

## SYLLABUS

- LECTURE TITLE:** Spondylolysis in the Athlete, Disc Lesions and Unknown cases
- LECTURER:** Alicia M. Yochum RN, DC, DACBR, RMSK
- LECTURE LOCATION:** Nevada Chiropractic Association
- LECTURE LENGTH:** 8 Hours
- MODE OF PRESENTATION:** Power Point with x-rays, SPECT and MRI with selected case studies

### **COURSE CONTENT:**

#### **Hour 1**

- Introduction
  - Terminology of Spondylolysis/Spondylolisthesis
  - Etiology of Spondylolisthesis
- Clinical Presentation of Active versus Inactive Spondylolisthesis
  - Signs and Symptoms
  - The Stork (Micheli's) Test

#### **Hour 2**

- Imaging Findings
  - Plain Films
  - Computed Tomography
  - Planar Bone Scan
  - SPECT Bone Scan
  - MRI Scan

#### **Hour 3**

- Treatment and Prognosis
  - Detailed Discussion Concerning Patient Management of the Active/Athletic Patient
  - Spinal Manipulative Therapy for Active versus Inactive Spondylolisthesis
  - Use of the Boston overlap Brace for Active Spondylolisthesis
- Case Management

#### **Hour 4:**

- Review of Normal Anatomy of the Lumbar Spine MRI Imaging
- Traditional MRI recumbent imaging of disc disease.
- Biomechanics of disc lesions
  - Predisposition from posture
  - Pressures within the disc in upright, recumbent and sitting positions
  - Flexion vs extension

#### **Hour 5:**

- Disc bulge
- Disc herniation
  - Protrusion
  - Extrusion
  - Migration
  - Sequestered/free fragment
  - Annular Fissure/tear
- Weightbearing MRI
- Presentation of case demonstrating disc herniations utilizing upright MRI imaging.

- The Use of kinetic or dynamic flexion and extension imaging of the spine to pinpoint the patient's pain, reveal occult disc lesions and/or to demonstrate spinal instability.

**Hour 6:**

- Spinal Stenosis
- Neural foramen stenosis
- Lateral recess stenosis
- Central canal stenosis
- Facet/synovial cyst
- Degenerative spondylolisthesis

**Hour 7:**

- Other forms of Inter-vertebral disc herniation
  - Schmorls node
  - Limbus bone
- Modic changes/degenerative endplate changes
  - Three types of degenerative endplate change
  - Differential diagnosis with disc infection

**Hour 8**

- Unknown Cases
  - Arthritis
  - Neoplasm
  - Fracture