



## CASE STUDY VII

### *Acute Low Back Pain due to Vehicular Accident*

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#### **PATIENT HISTORY:**

Shaneika K. – A five months pregnant 21 year old female who was the seat-belted driver in a motor vehicle accident. The patient reported immediate sharp stabbing pain in her low back, pelvis, and lower abdomen. The patient reported the discomfort to worsen soon after the accident and reported to the hospital where she was prescribed suitable anti-inflammatory and pain killers. This only provided marginal relief. She reported this discomfort to worsen when bending or twisting at waist. The patient reported 6 out of 10 on the pain scale and has difficulty in both her activities of daily living and sleeping. She also reported discomfort while at work, staying seated for prolonged periods of time, and going from a seated to standing position. She therefore is unable to continue working at this time. All other patient history is unremarkable.

#### **EXAMINATION FINDINGS:**

Positive Orthopedic Tests indicating lumbar strain/sprain and associated generalized muscle spasms due to trauma. (+Kemps, +Straight/Well Leg Raise, +3/5 Muscle Strength on Iliopsoas and Piriformis, +Milgrams, No Sensory Deficits were noted, All Reflexes within Normal Limits) No X-rays were taken because of pregnancy. Malposition of vertebrae at multiple levels was noted with associated subluxation rotations with palpatory examination.

#### **DIAGNOSIS:**

Lumbar Sprain/Strain with Radiculopathy and Associated Hypertonicity in Paraspinal Musculature.

#### **TREATMENT PLAN:**

##### *2 Months*

*1<sup>st</sup> Week* – treated patient a total of 5 times. Each visit consisted of ice therapy to reduce the inflammation in the soft tissue and pre-modulated interferential therapy to provide pain relief. Ancillary therapy was followed by a gentle manipulation to the lumbar spine. Once the patient's pain reduced to lower than 5 out of 10 on pain scale, therapy was changed from ice therapy to heat therapy to address low grade soreness and tightness.

*2<sup>nd</sup> Week* – treated patient a total of 4 times. Each visit consisted of heat therapy to reduce the tightness in the soft tissue and pre-modulated interferential therapy to provide pain relief. Ancillary therapy was followed by a gentle manipulation to the cervical and lumbar spine.

*3<sup>rd</sup> – 5<sup>th</sup> Week* – treated patient a total of 9 times. Each visit consisted of heat therapy to reduce the tightness in the soft tissue and Russian stimulation therapy to provide pain relief and strengthening of associated musculature. Ancillary therapy was followed by a gentle manipulation to the lumbar spine. Patient was given a protocol of pregnancy related lumbar stretches/exercises to address residual tightness and pain. Patient was also prescribed a lower extremity orthopedic pillow to aid in relief while sleeping.

*6<sup>th</sup> – 8<sup>th</sup> Week* – treated patient a total of 5 times. Each visit consisted of heat therapy to reduce the tightness in the soft tissue and Russian stimulation therapy to provide pain relief and strengthening of associated musculature. Ancillary therapy was followed by a gentle manipulation to the lumbar spine.

#### **OUTCOME:**

Complete resolution of low back pain due to motor vehicle accident. Due to the patient's pregnancy residual soreness and joint restriction is to be expected. Patient was released and it is anticipated that after pregnancy patient will return to full gainful employment with no permanent nor partial impairment.