



10694 Jones Road, Suite 100



Spacious Reception Area



Modern, Individual Treatment Rooms



Large Progressive Rehab  
Exercise Area



Interventional Procedure Suite



Interventional Procedure Prep &  
Recovery Area

The Diagnostic and Injury Center of Houston, LLC  
10694 Jones Road  
Suite 100  
Houston, Texas 77065

#### HAVE YOU SEEN OUR FACILITY?

The Diagnostic and Injury Center of Houston, LLC is now in its new 5000+ square foot facility. Go to [www.diagnosticinjury.com](http://www.diagnosticinjury.com). Click on "Our Office" on the directory bar for a photo tour. You will be pleased. Your clients will be impressed. Check out our upcoming events.

#### THIS MONTH

Top 10 Reasons to be Treated at The Diagnostic and Injury Center of Houston

Lumbar Spondylosis and Low Back Pain

#### NEWS YOU CAN USE

- Renal Injury and Motor Vehicle Trauma
- Rate of Acceleration vs. property damage
- Red Light Cameras and Rear impact Crashes
- Low Back Pain and Cardiac Disease

Condition of the Month

Post Concussive Syndrome following Motor Vehicle Accident

#### TOP 10 REASONS TO BE TREATED AT THE DIAGNOSTIC AND INJURY CENTER OF HOUSTON, LLC

- 1) Credibility and Experience. All practitioners are Board Certified with over one hundred year's combined experience.
- 2) Integrative Approach to Injury Care. Integration of multidiscipline health care providers to best manage you or your client's injuries. Medical, orthopedic, interventional procedures, chiropractic, physical modality, and other services are available.
- 3) Evidence Based Care. Our integrative approach and treatment methods are confirmed by evidence based reproducible research.
- 4) Forensic Substantiation. Diagnosis and treatment of kinetic injuries is based on current forensic literature.
- 5) One Stop Care. We offer orthopedic care, medical treatment, chiropractic care, interventional procedures (injections, pain blocks, ESI, facet injections, etc.), surgical evaluations, physical modalities, (therapy), progressive resistance physical rehab exercise, EKG, lab procedures, blood work-up, urinalysis, digital x-ray, MRI, CT, Diagnostic Ultrasound, and other care all under one roof.
- 6) All Digital Format. Reports, photographs, x-rays, and records are all digitally prepared and sent.
- 7) Beautiful New Facility. Diagnosis and treatment is given in our 5000 plus square foot modern, state of the art facility. No "Doc in a Box" stigma.
- 8) Extended Hours. We offer treatment hours from 8:00 am until 6:00 pm several days a week.
- 9) Convenient Location. We are conveniently located in Northwest Houston off of Highway 290 at FM 1960 on Jones Road.
- 10) You and Your Clients Will Be Impressed. You will be pleased.

# NEWS YOU CAN USE

## RENAL (KIDNEY) INJURY AND MOTOR VEHICLE TRAUMA

A September 2007 study published in the “Journal of Urology” confirms what this office has suspected for quite some time – renal injuries frequently occur with front, side, and rear impacts. The Diagnostic and Injury Center routinely runs a urinalysis on its motor vehicle crash patients with frequent positive results including blood found in the urine. Injuries occur, based on this published study, in side impacts due to side panel intrusion and armrest contact. In frontal crashes acceleration into seatbelts and the steering wheel appears to cause the injury. In rear impact seat collapse and seat alteration can cause injury.

As we always say, if you don’t know what to look for, you can’t find it. The Diagnostic and Injury Center is highly experienced with motor vehicle trauma patients.

## RED LIGHT CAMERAS AND REAR IMPACT CRASHES

The red light cameras in Houston are coming back on. In 2009 676 persons were killed and 113,000 injured by red light runners. One third that died were the red light runners themselves. Twenty five percent of the runners had a blood alcohol index of over the 0.08 limit. According to the Insurance Institute of Highway Safety fatal intersection crashes were diminished by 35% for camera equipped cities versus 14% for non-camera equipped cities.

The significant factor in camera intersections is the increase of whiplash injuries. Facing a stiff fine for running a camera equipped light has induced a strong incentive to stop even on a yellow light. The result has been an increase in rear impact collisions leading to rear acceleration neck injuries.



## NEED MORE FORENSIC ADVICE?

The Diagnostic and Injury Center of Houston, LLC constantly strives to maintain the most advanced research data on kinetic (motion) induced and motor vehicle crash injury, crash kinetics, and forensic data. Need advice on a crash or problem injury? We can help. If you don’t know what to look for, you can’t find it. Call us – (281) 890-2225.

## RATE OF CHANGE OF ACCELERATION

### More Significant Than Property Damage in Consideration of Cervical Injuries

An article published in “Accident Analysis Prevention” 2008 reveals that rate of acceleration pulse in rear impact trauma resulting in head acceleration is key to injuries sustained to the cervical spine in rear impact trauma. The study examined acceleration “Pulse” or jerk in low-velocity, low damage rear impact collisions. It found that the impact pulse was most significant to the injury sustained and not damage.

As always found in non-insurance funded research, there is no correlation between property damage and injury sustained.

## LOW BACK PAIN AND CARDIAC DISEASE

Multiple studies have revealed a direct correlation of cardiac and vascular disease with low back pain. Many times individuals with low back injuries from motor vehicle trauma are slow to recover. Consideration must be made to cardiac complications as a factor in the healing rate of older or cardiac/vascular disease history patients.

# CONDITION OF THE MONTH

## LUMBAR SPONDYLOSIS AND LOW BACK PAIN



Frequently we are asked “how much low back pain did the person have before the motor vehicle crash occurred”. In some proportion of claims the injured party will neglect to report prior symptoms, injuries, treatment, and/or impairment. A study was undertaken at Stanford a few years back that demonstrated this propensity.

Radiographic findings of spondylosis and disc degeneration are often taken as good evidence of either prior injury, pain, impairment, or a combination of those things. More advanced forms of spondylosis or disc degeneration are very often associated with back pain. Spondylosis that is localized to a single spinal segment is considered a very strong indicator of prior injury at that segment. Disc spondylosis is also sometimes a source of symptoms.

On the other hand, it is also true that many rather severe cases of spondylosis and disc degeneration are discovered incidentally in imaging for some other condition. The injured party, although spondylosis and disc degeneration are present, could have been completely asymptomatic prior to the onset of the new injury. Practitioners who specialize in neuromuscular skeletal conditions, as we do at The Diagnostic and Injury Center of Houston, are familiar with this relationship. It seems fair to state that there is a clear **association** between low back pain and degenerative conditions, but whether there is an adequate **correlation** upon which to boast an opinion in a contested medical claim is the more fundamental question. Better yet, we should look at sensitivity and specificity.

A recent study looking at this association among older subjects (70 years and older) has once again demonstrated that no clear correlation exists until there is a loss of disc height. Even then, there is only a significant correlation in women. Many studies support the theory that disc degeneration precedes spondylosis.

1. Muraki S, Oka H, Akune T, A. M, et al. Prevalence of radiographic lumbar spondylosis and its association with low back pain in elderly subjects population based cohorts; The ROAD Study. Annual Rheumatoid Disease 2011; 68: 1401-6.
2. Van Saase JLCM, et al. Epidemiology of Osteoarthritis: Zoetermeer Survey. Comparison of radiologic osteoarthritis in a Dutch population with that and ten other populations. Annual Rheumatoid Disease 1989; 48: 271-80.

## POST CONCUSSIVE SYNDROME FOLLOWING MOTOR VEHICLE TRAUMA

I have previously addressed mild traumatic brain injury (MTBI) in our newsletter. I readdress due to the large percentage of missed diagnosis we see in this office during our assessment of previously examined patients.

MTBI represents 70-90% of all treated brain injuries <sup>1</sup>. Today the combination of high resolution MRI with specific tailoring of scanning protocols provides evidence of microstructural abnormalities in MTBI patients <sup>2</sup>.

Appropriate physical examination including vital signs, radiological findings, and a comprehensive neurologic examination is critical to the assessment of MTBI.

If you don’t know what to look for, you can’t find it.

1. Cassity JD, et al. Incidence, risk factors and prevention of mild traumatic brain injury: results of the WHO Collaborating Centre Task Force on Mild Traumatic Brain Injury. J Rehabil Med, 2004 Feb; (43 Suppl):28-60.
2. Umile EM, et al, Dynamic imaging in mild traumatic brain injury: support for the theory of medical temporal vulnerability. Arch Phys Med Rehabil, 2002 Nov; 83(11): 1506-13.