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# **2 HOUR SEMINAR**

## Non-Spinal Auto Collision Injuries in Chiropractic Practice Pt 1

The most common auto injuries seen by chiropractors include the neck, upper back and low back. Yet many patients present with non-spinal injuries to the TMJ, upper extremity and chest. In some instances, it can be easy to overlook these injuries or associate them with the spinal injuries. To offer the patient the best care possible, proper documentation, examination and diagnosis is essential for either treatment or proper referral. Based on current literature and years of experience, this course covers some of the more common non-spinal auto collisions injuries that are likely to be presented in the chiropractic practice.

## OUTLINE

## HOUR 1

- 1. Introduction
  - a. Incidents of non-spinal auto injuries
- 2. Documentation
  - a. The law
  - b. How We Get Paid
  - c. Malpractice Protection
  - d. Professional Communication
  - e. Personal injury specific
    - i. Causal relationship
    - ii. Mechanism of injury
    - iii. Medical necessity
    - iv. Probability
- 3. History
  - a. Necessary for Causal relationship, determine mechanism of injury, subjective complaints, prognostic factors,
  - b. Causal Relationship
    - i. All causal criteria can be distilled to a minimum of 3 common and essential elements, which are as follows.
      - 1. There must be a biologically plausible or possible link between the exposure and the outcome.
      - 2. There must be a temporal relationship between the exposure and the outcome. Such a determination requires an accurate documentation of the signs and symptoms of the condition of interest both before and after the exposure of interest. Additionally, the outcome cannot postdate the exposure by a period that is considered, from a clinical perspective, to be too long or too short to relate the two.
      - 3. There must not be a more likely or probable alternative explanation for the symptoms.
- 4. Non-Spinal Auto Collision Injuries
  - a. Temporomandibular Disorder
    - i. Prevalence

- ii. Mechanism of Injury
  - 1. Direct Injury Theory
  - 2. Indirect injury Theory
- iii. Presentation
  - 1. Acute
  - 2. Delayed onset
- iv. Examination
  - 1. Palpation
  - 2. Range of motion
  - 3. Resisted motion
  - 4. Cervical spine involvement
  - 5. Imaging
  - 6. Treatment
- b. Shoulder injuries
  - i. Prevalence
    - 1. Thoracic Outlet syndrome
    - 2. Impingement Syndrome
    - 3. AC Sprain/Separation
    - 4. Rotator Cuff Injuries
  - ii. Thoracic Outlet Syndrome (TOS)
    - 1. Types of TOS
      - a. Arterial
      - b. Venous
      - c. Neurological
    - 2. Prevalence
    - 3. Anatomical Spaces
      - a. Interscalene Triangle
      - b. Costoclavicular Space
      - c. Subcoracoid space
    - 4. Mechanism
    - 5. Presentation
    - 6. Examination
      - a. Provocation Tests
        - i. Elevated Arm Stress Test
        - ii. Upper Limb Neural Tension Test
        - iii. Supraclavicular Pressure Test
        - iv. Costoclavicular Maneuver
        - v. Wrights Test
    - 7. Treatment

#### HOUR 2

- iii. Impingement Syndrome
  - 1. Prevalence
  - 2. Mechanism
    - a. Direct Trauma
    - b. Abnormal Scapulohumeral Motion
  - 3. Examination
  - 4. Provocative Test Clusters

- a. Painful Arc
- b. Resisted External Rotation
- c. Neer's
- d. Hawkin's Kennedy
- iv. AC Sprain
  - 1. Prevalence
  - 2. Presentation
  - 3. Examination
    - a. Provocation Tests
      - i. Cross Body Arm Adduction Test
      - ii. AC Shear/Paxion's
      - iii. O'Brien's Test
    - b. Rockwood Classifications
- v. Rotator Cuff Injuries
  - 1. Prevalence
  - 2. Classifications
    - a. Small tear less than 10 mm
    - b. Medium tear 10mm 30mm
    - c. Large tear greater than 30mmor involving 2 or more tendons
  - 3. Clinical Exam Findings Associated with Medium to Large Tears
    - a. External rotation lag sign
    - b. Speeds Test
    - c. Painful Arc
    - d. Painful resisted abduction or External Rotation
  - 4. Imaging
- vi. Hand/Thumb
  - 1. Prevalence
  - 2. Mechanism
  - 3. Collateral Ligament of Thumb Injury
    - a. Ulnar Collateral ligament
    - b. Mechanism
    - c. Presentation
    - d. Examination
    - e. Imaging
    - f. Management
- vii. Chest Injury
  - 1. Sternocostal-costochondritis
    - a. Mechanism
    - b. Presentation
    - c. Objectives/Examination

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