Asia-Pacific Chiropractic Journal

CASEREPORT

Structural and biochemical interactions within the Chiropractic patient: An Adrenal Stress Disorder (ASD) case report

Scott Cuthbert

Narrative: Adrenal stress disorders (ASD) are one of the most common conditions globally, and stress-related illnesses are one of the most common comorbid conditions seen in Chiropractic patients and faced by integrative Chiropractic practitioners.

Every Chiropractor will discuss stress with a large number of their patients simply because most sick people, especially if they've been sick for any length of time, are involved with stress as a complicating factor of their health problems. In some cases, 'finding and fixing' this primary human problem unravels an immense complexity of other Chiropractic-relevant troubles in our patients.

Chiropractic applied kinesiology manual muscle testing procedures can be a helpful screening tool for patients with ASD. This case report discusses the story of a patient whose positive outcomes improved dramatically once ASD was recognised and treated, in addition to all the physical corrections made by the chiropractor. His complicated joint dysfunctions became very minor in his life after nearly a decade of pain.

Indexing Terms: Chiropractic; AK; Applied Kinesiology; Adrenal stress disorders; stress.

Patient story and case report

The patient on initial consultation related that he was the restrained driver of a GMC pickup truck traveling north on Santa Fe Drive in Pueblo, CO at about 35 mph, 56 kph. He stated that a GMC pickup came out of a driveway traveling about 20-25 mph, 30-40 kph and struck his vehicle on the right front. The patient's truck was air-bag equipped, but it did not deploy.

> *...Goodheart says 'If you must adjust the same subluxation more than twice, you are probably treating an effect instead of a cause' ...'*

Road conditions were dry. At the time of impact the patient stated that he thinks he hit the steering wheel and was shaken back and forth. He was not unconscious, cut or bruised. Other than being emotionally shaken he had no immediate symptoms. His truck was towed from the accident scene, and he left by private automobile. He did not go to the hospital at the time of accident. Later that evening he developed neck and back pain and a headache with left shoulder pain.

The patient informed me of his previous Chiropractic treatments for nine months, at a schedule of 2 or 3 times per week, and that what bothered him the

most was the side-lying lower back lumbar-roll adjustment. He stated that three to four weeks after starting treatment with his previous Chiropractor he developed pain radiating down his leg, which was aggravated by the side-posture adjustment. The patient was then referred by the Chiropractor for massage therapy. He states that he gets relief from the massage therapy and that's partially what keeps him going at the time of our examination.

He had a series of acupuncture treatments with a licensed acupuncturist (L.Ac). He stated he was not obtaining any relief from the acupuncture treatment, and he and the L.Ac mutually agreed to discontinue treatment because of lack of results. The L.Ac referred him to another Chiropractor, and she continued the referral for massage therapy. The patient related that the second Chiropractor's treatment was usually ultrasound and more gentle spinal adjustments than what he received initially. The patient continued treatment, one time a week, or every other week. He stated that he gets relief from her treatment.

The patient was then referred for physical therapy, which he stated did not help. At some point during this long treatment period he was also referred for psychological evaluation and treatment. He was having a lot of problems with financial stress and ongoing pain, and the psychological counselling was helpful. He was also referred to another PT for functional capacity evaluation. Initially the Total Gym unit was approved by a representative of his insurance company on the PTs recommendation, and he ordered it by credit card. Then when the time came for his insurance company to reimburse him, the company said it would not be paid. Eventually there was a compromise where the insurance company paid for half of the unit and the patient paid the other half.

The patient said that he was continuing his exercises on the home unit, as well as using an inversion table; and they helped.

AK Chiropractic Examination

After recording his long history and reviewing his thick file of records post-MVA, he came to me for examination and treatment, based on a referral from his lawyer. The current symptoms were stiffness in the low back, weakness in the left leg, and increased pain in the left leg with yard work. He had constant pain in the right sacroiliac area, radiating to the left. Occasionally he had numbness in his left foot. He had a headache two or three times a week. He stated the shoulder pain that he once had was resolved by one of his previous Chiropractors.

The patient also had Type II diabetes. He stated that he is well-controlled at the time of our encounter, with Glucophage prescribed and regulated by his MD. He checks his blood sugar regularly, and in the evening it typically runs around 130 mg/dl. On a fasting level it runs 90-100 mg/dl. In addition to the Glucophage he is taking Amitriptyline, which he says is necessary for him to obtain sleep. He sleeps about six hours with the medication. He states his energy level is poor. In a routine system and symptom review he denied any other health problems.

He had a long history of what he himself called whiplash injuries from motor vehicle accidents in 1984, 1992, and 1996, being motorcycle crashes. He stated that he recovered completely from all of those accidents. He had previous treatment for the accidents by one of the Chiropractors whom he saw described previously. He denied any other injuries, with the exception of a right wrist fracture when he was young, occasional headaches, and MVA-related stress. Stated height 5 feet 7 inches 170cm, weight 160 lbs 72.5 kg.

An immediate suspicion derived from the initial consultation was that the patient had a potential adrenal stress disorder (ASD). This is a common phenomenon for chronic pain patients, as well as diabetics and emotionally distressed individuals. Examination described next confirmed this suspicion.

Orthopaedic Tests that correlate with Manual Muscle Tests

Lower body examination

Postural evaluation revealed right head elevation and right shoulder elevation. The spinal AP curves were within normal limits. Visual inspection of muscle form was normal and symmetrical.

Romberg, finger-to-finger, finger-to-nose and heel-to-shin tests were passed. Biceps, triceps, brachioradialis, quadriceps, and Achilles reflexes were 2+ bilaterally. Babinski test was down-turning. Sensory functions appeared generally normal.

The patient rose from the lumbar-flexed position by using his hands to walk up his legs (Minor's sign). Adam's position was limited in flexion but balanced. Trendelenburg test was positive on the right, but standing on the right leg made it appear that the quadriceps was going to give out; however, he recovered without falling. Kemp test was negative bilaterally for radiation to the legs; however, left Kemp test caused some discomfort in the right sacroiliac area. Bechterew tests bilaterally caused discomfort in the right sacroiliac, but there was no radiation to the legs. Lindner's seated test is negative.

Clinical reasoning

The purpose of specific muscle tests in my examinations are to determine if there is objective evidence to substantiate the continuing subjective complaints. If so, then the examination design continues to determine the cause of the dysfunction and whether it can be improved with Chiropractic. To accomplish this, various sensory receptor stimuli are applied to determine if the motor nerve and muscle dysfunction is improved, indicating the weakness is functional in nature and has potential for improvement. If there is improved muscle function, the type of sensory stimulus that causes the improvement separates the problem from a peripheral neuropathy, receptor, spinal cord, brainstem, cerebellum, thalamus, or cortical lesion. Unless otherwise noted the muscle tests listed in this report as strong are equivalent to '5' and weak as a '4' as graded in the Guides to the Evaluation of Permanent Impairment, 6th edition, by the American Medical Association. (1)

Quadriceps muscles as a group were weak bilaterally, more so on the left. Several specific vectors of pressure to the lumbar spine strengthen the quadriceps muscles (called in Applied Kinesiology Vertebral Challenge). There is no change in muscle strength when pressure is applied to vertebrae that are not expected to affect the quadriceps muscles. Psoas and tensor fascia lata muscles were weak bilaterally. The psoas and tensor fascia lata muscles strengthen to suboccipital stimulation (upper cervical ligaments). Also the psoas muscles strengthen with forced inspiration that was held.

Right sartorius muscle was weak, left was strong. Gracilis muscles were weak bilaterally. Extensor hallucis muscles were weak on the right, strong on the left. Tibialis posterior and peroneus longus and brevis were weak bilaterally. Toe walking showed lack of inversion of the heel on the left and right.

Upper body examination

Deep neck flexor muscles were strong. Sternocleidomastoid muscles were weak bilaterally. When the sternocleidomastoid muscles were tested there was an attempt to rotate the head toward neutral. This is a normal effort to recruit the scalene muscles into the test in the presence of weak sternocleidomastoid muscles and must be carefully noted by the astute muscle testing examiner. (3) The sternocleidomastoid muscles strengthen with phases of forced respiration held while the muscle test is repeated: an indication in AK of stomatognathic or cranial system dysfunction.

Pectoralis muscles (clavicular and sternal divisions) were strong bilaterally. When the patient moved his eyes through the cardinal directions of motion there was a saccade in the left lower quadrant. When the eyes are held in this position there is generalised muscle weakness, known as a positive ocular lock to the left lower quadrant and indicating stomatognathic or cranial dysfunction. In both AK and SOT analysis these dysfunctions correlate frequently in patients who have a Category 1-3 pelvic dysfunction. (4)

The right deltoid, serratus anticus, infraspinatus, supraspinatus, subscapularis, teres minor, opponens pollicis, and rhomboid muscles were strong. Right flexor digiti minimi brevis was weak. Left deltoid, serratus anticus, infraspinatus, supraspinatus, subscapularis, teres minor, rhomboid, flexor digiti minimi brevis, and opponens pollicis muscles were strong. Lower trapezius muscles were strong. Cervical extensor muscles tested unilaterally and bilaterally were strong.

Cervical range of motion was limited in flexion and lateral rotation on the left. All cervical range of motion movements are without pain.

The Adrenal Glands involvement (2, 5, 7)

Sitting blood pressure 128/81, pulse rate 86; standing b/p 119/75, pulse 85. Standing and lying blood pressure were also deviating, indicating a positive Ragland's sign. The patient's systolic blood pressure dropped 9 mm when he moved from sitting to standing, called the positive Ragland's Sign. (2, 5, 7) It is normal for the blood pressure to rise to combat gravity for blood supply to the brain against gravity.

Upon questioning, the patient acknowledged that he frequently gets lightheaded when rising to a standing position from sitting; this lasts for several seconds; bright lights bother his eyes; the 'paradoxical pupillary reaction'; (consistent with ASD) was present; and finally the ligament stretch reaction. (These physical tests are additional physical signs in AK's neurophysiological examination regimen of adrenal gland dysfunctions, (7) also consistent with chronic and inflammatory pain and emotional distress.)

There is an association in applied kinesiology of adrenal function with the sartorius and gracilis and posterior tibialis muscles, noted above as inhibited. In this case, it proved to be necessary to improve the patient's adrenal gland function with chiropractic subluxation correction and nutritional support in order to maintain the pelvic category corrections

In an important previous report, Cuthbert and colleagues used salivary hormone testing in their practices to find that out of 110 chiropractic patients assessed for ASD, and given salivary hormone tests, that 58 of these patients had the positive Ragland's Sign. The other AK correlations found were as follows. (2)

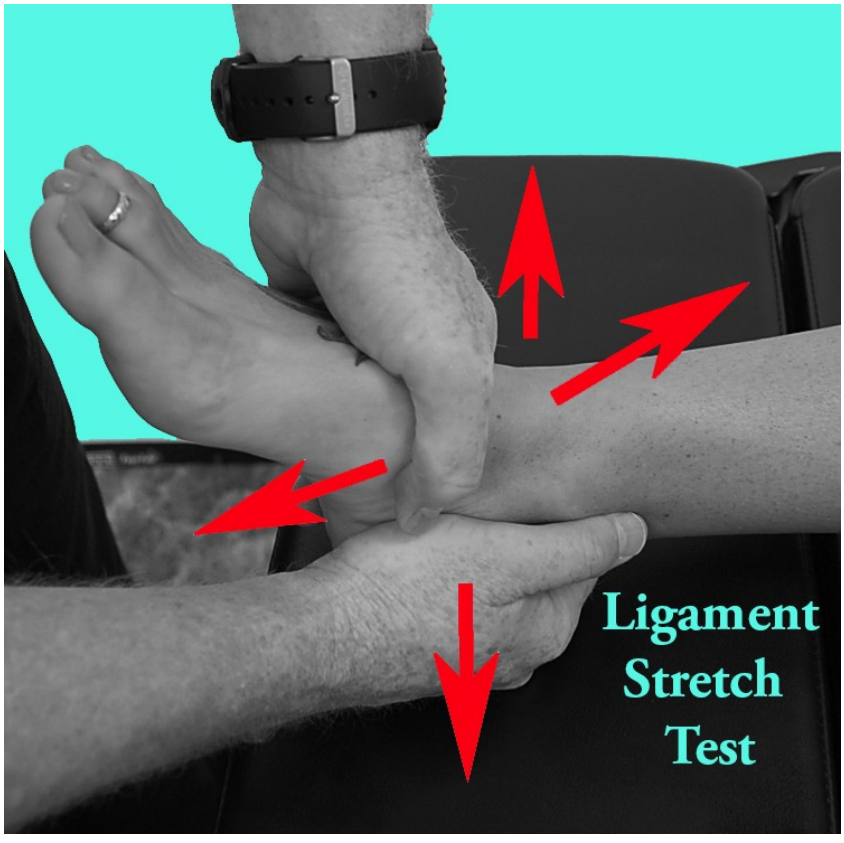
AK Correlations Found In Adrenal Stress Disorder

# MMT Correlations – (Adrenal-related muscle found inhibited)	Ragland's Sign/ Paradoxical Pupillary Reaction	Abnormal Cortisol	Abnormal Cortisol: DHEA ratio	Associated and Expected Signs and Symptoms
110	58	101	65	110

Zodkoy, in an important paper about the United States military, showed successful outcomes for ASD or what is more commonly referred to as post-traumatic stress disorder (PTSD) using AK methods. (8)

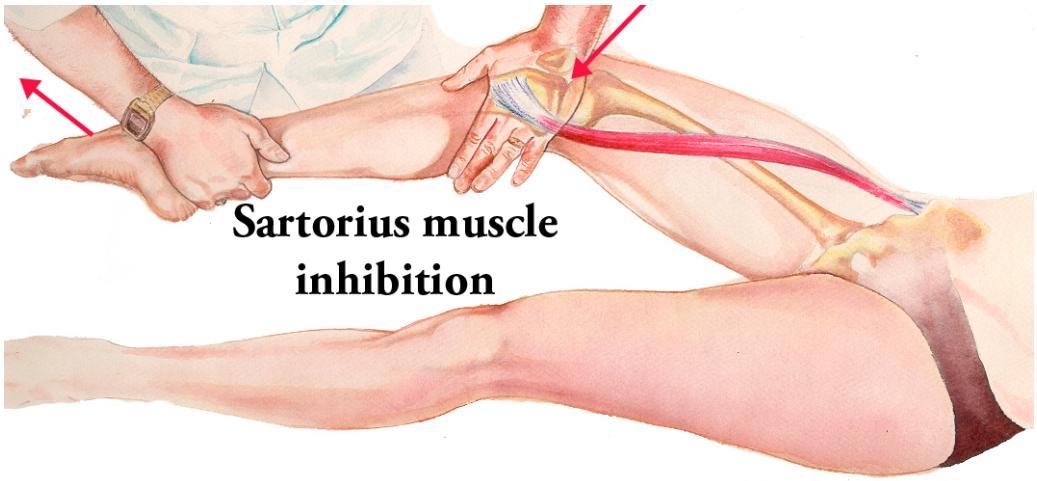
Key points of the Zodkoy study:

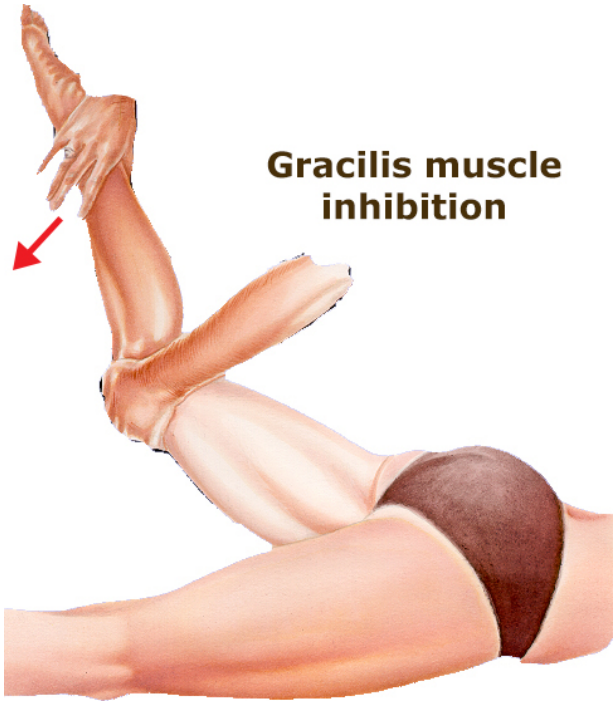
- During the ninety-day study, 90 percent of Marines showed improvement.
- No lifestyle changes (diet, combat, location, exercise, etc.) were made.
- Physical and emotional complaints dropped by 40 to 50 percent in ninety days.
- No negative side effects were noted.
- Improvement was achieved by nutritional supplements alone; no other factors were involved.

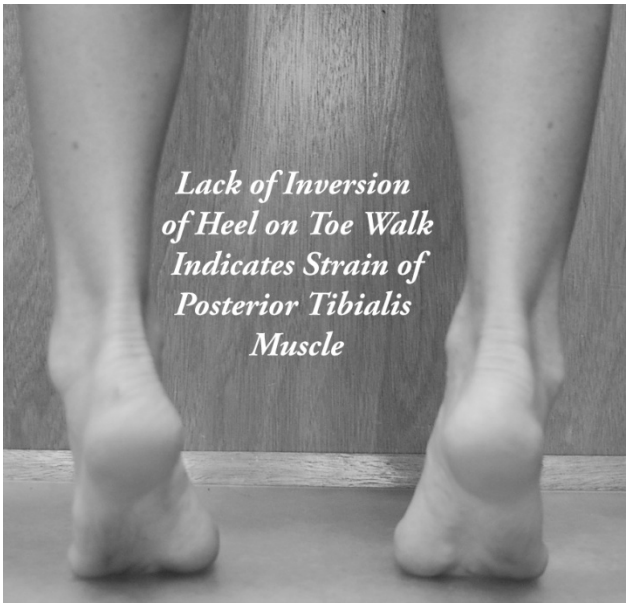


Schmitt, (9) using applied kinesiology, designed a clinical study (N=16) to determine the reproducibility and apparent association of the ligament stretch reaction to the adrenal gland. The study consisted of stretching the ligaments of various articulations in the body, and then re-testing muscles associated with the articulation and general indicator muscles.

If therapy localisation to the adrenal reflex point abolished the ligament stretch reaction, it seemed there was probable adrenal involvement associated with the mechanical stretch to the ligament. After all reflexes were tested, the individual was asked to chew adrenal concentrate; its effect was evaluated by re-testing for ligament stretch reaction. The ligament stretch reaction was removed with these approaches in fourteen of the sixteen patients.



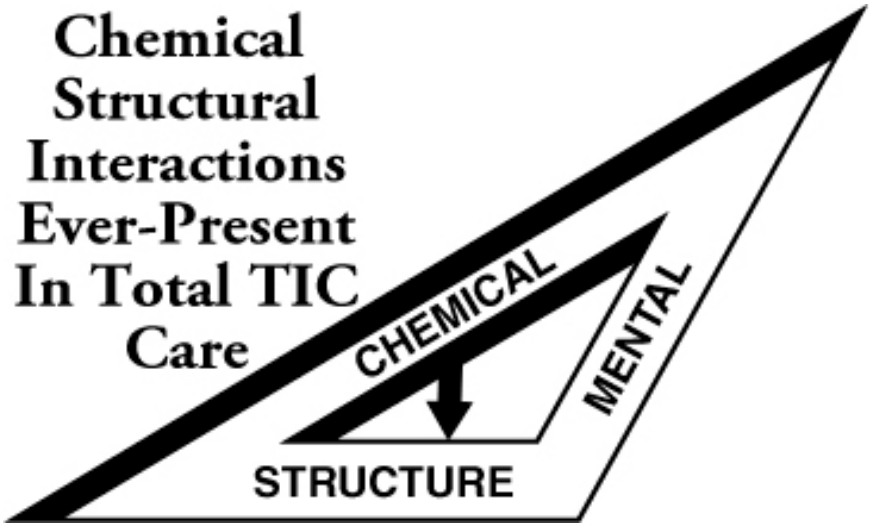




Pivotal to AK adrenal gland physical diagnosis: Sartorius and Gracilis and Posterior Tibialis muscle inhibitions which immediately strengthen with therapy localisation to the adrenal reflexes or insalivation of adrenal gland nutritional supplementation (Ashwagandha: a powerful adaptogen that also elevates testosterone)

DD Palmer's & George J. Goodheart Jr's Triad of Health

Biochemical, Mental-Emotional, and structural interrelationships



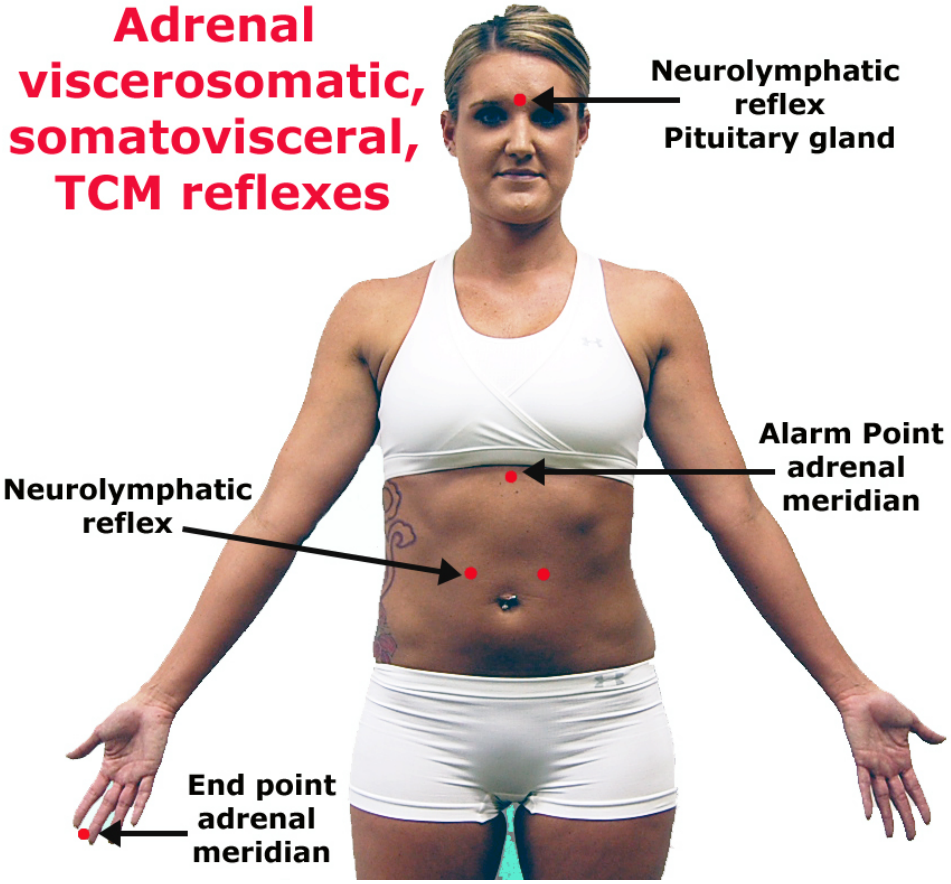
The probability that there was a chronic pelvic category II subluxation underlying this patient's long-term hip, low back and leg pain was revealed based on the weakness of the sartorius and gracilis muscles caused by the ASD. Therapy localisation to the sacroiliac joint on the left side corrected both of these muscles. Additionally, TL to the reflexes related to the adrenal glands also improved both of these muscle's reactivity and strength immediately. (Figure Below)

These muscles provide anterior support to the ilium, and when they are inadequate there is a propensity to develop a recurrent sacroiliac subluxation (category II pelvic subluxation in AK- and SOT chiropractic-speak). Not only does the subluxation develop, the primary problem is that when the subluxation is properly corrected structurally, the correction is lost because of the poor support from the sartorius and gracilis muscles driven by two factors: the related ASD and the ligamentous damage and inflammation that occurs in the category II condition. The posterior tibialis on the same side was inhibited as well, making a stable base for the hip joint to function unlikely.

Evaluation of stress and the entire endocrine system is important in treating the functional hypoadrenic as in this case report. The individual should also be evaluated for possible blood sugar handling stress. (The endocrine system, blood sugar handling, and stress are discussed in previous works by the author). (2, 5)

Numerous additional orthopaedic tests also pointed to the persisting sacroiliac subluxation underlying his symptom picture. The straight leg raise on the left at about 80˚ caused pain in the left sacroiliac. The Faber (Patrick) test caused pain in the left sacroiliac. Left Ely test was positive, causing pain across the bilateral sacroiliac articulations. Mennell's test was positive bilaterally. Hip extension causes sacroiliac pain bilaterally. Lumbar range of motion was limited in both flexion and extension. There was pain with flexion and a slight amount with extension movement

Hamstrings were weak bilaterally. Gluteus maximus muscles were weak on the left. The pelvic category I AK challenge and therapy localisation were positive. A pelvic category III was also present. (4, 5)


Adrenal viscerosomatic, somatovisceral, TCM reflexes
Neurolymphatic reflex Pituitary gland
Alarm Point adrenal meridian
Neurolymphatic reflex
End point adrenal meridian


Therapy Localization Category II

Pen-and-paper evaluation tools

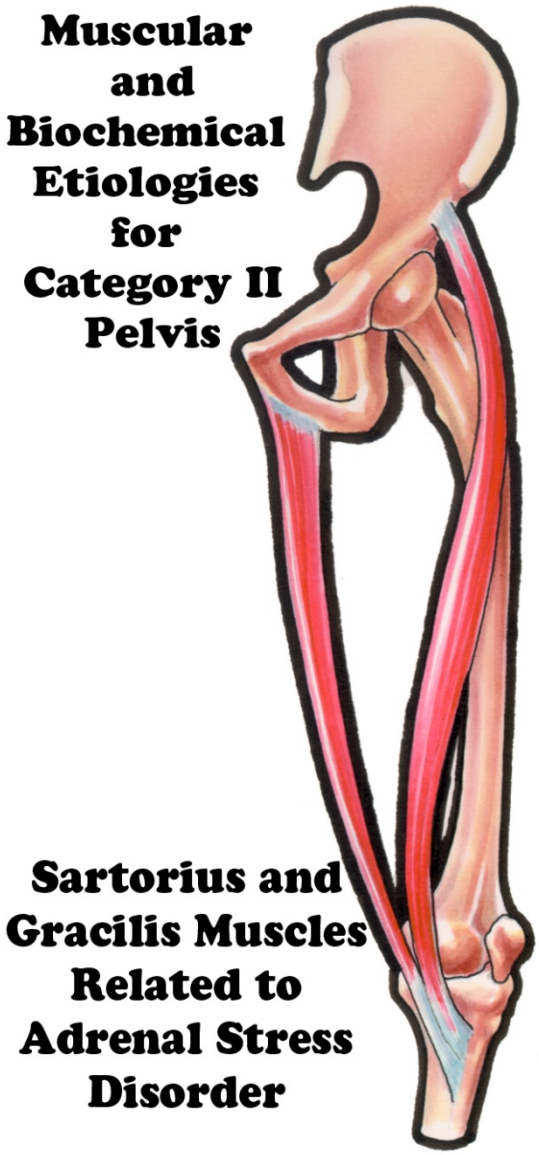
The patient filled out the Oswestry Low Back Disability Form and Visual Analog Scale of Neck and Associated Pain at my request.

The Visual Analog Scale of Neck and Associated Pain has a total score of 1900. The questions are 0-100 on a grid of 0-10. Of the 15 questions there are 19 scales of 1-10, giving the total score of 1900 (some questions are bilateral). This patient's score was 690. This score is more in keeping with my impression of him (comparing his low back to his neck dysfunctions) following my examination.

His score on the Oswestry Low Back Disability Form is 26, placing him in the severe bracket of low back disability. The Visual Analog Scale of Low Back Pain had a total score of 1500. The questions are 0-100 on a grid of 0-10. This patient's score was 1145. See Appendices for these instruments.

Discussion

Members of the AK-family of Chiropractic techniques around the world have published an impressive amount of literature (in the Collected Papers of the International College of Applied Kinesiology – USA, made recently available in this Journal) on the effective diagnosis and treatment of ASD and stress-related illness since Goodheart first published an article about it in 1964 for the chiropractic profession. (5)



A brief listing of these papers follows.

- Cuthbert, Rosner, Gangemi, Chetcuti (2015)
- Karpowicz, Lebowitz, Bernzott, Rubenstein, Dieterle, 1995, 1987, 1985, 1978, 1983 (pupillary reflex, Ragland's sign, Koenigsburg & Sulkowich test correlations to ASD)
- Duffy, 1991 (Addison's Disease)
- Porzio, 1987 (increase in 2nd heart sound with ASD)
- Schmitt, 1987 (citric acid cycle and ASD)
- Hambrick & Blaich, 1988 & 1987 (n = 25, n = 82, constellation of clinical findings associated with ASD)
- McBride, 1985 (allergy and ASD)
- Branham, 1985 (drug withdrawal and ASD)
- Hickey & Sinett, 2008 & 1979 (hyperadrenia)
- Kharrazian, 2007 (HPA axis and ASD)
- Mincey & Duffy, 2005, 1999 (anxiety and ASD)
- Kharrazian & Achilly, 2004, 1976-77 (hypoglycemia relationship and ASD)
- Sprieser, 2002 (RMAPI relationship and ASD)

- Power, 1995 (mineral imbalances with ASD)
- Hansen, Deutsch, Blaich, 1999, 1990, 1980, 1975 (ligament stretch reaction and ASD)
- Jackowski; Evans, 1978, 1975 (ileocecal valve relationship to ASD)
- Schmitt, 1977 (ligament stretch reaction and ASD)

The patient in this report suffered from chronic sacroiliac sprain-strain, sacroiliac subluxation, lumbar subluxation, cervicocranial syndrome with ASD complicating his recovery over the course of many years from each of these Chiropractic pain problems.

The diagnosis from the initial examination was that the patient continued to have dysfunction as the result of his previous motor vehicle accident, as well as 3 previous motorcycle accidents. Because of the findings reported in the Functional Capacity Evaluation done by a previous Physiotherapist and presented to me in his thick case file, I took particular care during his examination to make certain the motor nervous system tests were accurate. (6)

Symptoms were primarily coming from his lumbopelvic dysfunction. At the time of my examination there was pelvic category I, II, and III dysfunction. When the category III fault was corrected there was also a category II and I pelvic subluxation revealed. The former condition is torsion at the lumbosacral junction and within the pelvis and the latter is a subluxation of the sacroiliac joint itself. The pelvic category I pelvic fault usually associates with dysfunction of the cranial-sacral primary respiratory system. This is consistent with the findings in the patient's condition.

The cranial nerve aspect of the system was influenced by forced respiration in the AK cranial testing approach. In the patient's examination the sternocleidomastoid tested weak but strengthened with certain phases of forced respiration held when the muscles were re-tested. This indicated cranial nerve XI that supplies the sternocleidomastoid was influenced by the respiration test. The psoas muscles also strengthened to the same phase of breathing (inspiration) of the respiration test.

It was apparent that there was disorganisation between the head-on-neck, visual righting, and labyrinthine reflexes. This was indicated by

a. the stimulation to the head-on-neck reflexes strengthening the psoas and tensor fascial lata muscles, and
b. the left lower quadrant ocular lock.

This disorganisation responded to specific upper cervical correction and correction of the cranial-sacral primary respiratory system on the patient's first and second visits to our office.

Not only did the pelvic category II subluxation develop in the course of this patient's trials, but the primary problem was that when the subluxation was properly corrected, the correction was lost because of the poor support from the sartorius and gracilis muscles, driven by the patient's non-musculoskeletal ASD. This is a common factor in far more Chiropractic patient presentations than is presently recognised or addressed. (5)

It was my opinion that the sciatic neuralgia was a referred pain from the sacroiliac dysfunction. This was confirmed when the sciatic pain was resolved by correcting the pelvic category and its underlying ASD dysfunctions.

It is important to point out that the muscle weaknesses noted in this report were not due to deconditioning; rather they were due to the nervous system not controlling the muscles properly. If the muscles were weak due to deconditioning, they would not have strengthened with the tests and sensorimotor challenges done during this examination. Also, it is my experience that muscles that are not properly controlled by the nervous system do not respond adequately to exercise, the usual treatment for deconditioning.

Conclusion

To obtain lasting corrections in a two-week period (6 visits altogether) it was necessary to maintain an accurate record of examination findings, the corrections made, and the results of the correction attempts. My treatment plan for this kind of complicated condition, in my experience, was to start examination and treatment at three times per week for two weeks. As corrections were holding and the underlying ASD was improving (including symptoms of improved energy, vim and vigour, better sleep, less anxiety and less pain), the examination and treatment were reduced to two times per week and then further to one time per week. It was expected that a total treatment of up to 8 visits over a 1 month period would resolve the patient's condition. This proved to be the outcome in this case.

During this time the records showed subjective improvement, such as with the Visual Analog of Pain done at my initial examination and after 1-month of treatment or 8 visits. Positive manual muscle test findings were eliminated, as well as the orthopaedic tests observed at the commencement of his care. If there had been failure to obtain subjective and objective improvement, the treatment plan would be changed or an outside referral would have been made.

> Goodheart suggested that '*If you must adjust the same subluxation more than twice, you are probably treating an effect instead of a cause*'.

In this case, the patient had been treated by handfuls of physicians and therapists without resolution of his primary complaints for several years. Using AK Chiropractic diagnostic methods, after the ASD was found and fixed, the patient's chronicity improved and his primary complaints faded out of his life.

Conclusion? The primary cause had likely been found and fixed.

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About the author

Scott Cuthbert, BA, DC practices in the city of Dauin on the island of Negros Oriental in the Philippines and is the Associate Editor with the *Journal*.

He has served on the Board of Directors of the *International College of Applied Kinesiology USA*. Dr Cuthbert is the author of three textbooks on applied kinesiology (in addition to 15 *Index Medicus* and over 50 peer-reviewed research papers) on Chiropractic approaches to functional health problems. *Images courtesy of David S. Walther, DC, with permission.*

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Appendix 1

Visual Analog Scale of Neck & Associated Pain

Name _____ Date ____/____/____

Please mark on the 1 to 10 scale your involvement with pain to the following locations and situations, from no involvement (0) to maximum involvement (10). Mark the scale with a vertical line like this:

0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

1. Do you have any pain in your neck? How severe is it?

0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

No pain Intolerable

2. Do you have any pain in the night? How severe is it?

0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

No pain Intolerable

3. Does activity give you pain? Yes ____ No ____ If so, how much activity is required to cause you pain?

0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

A great deal of activity Almost no activity

4. Do you use pain killers? Yes ____ No ____ If so, how much relief?

0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

Complete relief No relief

5. Do you have any stiffness in your neck?

0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

No stiffness Intolerable stiffness

6. Do you have pain in your shoulder and/or arm? (Mark for right and left.)

Right 0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

Left 0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

None at all Intolerable

7. Does your pain interfere with the use of your arm and/or hand? (Mark for right and left.)

Right 0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

Left 0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

None at all Not able to use it at all

8. Do you have numbness or tingling in your arm and/or hand? (Mark for right and left.)

Right 0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

Left 0 . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | 10

None at all Intolerable

Appendix 2

Patient's Name_____ Number_____ Date_____

LOW BACK DISABILITY QUESTIONNAIRE (REVISED OSWESTRY)

This questionnaire has been designed to give the doctor information as to how your back pain has affected your ability to manage in everyday life. **Please answer every section and mark in each section only ONE box** which applies to you. We realize you may consider that two of the statements in any one section relate to you, but **please just mark the box which MOST CLOSELY describes your problem.**

Section 1 - Pain Intensity

☐ I can tolerate the pain without having to use painkillers.
☐ The pain is bad but I can manage without taking painkillers.
☐ Painkillers give complete relief from pain.
☐ Painkillers give moderate relief from pain.
☐ Painkillers give very little relief from pain.
☐ Painkillers have no effect on the pain and I do not use them.

Section 2 -- Personal Care (Washing, Dressing, etc.)

☐ I can look after myself normally without causing extra pain.
☐ I can look after myself normally but it causes extra pain.
☐ It is painful to look after myself and I am slow and careful.
☐ I need some help but manage most of my personal care.
☐ I need help every day in most aspects of self care.
☐ I do not get dressed, I wash with difficulty and stay in bed.

Section 3 – Lifting

☐ I can lift heavy weights without extra pain.
☐ I can lift heavy weights but it gives extra pain.
☐ Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned, for example on a table.
☐ Pain prevents me from lifting heavy weights, but I can manage light to medium weights if they are conveniently positioned.
☐ I can lift very light weights.
☐ I cannot lift or carry anything at all.

Section 4 – Walking

☐ Pain does not prevent me from walking any distance.
☐ Pain prevents me from walking more than one mile.
☐ Pain prevents me from walking more than one-half mile.
☐ Pain prevents me from walking more than one-quarter mile
☐ I can only walk using a stick or crutches.
☐ I am in bed most of the time and have to crawl to the toilet.

Section 5 -- Sitting

☐ I can sit in any chair as long as I like
☐ I can only sit in my favorite chair as long as I like
☐ Pain prevents me from sitting more than one hour.
☐ Pain prevents me from sitting more than 30 minutes.
☐ Pain prevents me from sitting more than 10 minutes.
☐ Pain prevents me from sitting almost all the time.

Scoring: Questions are scored on a vertical scale of 0-5. Total scores and multiply by 2. Divide by number of sections answered multiplied by 10. A score of 22% or more is considered significant activities of daily living disability.
(Score___ x 2) / (____Sections x 10) = _____ %ADL

Section 6 – Standing

☐ I can stand as long as I want without extra pain.
☐ I can stand as long as I want but it gives extra pain.
☐ Pain prevents me from standing more than 1 hour.
☐ Pain prevents me from standing more than 30 minutes.
☐ Pain prevents me from standing more than 10 minutes.
☐ Pain prevents me from standing at all.

Section 7 -- Sleeping

☐ Pain does not prevent me from sleeping well.
☐ I can sleep well only by using tablets.
☐ Even when I take tablets I have less than 6 hours sleep.
☐ Even when I take tablets I have less than 4 hours sleep.
☐ Even when I take tablets I have less than 2 hours sleep.
☐ Pain prevents me from sleeping at all.

Section 8 – Social Life

☐ My social life is normal and gives me no extra pain.
☐ My social life is normal but increases the degree of pain.
☐ Pain has no significant effect on my social life apart from limiting my more energetic interests, e.g. dancing.
☐ Pain has restricted my social life and I do not go out as often.
☐ Pain has restricted my social life to my home.
☐ I have no social life because of pain.

Section 9 – Traveling

☐ I can travel anywhere without extra pain.
☐ I can travel anywhere but it gives me extra pain.
☐ Pain is bad but I manage journeys over 2 hours.
☐ Pain is bad but I manage journeys less than 1 hour.
☐ Pain restricts me to short necessary journeys under 30 minutes.
☐ Pain prevents me from traveling except to the doctor or hospital.

Section 10 – Changing Degree of Pain

☐ My pain is rapidly getting better.
☐ My pain fluctuates but overall is definitely getting better.
☐ My pain seems to be getting better but improvement is slow at the present.
☐ My pain is neither getting better nor worse.
☐ My pain is gradually worsening.
☐ My pain is rapidly worsening.

Comments_____

Reference: Fairbank, Physiotherapy 1981; 66(8): 271-3, Hudson-Cook. In Roland, Jenner (eds.), Back Pain New Approaches To Rehabilitation & Education. Manchester Univ Press, Manchester 1989: 187-204