

Date: May 13, 2025

Time: 8:30-3:00pm CST

Speakers: Jeff Rich, DC, DACBR; Heidi Mendenhall, DC, DACBR

Presentation: Radiology case studies: Putting it all together. The patient history, clinical presentation, and imaging findings to gain the entire clinical picture of the patient and their condition.

Cost: \$250.00

Registration: Dr. Michael Krejci 952-205-3129

Location: Optum – Physical Health, 11000 Optum Circle, Eden Prairie, MN 55344

Course Description

Join us for an informative 6-hour session that will cover chiropractic radiology case studies that will cover normal and abnormal imaging signs, interpretation of chiropractic imaging, and clinical correlation of findings as well as proper utilization of diagnostic imaging.

Course Outline

Part 1: Jeff Rich, DC, DACBR (8:30am – 11:30am)

Comprehensive overview of important imaging findings and their clinical correlations relevant to chiropractic practice, enhancing the diagnostic skills of the participants utilizing a case-study approach. For each topic, Dr. Rich will present cases and discuss the patient's history, clinical presentation, and imaging findings. Throughout this presentation, interactive Q&A will be encouraged with seminar participants to reinforce learning objectives.

Hour 1: Introduction/Normal Skeletal Variants

8:30am – 9:30am

Learning Objectives:

- Understand the different imaging modalities used in chiropractic practice
- Identify common normal skeletal variants in different regions of the body
- Differentiate between normal variants and pathological findings

List of topics discussed during this hour:

- Introduction to various imaging modalities utilized in chiropractic practice
- Indications and contraindications to various imaging modalities
- Discussion of congenital variants of the spine and pelvis (i.e., transitional vertebrae, lumbarization, sacralization, etc.)
- Discussion of congenital variants of the extremities (i.e., accessory ossicles, variations in bone structure, etc.)
- Clinical implications of congenital skeletal variants.

Hour 2: Trauma and Tumors

9:30am – 10:30am

Learning Objectives:

- Recognize imaging characteristics of different types of extremity trauma
- Identify and differentiate spine and pelvis trauma on imaging
- Distinguish between benign and aggressive bone tumors based on imaging findings

List of topics discussed during this hour:

- Extremity trauma: fracture types (i.e., simple, compound, comminuted); dislocations and subluxations; soft tissue injuries associated with trauma, etc.
- Spine and pelvis trauma: vertebral fractures (i.e., compression, burst, chance fractures), pelvic ring disruptions, imaging findings in whiplash injuries, etc.
- Benign and aggressive bone tumors: i.e., osteochondroma, enchondroma, fibrous dysplasia, osteosarcoma, chondrosarcoma, eosinophilic granuloma, etc.

Hour 3: Infectious, Metabolic and Arthritic Conditions

10:30am – 11:30am

Learning Objectives:

- Identify imaging features of metabolic bone diseases
- Understand the imaging presentation of infectious and inflammatory conditions
- Correlate clinical symptoms with imaging findings in various arthropathies
- Recognize osteoporosis and its complications on imaging

List of topics discussed during this hour:

- Metabolic bone disease: i.e., Paget disease, osteonecrosis, osteomalacia/rickets, hyperparathyroidism, osteoporosis, etc.
- Infectious disease: osteomyelitis, septic arthritis, spondylodiscitis, etc.
- Arthritis: rheumatoid arthritis, psoriatic arthritis, degenerative arthritis, crystalline arthropathies, etc.

Lunch 11:30am – 12pm

Part 2: Heidi Mendenhall, MS, DC, DACBR (12:00pm – 3:00pm)

This seminar provides chiropractors with an in-depth exploration of radiographic and advanced imaging techniques and their applications in diagnosing and managing neoplastic, infectious, and hematologic/metabolic conditions. Participants will learn to select the most appropriate imaging modalities, interpret key findings using precise terminology, and integrate imaging results with clinical data to formulate accurate diagnoses and effective management plans. Through interactive case discussions, attendees will enhance their ability to differentiate pathological changes from normal anatomical variations and improve patient outcomes through evidence-based practices.

Hour 4: Imaging Modality Selection

12:00pm – 1:00pm

Learning Objectives:

- Identify the imaging modality of choice for neoplastic, infectious, and hematologic/metabolic conditions based on cost, dose, and unique capabilities.
- Discuss the rationale for selecting specific imaging modalities considering patient safety and diagnostic yield.

List of topics discussed during this hour:

- Overview of imaging modalities: X-ray, MRI, CT, PET-CT, Ultrasound, Nuclear Medicine
 - Advantages, limitations, and unique features
 - Cost-effectiveness and accessibility considerations
- Imaging modality selection criteria:
 - Neoplastic conditions (e.g., primary vs. metastatic lesions)
 - Infectious conditions (e.g., discitis, osteomyelitis)
 - Hematologic/metabolic conditions (e.g., osteoporosis, Paget's disease)
- Radiation dose considerations and risk communication

Hour 5: Imaging Findings and Terminology

1:00pm – 2:00pm

Learning Objectives:

- Describe imaging findings associated with various neoplastic, infectious, and hematologic/metabolic conditions using imaging-specific terminology.
- Differentiate normal anatomical variants from pathological imaging findings to improve diagnostic accuracy.

List of topics discussed during this hour:

- Characteristic imaging findings for selected neoplastic conditions
- Characteristic imaging for selected infectious conditions
- Characteristic imaging for selected hematologic/metabolic conditions

Hour 6: Clinical Synthesis and Patient Management

2:00pm – 3:00pm

Learning Objectives:

- Synthesize imaging and clinical findings to formulate a diagnosis or differential diagnosis.
- Develop and document appropriate patient management plans based on imaging and clinical findings.

List of topics discussed during this hour:

- Formulating differential diagnoses based on history and imaging findings
- Documentation of findings and management plans; communicating findings effectively to patients and other healthcare providers
- Management pathways based on diagnosis including referrals (including red flags and urgent referrals), chiropractic management considerations and follow-up imaging and monitoring protocols