

BRINGING JUSTICE
TO THE VICTIMS OF
NECK
AND BACK INJURY

Hard Facts About Soft Tissue
Injuries

by Douglas E. Schmidt, J.D.
Schmidt Law Firm



Meet Douglas E. Schmidt

Personal Injury and Wrongful Death Attorney



- ★ Nationally Recognized (Civil Trial Advocate, National Board of Trial Advocacy 1985)
- ★ Over 40+ years' experience in over 6,000 successful cases of Personal Injury and Wrongful Death.
- ★ Honored by satisfied clients who awarded him a 5 star rating for client satisfaction
- ★ Recipient of many professional awards and honors (including the Distinguished Service Award of the Minnesota Trial Lawyers Association, Award of Merit (American Bar Association).
- ★ AV Rated (Martindale Hubbell)
- ★ Author, Diagnosis & Proof of Ligamentous Injuries of the Cervical Spine (2014).

“Douglas E Schmidt is an accomplished litigator representing the victims of injury due to defective products. He has successfully tried cases against many major manufacturers, including cases involving medical appliances, drugs and vaccines, motor vehicles, agricultural, and construction equipment, as well as chemicals.”

- *The William Mitchell Law Review*

“The victims of personal injury and wrongful death deserve a lawyer as good or better than the giant insurance companies they are battling against. Most of all, they deserve a lawyer who cares!”

Automobiles, Truck, Motorcycle, and Pedestrian Injuries; Construction Site, Industrial and Farm Injuries; Products Liability Injuries; Medical and Other Professional Malpractice Claims; Workers Compensation Claims; Social Security and Private Insurance Disability Claims.



Fact: Life “just ain’t fair” for the victims of Neck and Back Injuries.

The medical community generally is grossly prejudiced against neck and back injuries and disabilities. They are underdiagnosed and undertreated. They are dismissed as whiners and complainers.

Most MDs dismiss neck & back injuries as minor “soft tissue injuries” that:

- All heal within 12-14 weeks;
- All heal without permanent disability;
- Don’t exist in the absence of “objective findings”.

They believe that:

- Subjective pain is irrelevant;
- Disc injuries are meaningless in the absence of nerve impingement.
- Ligamentous injuries-What?
- Facet Joint injuries-What?

All of those premises are totally false!!! Yet, the majority of the medical community is generally ignorant of the true facts.

Fact: The fictions and fallacies of IME doctors are shared by much of the medical community.

The typical IME DOCTOR says:

- This is just a “soft tissue” injury.
- There wasn't enough car damage to cause any significant injury or disability.
- There was no objective evidence of injury in my examination.
- All soft tissue injuries heal within 10-14 weeks.
- They heal without permanent disability.

The INSURANCE ADJUSTER says:

- Your case is worth \$3-8k.

Personal injury lawyers need to know the facts about soft tissue injuries and find treating providers who also know those facts to bring justice to the victims.

FACT: Soft tissue injuries (WAD) are often permanent and severe.

Reliable medical research has proven that:

Neck sprain/strain is listed as the predominant injury in 28% of people treated in ER after MVA. (Seroussi)

-50% of whiplash injuries don't ever recover, i.e. are permanent. (Carroll, Sterling, Elliott)

-30% remain moderately to severely disabled.

Source: North American Spine Society (Whiplash and Whiplash-Associated Disorders)

www.knowyourback.org says:

-One-third of all whiplash injuries do not recover, i.e. are permanent.

-10% end up with "constant severe pain".

Another study reports that 42% of WAD patients become chronic. (Elliott, Characterization of Acute and Chronic Whiplash-Associated Disorders.)

The anatomy of soft tissue injuries.

Basic Terminology:

WAD-Whiplash Associated Disorder

CAD-Cervical

Acceleration/Deceleration Injury

LWAD-Lumbar Whiplash Injury

“Soft tissue injuries” include the following:

1. Muscle (myofascial) injuries (strains);
2. Nerve injuries;
3. Ligamentous injuries (sprains);
4. Facet Joint Injuries;
5. Intervertebral disc injuries (herniations, protrusions, extrusions).
6. Psychological injuries.

The term “soft tissue injuries” does not include bony fractures.

Sprain/Strain Injuries

- *Strain*: An overstretching of the muscle.
- *Sprain*: Damage to the ligament/tendon.
- Despite remodeling (healing), the biomechanical properties of healed tendon tissue never match those of intact tendons. (The Royal College of Surgeons of Edinburgh and Ireland, Surgeons 3: 5;309-306 2005).
- Sprain/Strain injuries are both transient and permanent.
- There are 3 grades of sprain/strain injuries.

Grades of Sprain/Strain Injuries

- Grade I (Primary): results in stretching of the muscles and/or ligaments. The symptoms tend to be limited to pain and swelling. This is a transient condition.
- Grade II (Secondary): is more severe and results in partial tearing of the muscles and/or ligaments. There is more significant swelling and bruising caused by bleeding under the skin. This is a permanent condition and will lead to permanent limitation of function to varying degrees.
- Grade III (Tertiary): is the most severe and results in complete tearing of the muscle and/or ligaments. The area is painful and function is limited and instability is present. This is a permanent condition and will lead to permanent and very significant limitation of function.

The Four Commonly Used Sprain/Strain Diagnosis Codes

- 847.0 – Sprain/Strain Injury
Cervical Spine
- 847.1 – Sprain/Strain Injury
Thoracic Spine
- 847.2 – Sprain/Strain Injury
Lumbar Spine
- 846.0 – Sprain/Strain Injury
Lumbosacral Spine
- All Sprain/Strain Diagnoses
refer to
- Grade I Injuries.

ICD10

- 14,000 codes to 69,000 codes.
- Sprain and Strain are two separate codes.
- Codes are now descriptive in nature.
- Initial Encounter/Subsequent Encounter.
- Location/Laterality.
- Driver/Passenger.
- Traffic/Nontraffic.
- Type of Vehicle driving/ Other type of vehicle.

Fact: Muscle injuries can result in Chronic Myofascial Pain Syndrome with trigger points of pain lasting indefinitely.

Chronic Myofascial Pain Syndrome (MPS) is a real-live clinical entity which is well-documented in the literature and poorly recognized in much of the medical community.

The textbook, Myofascial Pain & Dysfunction-The Trigger Point Manual, by Travell and Simons is the bible.

Foreman & Croft, Whiplash Injuries-The Cervical Acceleration/Deceleration Syndrome (3rd Ed, 2002) is also very reliable on this subject.

MPS is well recognized in the medical literature, but poorly recognized by the medical community. Perhaps the most succinct description of MPS is found in the AMA Continuing Education publication entitled Pain Management of Persistent Nonmalignant Pain.

Fact: MPS is a respected medical entity.

The AMA publication, Pain Management of Persistent Nonmalignant Pain describes the entity as follows:

Myofascial Pain Syndrome.

Myofascial pain syndrome is a condition of mild to severe muscle pain associated with trigger points, the pain is typically localized, often to a single muscle. The syndrome commonly follows “muscle overload” such as may occur with acute injury (e.g., following a near fall or intense exertion). Patients complain of a deep, aching pain that is worsened by activity. Postural muscles are often affected. The pain may wax and wane, but it is usually always present and at times can be severe.

Assessment and Diagnosis of Myofascial Pain

Trigger points are the diagnostic feature of the syndrome. On physical exam, there will be muscle tenderness and limited range of motion, and these may be associated with palpable trigger points, or “taught bands.” Helping the trigger point produces a local twitch (a visible shortening of the muscle), and referred pain. Myofascial pain, most often involves the posterior neck, low back, shoulders, and chest. Chronic pain in the muscles of the posterior neck and referred to muscles in the head and cause persistent headaches; trigger points in the lower back muscles can cause referred pain into the leg that mimics sciatica.

Fact: Recent research data has demonstrated structural muscle changes in patients with WAD.

There has been a substantial body of research investigating the **motor, muscle and sensorimotor changes** in individuals following whiplash injury, including loss of movement, altered muscle recruitment patterns, and morphological changes in neck muscles. (Sterling)

Biomedical research has proven that muscles injured in WAD trauma do not always heal.

Recent research data has provided evidence of **structural changes** in patients with chronic WAD that were not found to be present in those with non-traumatic neck pain or in healthy controls. These findings were found only in patients with chronic WAD symptoms. **Muscle fatty infiltration** in the neck extensor muscles of patients with chronic WAD were detected using MRI. (Elliott)

Fact: WAD trauma can result in permanent nerve damage.

WAD can cause damage to the **dorsal root ganglion**, resulting in hypersensitivity following WAD injury.

“**Peripheral nerve injury** is followed by change in expression of neurotransmitters, neuromodulators...in primary afferent neurons located in the dorsal root ganglion of the spinal cord.”

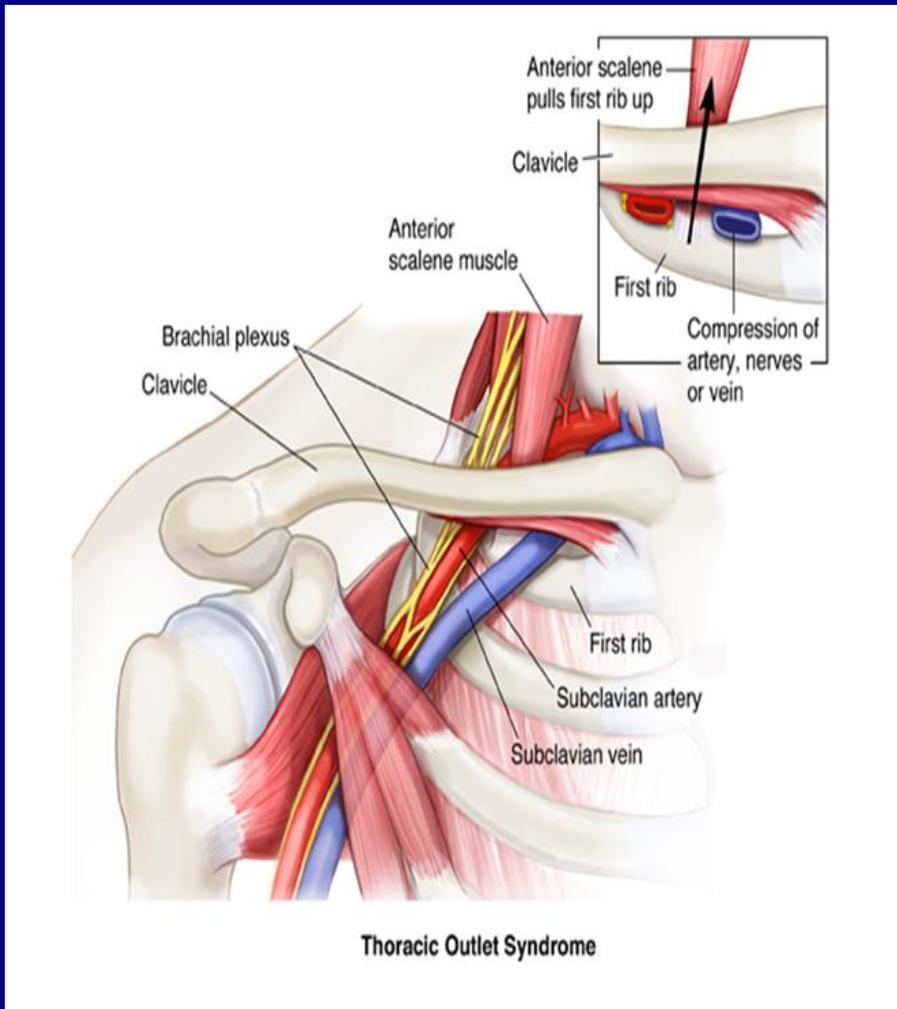
“Traumatic injury...of the peripheral nervous system often leads to **persistent pathophysiological pain** states” leading to a **permanent “rewiring”** of the pain pathways from the peripheral nerves to the brain.
(Davis)

As noted below, internal injury to the intervertebral discs can produce nerve ingrowth into the fissures, producing chronic discogenic pain.

Fact: CBS/TOS injuries are important.

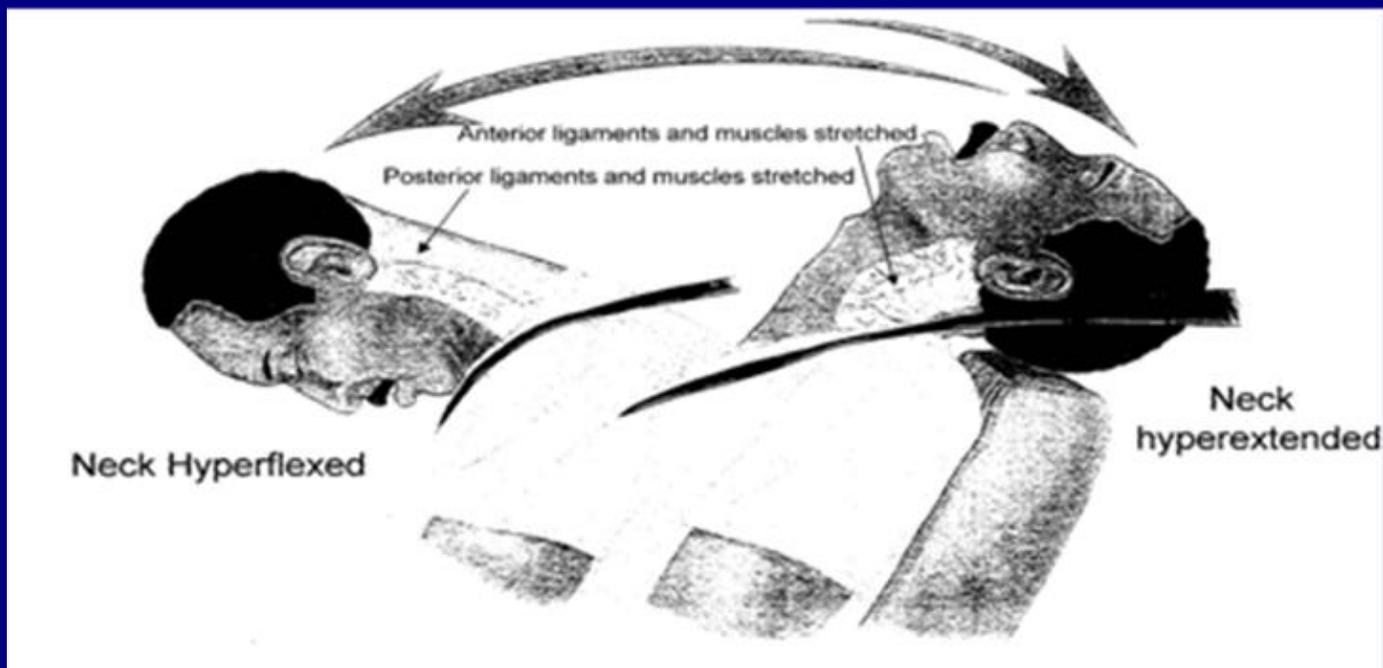
- **Cervicobrachial Syndrome** is a condition including a combination of spasm, pain, numbness, weakness and swelling in the region of the neck and shoulder.
- **Thoracic Outlet Syndrome (TOS)** is the result of pressure of a nerve bundle in the neck between the collar bone and a rib caused by a spasm of the scalene muscle or a congenital misplacement of the muscle into the first rib.

Thoracic Outlet Syndrome (TOS)



- **Thoracic Outlet Syndrome (TOS)** is the result of pressure of a nerve bundle in the neck between the collar bone and a rib caused by a spasm of the scalene muscle or a congenital misplacement of the muscle into the first rib.
- Symptoms of TOS are weakness, tingling, numbness of the arm and portion of the hand as well as heaviness of the upper extremities and headaches.
- In many patients with whiplash who do not respond to conventional therapy, doctors often overlook or misdiagnose the **Traumatic Thoracic Outlet Syndrome** as a congenital problem.

Fact: Ligamentous Injuries can result from CAD trauma and result in significant permanent impairment.

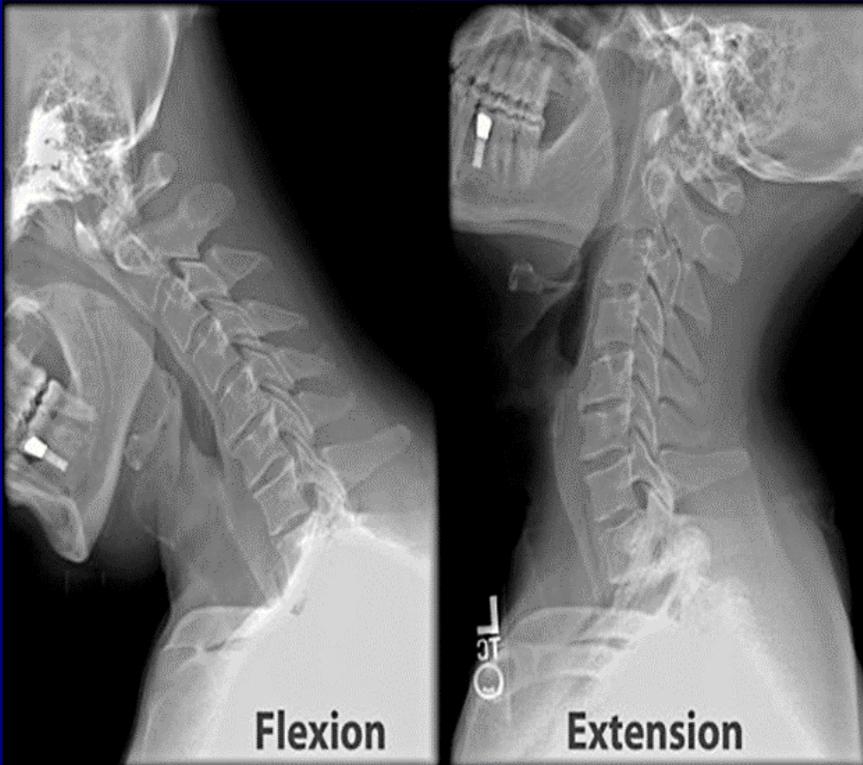


Ligamentous injury is at the core of all CAD (Cervical Acceleration/Deceleration) injuries.

Ligaments have poor vascular (blood) supply and don't heal well.

Ligaments that are stretched beyond their anatomical limit suffer “plastic deformity” (they stayed stretched permanently).

Fact: Ligament Injury Causes Spinal Instability (Laxity)



ICD-9 Code: 728.4

Diagnosed by
Flexion/Extension
X-rays or DMX

Permanent Injury

- Whiplash injury to the anterior spinal structures in the lower cervical spine can result in instability in extension, axial rotation and lateral bending (Stemper et al., 2005).
- All 3 grades of strain leave the ligament with permanent bodily damage (Torrez & Dupree, 2005).
- No treatment currently exists to restore an injured tendon or ligament to its normal condition (Birth Defects research (Part C) 75:226-236, 2005).
- Despite remodeling (healing), the biomechanical and mechanical properties of healed tendon tissue never match those of intact tendons. (The Royal College of Surgeons of Edinburgh and Ireland, Surgeons 3:5; 309-316 2005).

Most Commonly Injured Structures

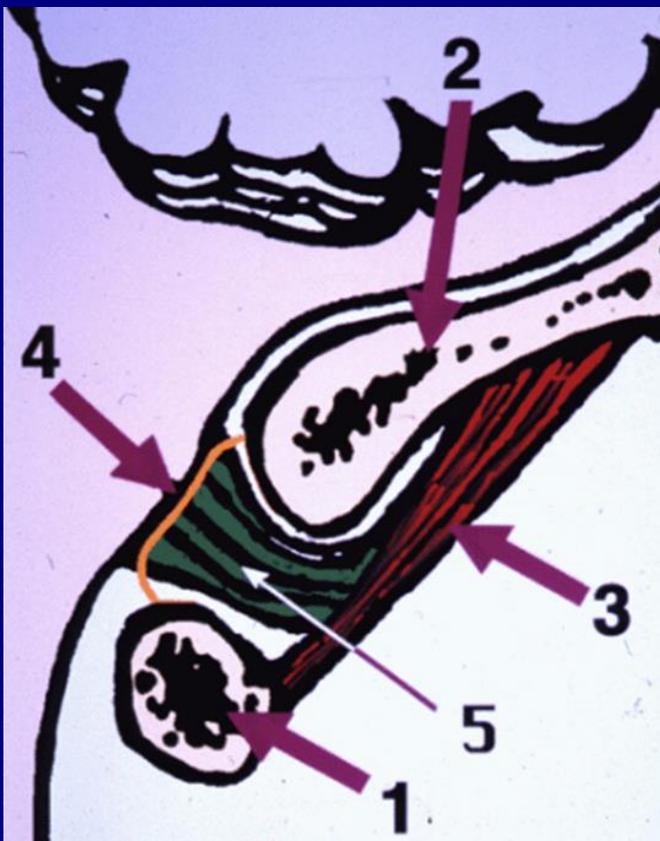
According to an extensive review of whiplash injury, the structures most likely to be injured in whiplash were:

- the facet capsule,
 - the intervertebral discs, and
 - the upper cervical ligaments
- (Hai-Bin, Yang, & Zheng-Gou, 2009, pg. 305).

Fact: Whiplash injury causes accelerated degenerative joint disease.

Fact: Upper Cervical Ligament Injury causes Cervicogenic Headaches

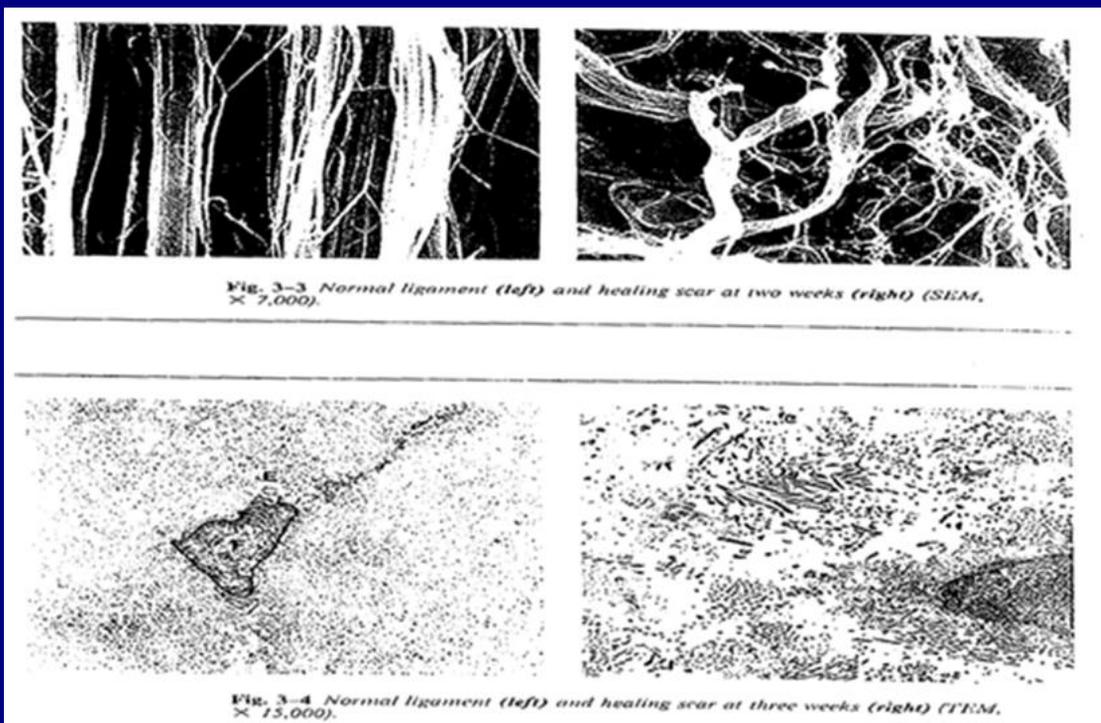
Connective Tissue Bridges between Muscle and Dura in the Upper Cervical Spine



1. First Cervical Vertebrae
2. Skull
3. Rectus Capitus Posterior Major
4. Dura Mater
5. Connective Tissue Bridge

(Dr. Gary Hack, Dr. Gwendolyn Dunn, Mi Young Toh, Encyclopedia Britannica 1998 Medical and Health Annual).

Fact: CAD trauma can cause over-stretching of cervical ligaments beyond their anatomical limit with “plastic deformity”.



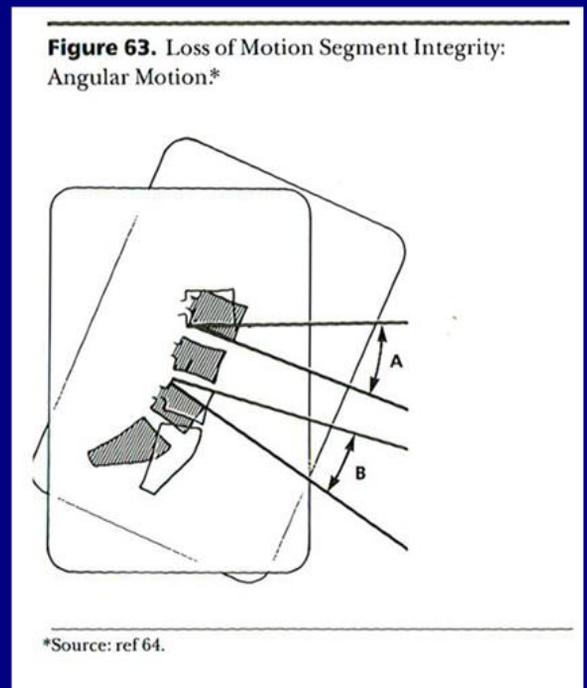
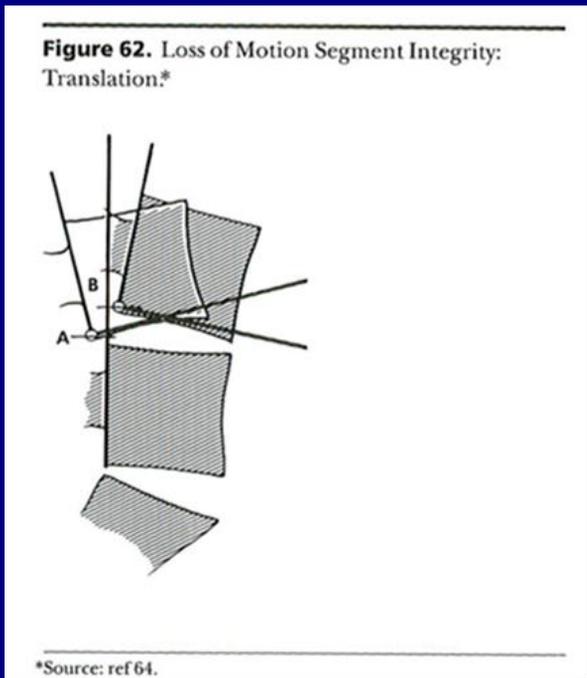
The over-stretching, or excessive distension (hyper-elongation), of the cervical ligaments can result in “plastic deformity” vs. “elastic deformity”, resulting in major permanent destruction of the ligament.

Fact: “Sub-failure” (stretch only) Ligamentous Injuries can be as serious as a complete tear.

Biomechanical research has proven the following:

1. Stretch (distension) damage of ligaments resulted in abnormal laxity equal to having “no ligamentous support” at all!!!
2. Partial injury to these ligaments resulted in laxity equivalent to “completely compromised” ligaments.
3. The Journal of Biomechanics recently reported that WAD trauma causes damage to the alar ligaments in 66% of whiplash victims. (Fice)

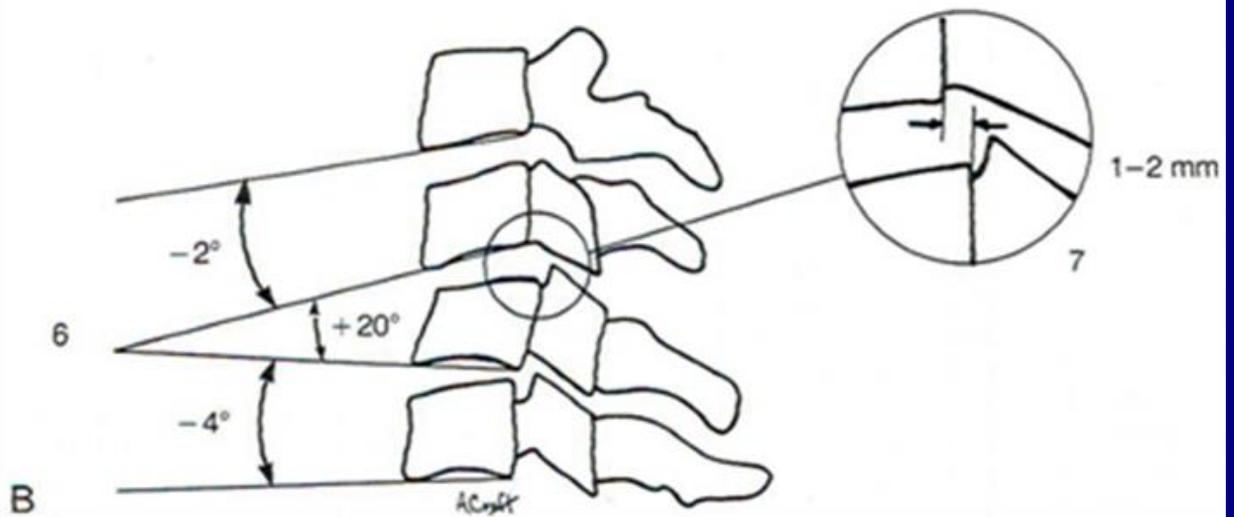
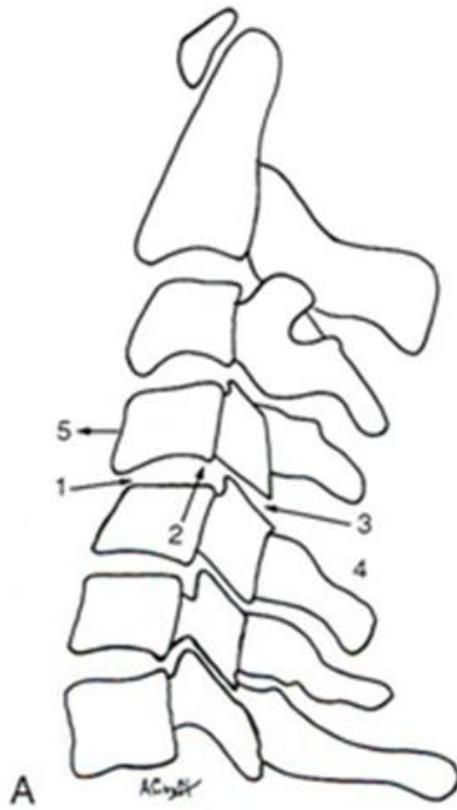
Fact: The result is “motion segment” impairment.



The **AMA Guides** acknowledge that ligament injuries produce two types of “motion segment” impairment:

- translational (see Fig 62),
- and
- angular (see Fig 63)

Foreman/Croft used a similar illustration of the same concept in 1995:



Fact: Digital Motion Xray can be used to prove motion segment impairment.

Digital Motion X-ray utilizes x-ray technology, and couples it with new digital and optic technology in the image intensifier to create high-resolution images of the spine and skeletal system in real-time motion.

DMX can produce 2700 still x-rays with the same radiation dose as the seven (7) view Cervical Davis series.

DMX can detect ligamentous laxity that static x-rays cannot see.

Most of these (static x-ray) studies...fail to define movement in a dynamic sense...deviation from the normal biokinetics may occur somewhere between these arcs of motion, which would not be visualized by static radiographic techniques.

FACT: Disc pain is the cause of chronic pain and permanent impairment in many cases-even without herniation or nerve impingement.

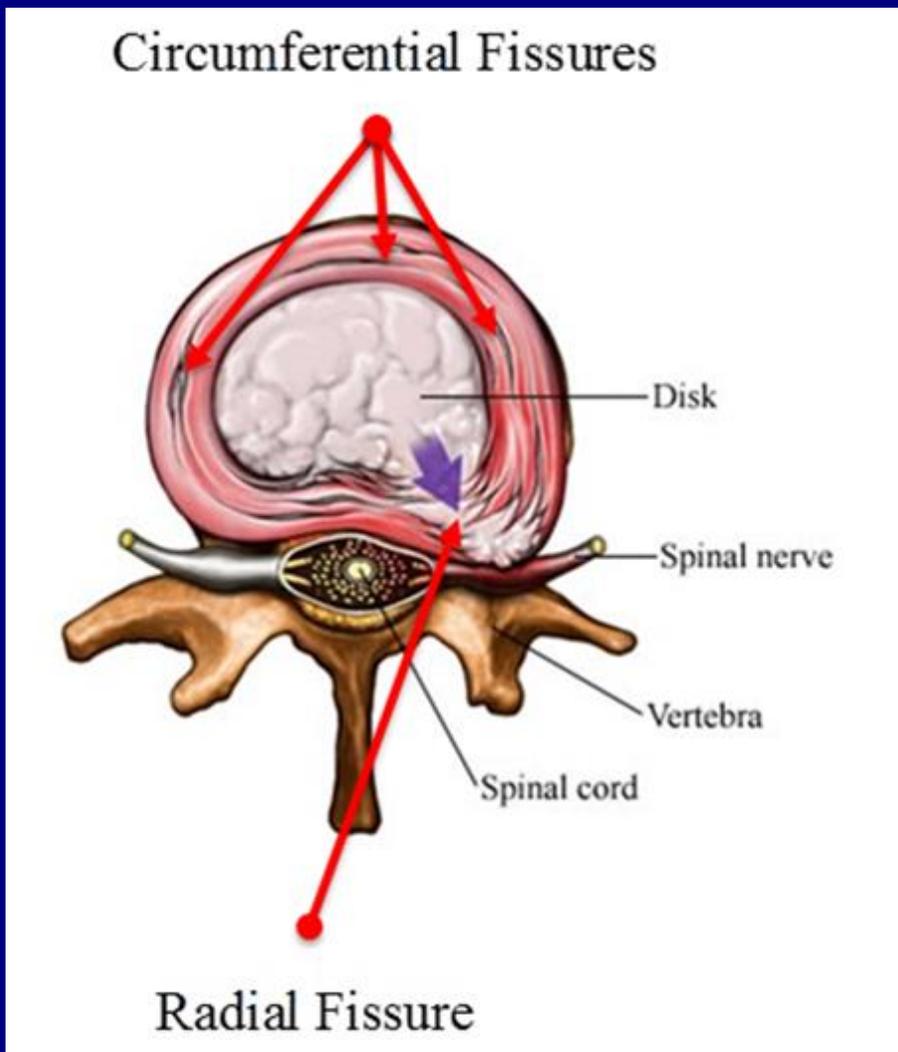
The outer wall of the disc (annulus) can be torn by whiplash trauma, i.e. an annular tear. That tear produces pain coming from the nerve endings in the annulus. That occurs without any nerve impingement.

The NASS says,

“The disc is the major cause of chronic neck pain in about 25% of patients...”

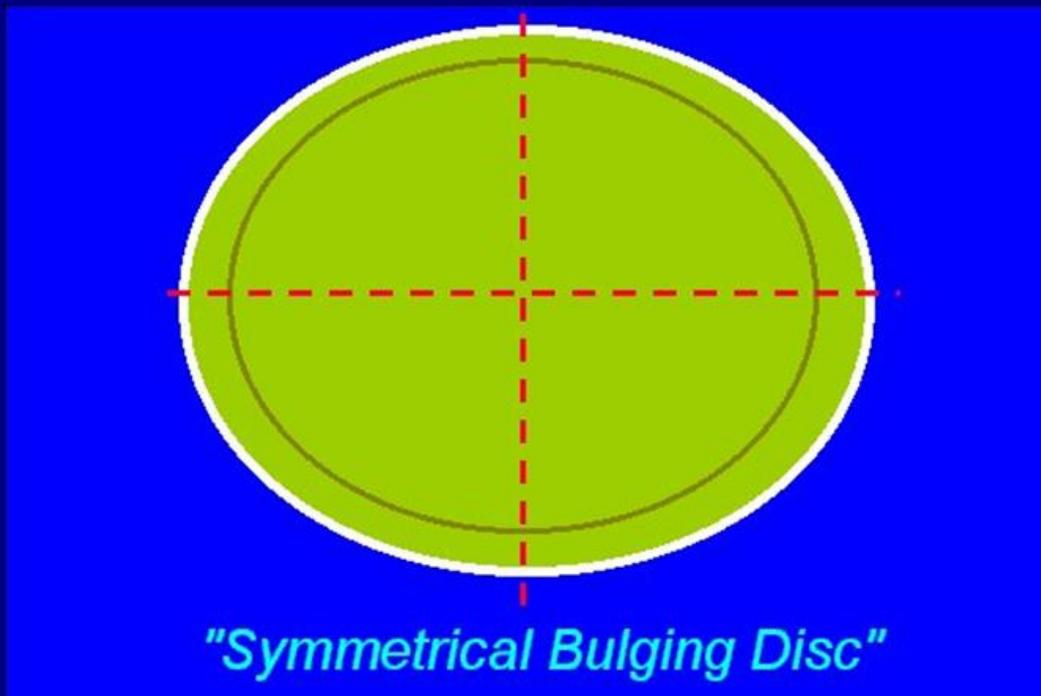
Many peer-reviewed medical articles have confirmed that disc pain is the cause of chronic pain-even where there is no actual nerve impingement. (Jinkens, Freemont)

Annular Fissures (Tears)



- Radial Annular Fissures are a tearing which begins within the center of the disc (nucleus pulposus) and progresses outward in a radial direction. Radial fissures are commonly associated with a single distinct trauma.
- Circumferential Annular (Concentric) Fissures are a separation or splitting apart of the annulus fibrosis, between the lamellae (rings Usually the result of repetitive micro trauma on the annulus is the cause of circumferential fissures.

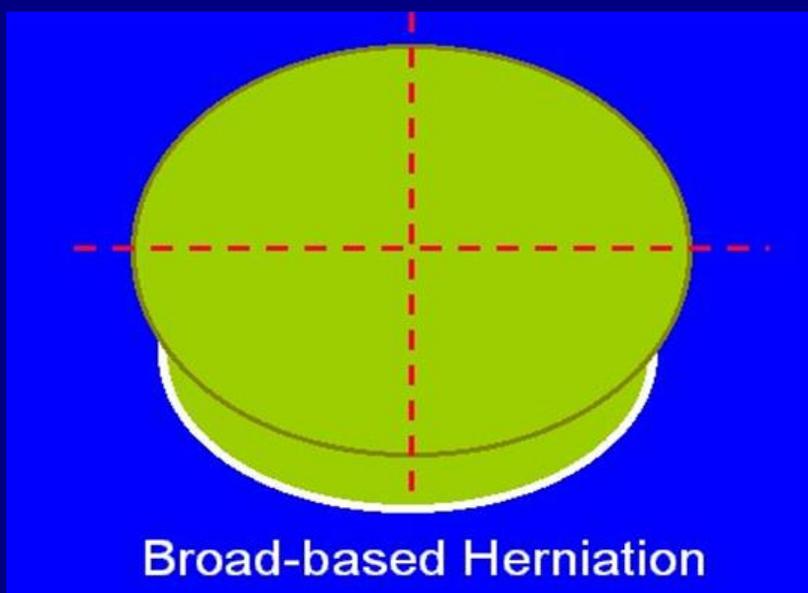
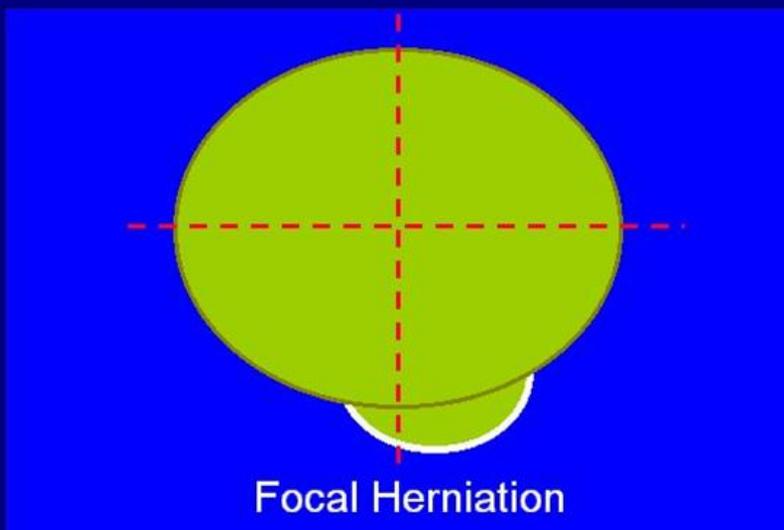
Disc Bulging



- The term bulging refers to the extension of disc borders beyond the apophyses.
- A bulging occurs in greater than 50% of the disc circumference and usually extends a short distance usually less than 3mm.
- Bulging occurs as a result of a normal variant, advanced disc degeneration, vertebral body remodeling, or adjacent structural deformities such as scoliosis or spondylolithesis.
- Disc bulging can be either symmetrical or asymmetrical.
- ***Disc bulging is degenerative but has been identified six months to one year post trauma along with osteophyte development.***

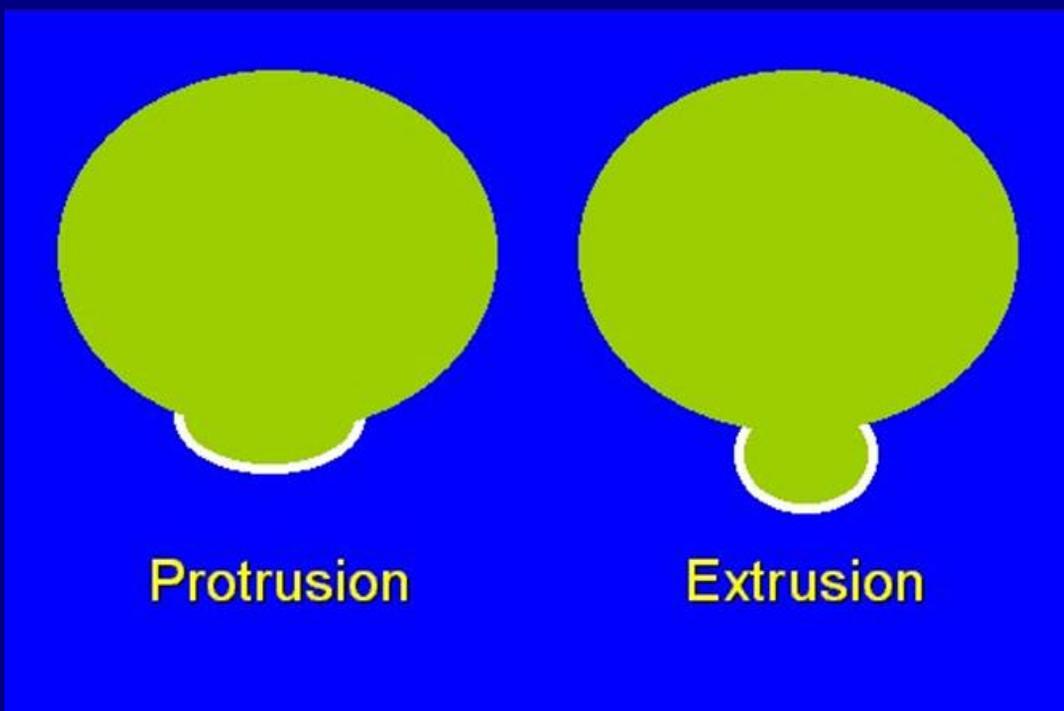
Focal vs. Broad-Based Disc Protrusions

- Disc Protrusions may be focal or broad-based. The distinction between the two is arbitrarily set at 25% of the circumference of the disc.
- Protrusions with a base less than 25% (90 degrees) of the circumference of the disc are “focal”.
- Protrusions encompassing 25% to 50% of the circumference of the disc is considered “broad-based”.



Disc Protrusion vs. Disc Extrusion

- The term “protrusion” is only appropriate in describing herniated disc material. A protrusion may be “focal” or “broad-based”.
- A disc protrusion’s depth in any plane is less than the base of the herniation in the same plane.
- A disc extrusion’s depth in any plane is greater than the base of the herniation in the same plane.



Fact: WAD trauma can cause accelerated degeneration of the intervertebral discs.

- Ligaments, intervertebral discs and muscles all work together to provide support to the human spine. When one of these structures is injured, an additional load is placed on the others.
- Ligament injury causes ligamentous laxity. The spinal muscles have to work harder to support the spine. The result is Myofascial Pain Syndrome with trigger points in the muscles that are being overworked.
- **Ligament laxity adds extra load on the IV discs, causing accelerated degeneration.** In our cases, repeat MRIs done years later have demonstrated large accelerated degeneration, disc desiccation, bulging, and actual herniations. In one case, the treating doctor rendered the opinion that a 16 year old girl had experienced 20 years of normal degeneration in the 2 years since the collision. See Schmidt, Diagnosis and Proof of Ligamentous Injury of the Cervical Spine.

Fact: Whiplash Doesn't Cause Stenosis but makes stenosis symptomatic.



- Stenosis is a congenital condition of narrowed space in the spinal column. Many people live their entire lives with stenosis-without problem.
- When they have CAD trauma, the stenosis becomes a problem-sometimes a big problem. The already narrowed space does not allow for the swelling and inflammation of the WAD injury., resulting in symptoms of numbness and tingling in their arms or legs, along with intense burning and shooting pain resulting from the inflammation.

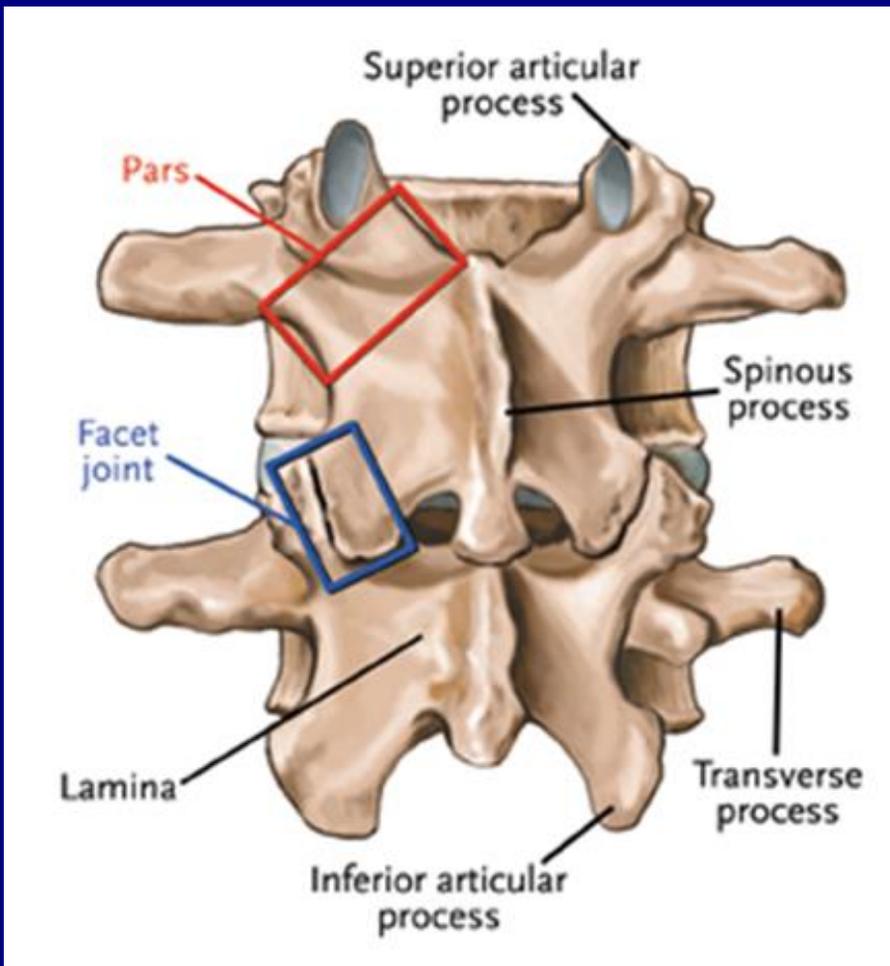
FACT: Pain from Facet Joint Injury is the primary cause of chronic pain lasting more than 1 year in 60% of the cases.

Serossi says,

According to peer-reviewed research, the main cause of neck pain and headache among patients with chronic motor vehicle crash-related injuries is injury to the cervical facet joint...60% of chronic nonradicular neck pain after MV crash-related injuries was caused by cervical facet joint injury. (Confirmed by biomechanical and post mortem studies)

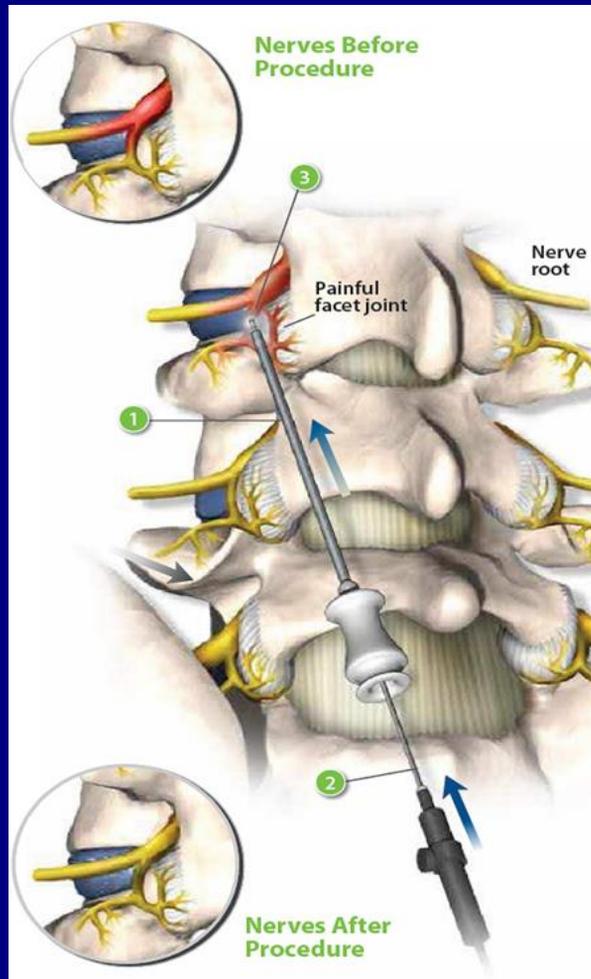
NASS agrees, saying, *“Facet Joint Pain is the most common cause of chronic neck pain after a car accident.”*

Facet Joint Syndrome



- Facet joint syndrome is the condition (inflammation, degeneration, etc.) that results from the injury to the facet joint (synovial) capsule and the facet ligaments and nerves, causing pain.. ICD Diagnosis Code M53.86.
- Facet joint syndrome causes referred pain into the upper and lower extremities, chest wall and head.
- Facet joint syndrome, traumatically induced, can be the cause of chronic (permanent) pain for a lifetime (Manchikanti et al. 2005).
- **50% of all chronic spinal pain sufferers had facet joint involvement (Merskey & Bogduk, 1994).**

Fact: RFNs effectively treat Facet Injuries



- RFN is a process where a needle electrode is radiographically guided into the facet nerve, which is then heated by radiofrequency waves to cauterize the facet nerve, reducing its ability to send pain messages to the brain.
- This procedure is only effective for one year, more or less, but then can be repeated should the pain return.
- It is usually effective. If effective the first time, it will be effective over 90% of the time when repeated.

Fact: Facet Injections/Radiofrequency Neurotomy is an effective treatment modality for Facet Joint Injury.

This procedure has become a well recognized and accepted procedure-at least with those informed about the procedure. It has been proven to be successful in over 60% of the cases with 90% pain relief initially.

However, the pain relief can only be expected to last for from 9 to 18 months. After that, the procedure can be repeated indefinitely. (See Rambarasingh, Smuck)

The procedure typically involves a series of three injections. The first two are exploratory injections done entirely for diagnostic purposes called medial branch blocks (MMB). They involve the injection of a short-term numbing agent. If the MMB injections successfully reduce or eliminate the pain, that proves that an RFN injection would likely be successful and can proceed. The final injection is the RFN itself using radiofrequency waves to anti-coagulate the facet nerve.

Fact: RFN treatment is generally accepted in the medical community-by those who are informed.

RFN is a well respected medical procedure for the treatment of chronic facet joint pain-by those “in the know.” It is being used in every single top medical school in the country. (Every single one of the top 5 medical schools is training residents to use RFN!)

It is most commonly used by Physiatrists (Physical & Rehabilitation Medicine specialist), Pain Medicine specialists and Anestheologists.) Yet, many neurologists and orthopedic surgeons remain “in the dark”. Even neurosurgeons!

Fact: Diagnosis & Treatment of Facet Joint Injury is a significant benefit to the client.

It is an established fact that RFN treatment of facet joint injuries adds significant value to the case, both in settlement and at trial for each of the following reasons:

1. RFN treatment provides significant pain relief in a large majority of cases.
2. Pain relief allows for improved rehabilitation.
3. Medial branch blocks and RFNs results provide objective diagnostic proof of injury.
4. Successful results from RFN disprove any claim of malingering. (The person who does not have true and real pain does not get better!)
5. Successful RFN results increase the value of the case, especially in terms of the future medical expenses.

FACT: Low back (lumbar) injury is often seen with WAD, i.e. “Lumbar Whipash”.

Flexion extension trauma also causes “Lumbar whiplash, the 2nd most common injury in WAD. (Seroussi). This injury can be due to anythe following:

- Disc injury;
- Facet joint injury;
- Sacroiliac joint injury.

“Lumbar whiplash” is the 2nd most common injury with WAD (Seroussi).

Fact: Lap belts contribute to “lumbar whiplash” because they only partially restraint the lumbar spine at the level of the belt only, allowing the segments of the lumbar spine above or below the beltline to be subjected to a significant lateral force in comparison to the level restrained. This produces a significant lateral force above and below the belt, abnormally stretching the lumbar ligaments, creating anterolisthesis and/or retrolisthesis.

Piriformis Syndrome

- The Piriformis is one of the small muscles deep in the buttock that rotates the leg outward. It runs from the base of the spine (the sacrum) to the femur.
- The sciatic nerve runs very close to this muscle and in approximately 10% of the population it passes through the muscle.
- If the piriformis muscle becomes tight it can put pressure on the sciatic nerve and cause pain and numbness which can radiate down the leg.
- It is commonly misdiagnosed as a lumbar intervertebral disc injury.

**Fact: Depression doesn't
cause WAD; WAD causes
depression!**

It is well established in the medical literature that depression and anxiety are present in a much higher than normal percentage of WAD victims. (Elliott 317)

So doesn't that simply prove that people with depression are more susceptible to WAD? No. Studies have proven that depression and anxiety disappear with recovery and/or reduction of pain-and then return with the return of pain. (Smith)

Fact: 60% of WAD victims also suffer a concussion injury-mostly overlooked.

The lawyers and legal assistants at the Schmidt Law Firm carefully screen for concussion injuries using the Rivermead Post Concussion Screening Questionnaire, which is respected and used in many Traumatic Brain Injury treatment facilities.

We find that approximately 60% of our client who have been in an MVA, have clear evidence of a concussion injury.

The large majority have been overlooked in the ER or Urgent Care for several reasons:

1. Respected medical studies have established that ER personnel do not properly screen for Concussions and TBIs. They simply ask the patient if they have experienced LOC! Further, most patients are in a state of shock, making concussion screening difficult.
2. The symptoms of Concussion/TBI often are delayed and progressively develop over days, weeks, and even months. (Mayo Clinic says 7-10 days)

Post Concussion Syndrome (F07.81)

- **Post concussion syndrome** is a collection of symptoms occurring after a head injury, occurring with or without a direct blow to the head or loss of consciousness.
- Symptoms include memory and concentration problems, mood swings, personality changes, headache, fatigue, dizziness, insomnia, or excessive drowsiness.
- Nearly 1/2 of concussion injuries are not diagnosed in the ER or Urgent Care.
- Concussions lead to Mild Traumatic Brain Injuries (mTBI)-many permanent with more than “mild” disability.

Emergency Room Doctors Cannot Be Expected to Diagnose Concussion Injury.

This is true for a number of reasons:

1. Most ER patients are suffering from shock and not in a condition for proper concussion evaluation.
2. Most ER doctors, and many other doctors, do not evaluate properly for concussion.
3. Glasgow Coma Scale evaluation is not helpful to assess for TBI.
4. It is well known that concussion injuries get progressively worse over weeks and months.

FACT: Whiplash/WAD can cause symptoms very similar to mild Traumatic Brain Injury (mTBI)

WAD symptoms include many symptoms the same as mTBIs:

-Headaches (cervicogenic or neck-related headaches;

-Difficulties with concentration or memory;

-Depression;

-Sleep disorder.

Source: NASS

Fact: Pain Related Impairment is the single most important feature of any Neck & Back Injury case.

- Muscle spasm subsides. Range of Motion improves. But the pain remains and chronic pain is the primary cause of ongoing disability and impairment.
- Pain Related Impairment (PRI) can be quantitatively and qualitatively assessed using the protocols established in the AMA Guides to the Evaluation of Permanent Impairment, 5th and 6th Ed.
- Disability caused by neck and back pain can be assessed using the Oswestry.
- Impairment due to cervicogenic headache pain can be assessed using the Henry Ford Headache Disability Index.
- Functional capacity due to pain can be assessed.

Fact: Pain is the #1 cause of disability in the US today.

The AMA Guides to the Evaluation of Permanent Impairment, 5th Ed. 2001, p. 567 states:

*“Pain is among the most common reasons for seeking medical attention, accounting for more than 70 million office visits to physicians each year. **It is also the most common cause of disability**, with chronic low back pain alone accounting for more disability than any other condition, resulting in nearly 150 million lost work days in 1988.” Id. at 567.*

Fact: Pain assessment is essential to the determination of impairment and disability in any soft tissue case.

Again, the AMA Guides has pronounced that pain is an “essential determinant” of disability:

Pain is an essential determinant of the incapacitation of many individuals who undergo impairment evaluation.

The AMA Guides declares that Pain Related Impairment can be both quantitatively and qualitatively assessed. It lists a number of protocol that can used to do so, including the following:

- The AMA Pain Related Impairment Protocol;
- The McGill Pain Assessment;
- The SF-36;
- The Oswestry Neck and Low Back assessments;
- The West Haven-Yale Multidimensional Pain Inventory
- Henry Ford Headache Disability Index

Fact: Pain Related Impairment exists without objective evidence.

The AMA in its publication Guides to the Evaluation of Permanent Impairment, 5th Ed., states that impairment evaluations based on the lack of objective findings are “fundamentally at odds” with modern medical doctrine. The exact language is this:

The notion that all impairments should be verifiable by objective evidence is... fundamentally at odds with a realistic understanding of how disease and injury operate to incapacitate people. Id at p. 567.

In fact, the guides state that reliance on objective evidence will be wrong 85% of the time:

...in up to 85% of individuals who report back pain, no pain producing pathology can be identified. Id at p. 566

Fact: The 1987 HHS Study calls for Functional Capacity Assessment related to pain.

The AMA Guides cite, in support of its positions as stated above, a study mandated by the U.S. Congress and commissioned by the secretary of the Department of Health and Human Services (HHS) that was conducted by the Institute of Medicine Committee on Pain, Disability and Chronic Illness Behavior.

The study was conducted by eminent physicians from Harvard Medical School, Cornell Medical School, UCLA School of Medicine, Walter Reed Army Medical Center and others.

The results of that study are reported in a 318 page book entitled *Pain and Disability: Clinical, Behavioral, and Public Policy Perspectives* (Institute of Medicine Committee on Pain, Disability and Chronic Illness Behavior, National Academy Press, 1987).

(HHS continued)

The DHH study reached the following conclusions:

(1) A definitive diagnosis can be reached in only 5-10% of the cases of chronic low back pain. (See p. 193);

(2) There is not always a strong correlation between pain intensity and the severity of pathology;

(3) A clear diagnosis can only be made in a small percentage of the cases of chronic pain.

(4) Disability evaluation should be based on “pain-related dysfunction” using “both multidimensional pain indices and measures of functional capacity”. (See p. 228).

Fact: The National Low Back Pain Study says that objective findings are present in only a small percentage of disability cases.

The National Low Back Pain Study (NLBPS), a 5 year, study by an eminent panel of doctors from the top medical schools in the U.S. reached the following conclusion:

Physical examinations of these patients do not provide significant clues for making a definitive diagnosis.

The study reports the patients disabled with pain frequently don't have objective findings:

1. Severe abnormalities such as muscle spasm, tenderness, and trigger points will only be present and 13.1% of the disabled patients;
2. Restrictions to range of motion were present in only 59.9% of the patients;
3. Motor weakness, was present in only 19.4 percent of the cases;
4. Positive straight leg raising findings were present in only 43.2% of the patients.

FACT: Pain assessment is mandated for every single patient in every single JCAHO hospital in the US.

The Joint Commission for the Accreditation of Hospitals Organization (JCAHO) is the entity that accredits almost all hospitals in the US. In 2001, JCAHO mandated that every single patient in every single JCAHO accredited hospital be assessed for pain. See JCAHO Standard PE 1.4.

The Veterans Health Directive for Veterans Hospitals, in May of 2003, mandated pain assessment using the “Pain as the 5th Vital Sign” protocol “in all clinical settings”.

Query: How can an IME doctor properly assess disability without a proper pain assessment?

Fact: Post Traumatic Stress Disorder (PTSD) is associated with WAD in a significant number of cases.

Psychological conditions occur in tandem with WAD, including Post Traumatic Stress Disorder (PTSD) in 22% of cases.

Depression is a common feature of WAD.

Kinesiophobia is prevalent, playing a more prominent role in low back injuries (LWAD)

PTSD can be a very serious and life altering condition with symptoms increasing in severity for 3-6 months and affecting the physiological healing process.. Delayed onset as long as years later has been documented. (Warner)

Mayo Clinic's patient information sheet lists MVAs as a known cause of PTSD.

Fact-Functional Capacities Assessment is Essential-by OTR?

Pain-related dysfunction should be performed using a functional capacities evaluation tool as recommended by the AMA. However, few treating physicians are willing to do so-or know how to do so!!!

The Schmidt Law Firm has recruited an Occupational Therapist to do functional capacities assessments, using standard and well recognized protocols, including some of the following:

- The AMA Pain Related Impairment Assessment;

- The Oswestry Neck and Low Back Assessment;

- The Henry Ford Hospital Headache Disability Index (DHI);

- The Dizziness Handicap Index (DHI);

Example: In a recent soft tissue injury case, we presented evidence that the client suffered from the following:

- PRI of 72%;

- Oswestry Cervical Impairment of 34%;

- Oswestry Lumbar Impairment of 58%

- Headache Disability of 64%.

Fact: The “Low Down” on Low Speed Impacts-They Do Cause Serious Injury.

The amount of force needed to cause neck and back injuries for any specific person cannot be predicted from Delta V (change in velocity) alone.

Human beings are not crash test dummies that all react in the same way. The results are variable from person-to-person.

The Brault study 1998, says that 30% of subjects exposed to 2.5 mph and Delta V experience Whiplash Associated Disorders. (Most cars on the road today have a 5 mph bumper. Therefore, many WADs can occur without any property damage.)

There is no direct connection between the amount of property damage and the amount of personal injury. (Davis)

Minor Impact Soft Tissue (MIST) Injuries

Property damage is not a valid predictor of acute injury nor of symptom duration. There is no valid connection between the amount of property damage and the amount of personal injury. (Croft & Freeman, 2005, pg.320).

The amount of personal injury depends on many factors other than the amount of property damage.



Car damage starts at between 8 to 12 mph. Personal injury starts at 6.8 mph. (Richter et al. 2000).

Fact: Head Placement alone is a big factor.

- Head position is a critical piece of information when evaluating a whiplash injury.
- If the head is turned the injury is worse (Siegmund et al. 2008).
- The maximum principal strain in the facet capsule doubles on the side towards which the head is turned (Siegmund et al. 2008).
- Whiplash forces are capable of tearing the cervical capsular ligaments, demonstrating a biomechanical basis for prolonged neck pain in whiplash victims (Ivancic et al. 2008).

You can bring justice to soft tissue neck & back cases by:

1. Knowing your medicine and keeping current on medical research.
2. Find and work with providers (medical doctors, chiropractic doctors, physical therapists, and occupational therapists) who are knowledgeable and up-to-date on current medical research.
3. Use disability and impairment ratings to the maximum.
4. Be actively involved in your client's treatment, by selecting the right providers and making certain that the client complies with treatment recommendations.
5. Take a significant number of cases to trial.

Good luck!!!

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