influence the diagnosis and treatment of cervical spine pain conditions. Neck pain and related radiculopathy pain are highlighted. Dr. Cox includes some of the latest research relevant to the discussion. He will share patient cases, key diagnostic elements to be aware of and then describe and demonstrate treatment options. Video demonstration is shown.

1 Hour: Cervical Spine II – Biomechanics, Diagnosis, Treatment

Dr. Cox leads this hour long discussion with recently published research that impacts the practice of cervical spine care. In addition, patient cases highlighting exam findings, imaging, treatment options and outcomes for the following conditions will be presented:

- Disc herniations
- Klippel Feil
- Thoracic Disc
- Multiple Discs in CS, LS, TS

1 Hour: Low Back Pain

Dr. Cox presents patient cases from his clinical practice, featuring historical and examination findings, imaging, treatment (chiropractic and other) methods and associated outcomes. Presentations to improve diagnostic awareness and one's ability to appropriately refer if necessary will include the following topics:

- Disc Herniation
- Fracture
- Motor Weakness
- Bilateral Stenosis
- Bilateral Radiculopathy
- Radicular Pain on side opposite the herniation
- Case report of a Post-surgical Low Back followed for 16 years

1 Hour: Spinal Cysts

Topics & case conditions presented:

- Spinal Cysts
 - Synovial
 - Tarlov
 - Discal

1.5 Hours: Scoliosis: Degenerative & Sciatic / Idiopathic - Discussion with Patient Cases and Treatment Demonstration

1 Hour: Cervical Spine: Anatomy, Diagnosis and Patient Case Presentations

- Syrinx – diagnosis, imaging, management, prognosis
- Vertebral Artery

- Resorption of Cervical Disc
- Whiplash
- Brachial plexopathy
- Disc herniation
- NIH study of cervical spine biomechanics with Cox Technic
- Physical therapists' plans for guidelines about managing and manipulating the cervical spine
- Demonstration of treatment methods

1 Hour: Cervical Spine: Anatomy, Diagnosis and Patient Case Presentations 2

- Stenosis
- Myelopathy
- Post-Surgical Fusion
- Disc Herniation
- Disc Regeneration
- Pain Patterns (head, neck, shoulders)
- Demonstration of treatment methods

1 Hour: Pelvic Pain and Organic Dysfunction: Relief with Flexion Distraction

In this overview webinar, Dr. Browning gives a brief presentation of the symptoms, examination findings, conservative treatment and outcome expectations for patients suffering with chronic pelvic pain issues. These patients present with a wide range of seemingly unrelated symptoms of pelvic pain and accompanying disturbances of bladder, bowel, gynecologic and sexual dysfunction that routinely defy diagnostic explanation.

1 Hour: The Subluxation PLUS Rotation Effects on Spinal Elements

- Subluxation: definition
- The Texas Lawsuit and the Subluxation
- Rotation: effect on disc, facet & discal pressure
- Rotation: resistance by facet, disc, ligaments
- Effect of degeneration and rotation

1.5 Hours: Free Fragment of Disc and Chemical Radiculitis

- Free fragment of disc and chemical radiculitis
 - exam and imaging findings
 - diagnostic indicators
- Neurogenic pain and radiculitis
- Autonomic nerve innervation and circulation
- Treatment approaches
 - Flexion distraction, electrotherapy

1 Hour: Examination of the Low Back Pain Patient

- Test by Test Demonstration
 - Prone, sitting, standing
- Interpretation of each with research
- Diagnosis developed from exam findings - algorithm
- Treatment Plan developed from diagnosis - algorithm

Instructional Methods:

- **Powerpoint with narration**
- **PDF of notes for slides**
- **PDF of Cox Technic Protocols**
- **Quizzes for each hour of material (Time is additional to this syllabus to complete these.)**
- **Treatment Demonstration (incorporated)**