

CASE STUDY

Chiropractic Care of a Battered Woman: A Case Study

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ABSTRACT

Objective: This case study documents the chiropractic care of a battered woman struggling with Intimate Partner Violence (IPV). Chiropractic offers battered women a unique service, it is the only profession trained and licensed to detect and correct vertebral subluxations. The relationship between the stresses of abuse and vertebral subluxation, as well as the subsequent changes during chiropractic care, are described.

Clinical Features: A Caucasian, 23-year old female presented with headaches, neck pain, and upper back pain. The initial complaint noted sharp, knife-like pains into the medial scapular borders, worse on the right side. Tingling extended into the right hand, most severe in the 2nd, 3rd, and 4th fingers.

Chiropractic care and outcome: Protocols of both Torque Release and Activator techniques were utilized to evaluate vertebral subluxations. Subjective quality of life issues were evaluated through a Network Spinal Analysis (NSA) Health Status Questionnaire. After commencing chiropractic care, this woman suffered a cervical spine hyper-extension/hyper-flexion type injury from an automobile accident. For the first 30 days after, adjustments were applied twice weekly. Acute exacerbations

of symptoms unrelated to the original complaints were displayed and progress became irregular. During the next 60 days, there were various unexplained falls and severe flare-ups of painful symptoms, and she finally admitted to being battered by her husband. Referrals to counselors and programs dealing with domestic violence were provided. Once the physical battering stopped, consistent progress was noted in both clinical symptoms and quality of life issues.

Conclusion: As a battered woman must receive emotional and social support to improve her situation, it is important for chiropractors to recognize the “red flags” of IPV. Chiropractors re-evaluate regularly for changes in vertebral subluxation patterns and can recognize inconsistent responses. They may also be the first caregivers to offer a vitalistic approach; considering a woman’s physical, chemical, and emotional quality of life; a perspective that offers significant connection and trust. This article serves as a foundation on the topic of IPV and chiropractic, for use in both communities.

Key words: *chiropractic, vertebral subluxation, adjustment, Activator technique, Torque Release Technique, Network Spinal Analysis (NSA), battered woman, Intimate Partner Violence*

Introduction

Intimate partner violence (IPV), previously termed “domestic violence,” is defined by the Centers for Disease Control (CDC) as “intentional emotional and/or physical abuse by ex-spouse, boyfriend/girlfriend, ex-boyfriend/ex-girlfriend, or date.”¹

IPV is the most frequent type of violence committed against women,² affecting 2 million women each year in the U.S., and includes all races, ages, incomes, and religions.³ Included in intimate partner violence is battering, where the abuser uses acts of violence and a series of behaviors, including intimidation, threats, psychological abuse and isolation to coerce and to control the other person. The violence may not happen often,

but it remains as a hidden (and constant) terrorizing factor.⁴ Battered women who are injured by ongoing partner abuse account for the highest percentage of U.S. emergency room visits, approximately 22-35%.⁵ Cultural awareness of this social issue has increased since 1987, when the first Domestic Violence Awareness Month was observed that October, it is now an annual event. Also begun in 1987 was the first national toll-free hotline.⁶

Battered women suffer from symptoms such as depression, anxiety, a sense of being detached from their bodies and numb to the physical world, nightmares, and flashbacks of violent episodes. The syndrome characterized by these symptoms is ‘post-traumatic stress disorder’ (PTSD).⁷ PTSD does not allow women to function well, think clearly, or prepare for their futures. Their bodies are constantly living in a state of “Fight or Flight”, described by Hans Selye,⁸ and many times the symp-

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toms that a woman seeks help for are magnified by the extent of abuse in her life. Their symptomatic profile can include: chronic pain with taut and tender muscle fibers in the head, neck and upper back region, sleeping disorders, and digestive complaints. In addition to these symptoms, victims of intimate partner violence will often reveal 'red flags' that can alert health care practitioners to a battering situation. These indicators may also contribute to the inconsistent or stalled progress of subluxation correction that a battered woman may demonstrate. Eleven red flags, developed from clinical experience, are listed in Table 1.

Statistics indicate that a woman is more likely to discuss her abusive relationship with her doctor than other professionals.⁹ As a trusting relationship is established between the chiropractor and the practice member, the battered woman may verbalize the truth about her life situation and be open to resources that are available to help her improve her situation.

Bruises and broken bones are not often a part of the clinical picture, however statistics report that verbal and emotional abuse can be just as damaging as physical abuse.¹⁰ Research by noteworthy scientist Candace Pert, Ph.D indicates that emotional stresses are able to influence neurochemistry: "Our research suggests that the usual picture of the limbic system should be extended to include the spinal cord, for a third area enriched with neuropeptide receptors is the dorsal horn of the spinal cord."¹¹ The changes in neurochemistry triggered by emotional stresses may contribute to vertebral subluxations, and confirms the mind/body connection the developer of chiropractic, B.J. Palmer, termed the "mental impulse" many years ago. Accordingly, emotional issues such as a woman's feelings of insecurity, fears of danger to herself or her children, helplessness to change her situation, and loss of self-esteem are as essential for chiropractors to note, as are life-style issues such as diet, exercise and postural stresses.

The Case Report

A 23-year old Caucasian female presented with headaches, neck pain, and sharp, knife-like pains into her upper back region most pronounced along the medial scapular border on the right side. There was tingling into the right hand, most severe in the 2nd, 3rd, and 4th fingers. Torque Release technique was utilized as the primary approach for analysis and care, Activator technique was utilized secondarily for correlation and application of adjustments. The initial evaluation includes observation of prone leg length discrepancies, termed functional leg length inequality in Torque Release and Pelvic Deficiency in Activator technique. Unequal leg length is described as the expression of the body's fixated pattern that lacks adaptability and indicates lateral or posterior rotated subluxation.

Dr. Jay Holder, developer of the Torque Release Technique, describes the definition of a subluxation as: "A condition of one or more spinal segments that have lost their ability to move freely or completely throughout their range of motion and that physically interfere with the spinal cord and or spinal nerves and their function."

Holder's perspective recognizes that all vertebrates have a brain reward system utilizing opiate receptor sites, and the vertebral subluxation complex is the hallmark insult of the vertebrate's ability to express a state of well-being to its fullest

potential. Therefore, Torque Release Technique views the subluxation as a "separation from wholeness." Holder describes the causes of subluxation as an:

"Imbalance between external incoming forces and internal resistive forces, often an exaggerated perception of stress causing an inappropriately excessive internal resistive response. The categories of one cause include 1) physical (trauma, thermal, electromagnetic, gravity), 2) chemical (nutritional, toxic, mood altering), 3) mental (perceived threats of stress, emotional), and 4) genetic."

The principles of the Torque Release Technique model are based on the original precepts and findings put forth in the two textbooks written by R.W. Stephenson, *The Chiropractic Textbook* and *The Art of Chiropractic*.¹²

Torque Release Technique Indicators¹³

In addition to functional leg length inequality, Torque Release technique utilizes the following findings as indicators to determine location of subluxations:

Palpation – The process of gathering information through touch. There are four types:

1. Scanning palpation
2. Tissue palpation
3. Intersegmental palpation
4. Motion palpation

The cranio-spinal meningeal functional unit is evaluated as a whole to observe energy imbalances including abnormal heat or cold. Vertebral segments are checked for rotational movement as well as anterior and posterior misalignments.

Abductor Tendency/Adductor Resistance:

A muscle which upon contraction draws apart and away from the median plane of the body, e.g. the action of the tensor fascia lata. The tendency of one or both legs to remain in abduction and resist being moved into adduction or together indicates C2 subluxation – usually on the side of greater resistance. The

Table 1. Bedell's Clinical Red Flags include:

1. hypersensitivity to touch including jumpiness and muscle twitching
2. vague descriptions of injuries related to acute exacerbations of symptoms
3. somato-emotional releases during chiropractic care including tears
4. financial concerns about treatment in spite of adequate family income
5. minimization of life stresses and their relationship to symptoms
6. obsessive need to find a physical answer that can be the cause of symptoms
7. over-concern about scheduling appointments and having to check in with her partner
8. irrational explanations of missed appointments
9. eye deviation/facial stress during questioning about injuries
10. changes subject frequently when asked about her relationship with her partner
11. over-emphasize positive character trait of partner

resistance is graded on a 0-5 scale with 0=no resistance and 5=maximum resistance to movement.

Foot Flare (Inversion/Eversion):

Toe-in or Toe-out – can be right, left or both observed in the prone position; indicates torsion/distortion/tension in the spinal cord and meninges. This is associated with anterior rotation of spinal segments with dural attachments.

Sphenoid, Occiput, C1,C2,C5, Sacrum (S2,3,4), and Coccyx anterior rotation is associated with traction of the meninges. Occiput has dural attachment around the entire foramen magnum.

Foot pronation/supination:

The foot resists against direction of supination and/or pronation and indicates a problem with the position of the chanter. The resistance is rated on a 0-5 scale as above.

Heel tension (Achilles):

Indicates spinal cord torsion/distortion/tension and any subluxation, posteriority, superiority, or inferiority. Spinal cord tension at C2, C5, Sacrum, and coccyx is most likely. Resistance is rated on a 0-5 scale.

Abnormal breathing patterns:

Observation of patient's breathing pattern, looking for slow, rhythmic, and full movement occurring in a wave throughout the entire spine. Normal breathing is not compartmentalized. An observable decrease or incomplete movement accesses movement throughout the Cranio-Spinal meningeal functional unit.

Inappropriate Sustained Patterns of Paraspinal Contractions
Positive Jump sign, myo-irritability, and EMG changes.

Congestive Tissue Tone:

Observation of abnormal fullness or congestion primarily in non-muscle tissue: over the subcutaneous tissue, over anterior neck muscles and the kidney area. Indicates trapped dominant patterns as a sequela to toxic chemicals, drugs, etc.

Postural faults (standing, sitting, prone):

Indicates stuck inappropriate pattern of spatial gravitational adaptation.

Cervical syndrome test:

A screening test for posterior rotation of C1 or C5, with or without laterality. A leg length inequality (short leg) is required prior to this test being performed. Evaluate in a prone position. The side that is down when head is turned and legs even is the side of posterior rotation. The legs must remain even to the exact millimeter and not lengthen or shorten again after a few seconds.

Bilateral Cervical Syndrome Test:

When the short leg changes back and forth to long and short as the head is turned from left to right and back again. In other words, the legs remain uneven. Repeat this action several times to verify that the legs are switching back and forth. A finger pressure test should be done first at coccyx, then occiput, C5, atlas, or T6. The posterior contact on the spinous process, the

tubercle, or E.O.P. with a line of drive inferior to superior, and posterior to anterior will cause the legs to remain even, thus determining which segment to adjust with the instrument. Also pressure test for right or left torque.

Derifield Test:

The screening test for +D reveals the pubic subluxation, posterior-inferior ilium or opposite side AS ilium. The screening test for -D reveals an AI sacral base.

Abnormal heat/energy radiation from the body:

Utilizes heat-sensing instruments such as the Thermograph or neurocalometer. Testing documents sympathetic dysfunction.

Torque Release Technique is distinct from Activator technique in that it is described as "non-linear." The same segments are never adjusted in the same vector or in the same order any three visits in a row, and only 1,2, or 3 segments are adjusted on any one visit. Leg testing and pressure testing are utilized to determine the subluxation, the presence of torque, and the line of correction. The practice member is encouraged to allow time to process the changes in their body following the adjustment.

Indicators and Care Relevant to This Case

This woman's initial chiropractic examination, utilizing the previously described indicators, revealed postural distortions of a head tilt to the right with the right ear and shoulder lower than the left. The head was carried forward of the normal gravitational line by 1 ½ inches and a loss of normal kyphosis was evident in the upper dorsal region. Palpation revealed painful trigger points and taut and tender muscle fibers along both medial scapular borders from the levels of T4-sacrum with the right side demonstrating the most pain. Congestive tissue tone was evident over the right upper dorsal region as well as the left flank. A one-inch left leg discrepancy was displayed, which will be referred to as a "pelvic deficiency." Leg length became equal with her head rotated to the right side, indicating a positive cervical syndrome on the left side and subluxation of one of the cervical vertebrae. A gentle force with finger pressure was directed into the 1st and 2nd cervical vertebrae on the left side, alternating clockwise and counterclockwise rotational movements, to determine if leg length equality could be obtained. Following the clockwise force at the first cervical vertebra, the leg lengths became equal (balanced), indicating ease of tension in the dural attachments along the left side of the spinal column and correction of the vertebral subluxation.

An adjustment (specific force applied to a vertebra to release the flow of vital life force along the nerve pathway) was given utilizing the Integrator instrument. This instrument was developed by Dr. Holder for use with Torque Release Technique. It is a spring-loaded, hand-held instrument, which delivers a force utilizing torque and recoil at 1/10,000 sec., similar to a toggle-recoil manual adjustment.¹⁴ The instrument is set with a pre-loaded tension so that when held lightly against the skin, the specific force is delivered in an exact line of drive to correct the misaligned vertebrae. In this case, the correction was made at the level of C1, from left to right, with a right torque. A similar

evaluation was performed along the medial sacral border on the left side. A noticeable evening of the legs was noted after applying a light finger pressure medially at the 1st sacral level, also indicating subluxation. The integrator instrument was pre-set and a specific force (adjustment) was applied medially, from left to right, at the 1st sacral level.

Levels of disability were self-rated in work and personal activities by completing Vernon-Mior (neck) and Oswestry (low back) scales. Visual Analogue assessment was also utilized as a means of monitoring the subjective symptoms. Findings are outlined in Table 2 and Table 3.

When questioned about personal stresses, the woman listed both work stress (working long hours at cleaning houses) and personal stress (live-in boyfriend). Her boyfriend worked for his father and the auto accident involved the father's vehicle, or both were stressful situations. A Health Status Questionnaire from Network Spinal Analysis was completed. The survey rates physical and mental/emotional stress evaluation, life enjoyment and overall quality of life on a 1-5 scale, with 5 indicating the highest rating.

A reduction in both objective and subjective findings occurred after the first month of care and the visit frequency was reduced to once weekly. A subluxation pattern continued to be evident, including acute exacerbations of painful symptomatology and taut, tender muscle fibers in the cervical, thoracic, and lumbosacral regions.

While planning a small wedding and marrying two months later, the woman missed several appointments during this time and stated, "I have the flu." Approximately one month after returning from her honeymoon, she returned to my office with increased painful symptoms in her neck and shoulder blade as well as paraesthesia into her right hand. Over the next 3 months, she was seen sporadically with several cancellations and vague excuses for her missed appointments. On one instance, she cited a "bad fall in the bathtub" and displayed a significant increase in her symptoms, including many tender muscle fibers during palpation. She was unable to make eye contact with me when I inquired about the details of her injury. One month later,

she re-appeared in my office for treatment after another bout with "the flu" and stated, "My neck, mid-back and rib cage hurt so bad that I had to roll out of bed." Once again, she avoided eye contact when relating her symptoms.

It was at this point, that I felt she was being battered. The "Red Flags" were all evident (see Table 1).

The Moment of Truth and Ultimate Trust

For a health care provider to successfully help battered women, they must be aware of the distinct communication patterns of this population. To document this appropriately, the following section is written in a more narrative style.

The moment of truth had arrived. The battered woman took an opportunity to trust me with her feelings - her emotional state as well as her physical state. While she lay prone on the adjusting table, I gently shared I could provide resources to help with whatever she was going through in her life that was causing her so much stress and pain, that was interrupting her full recovery. I related how much emotional stress affects our bodies and how much tension and stress I felt in her body. At that time she began sobbing and shared some of the suffering she was experiencing from her husband's abusive behaviors. I validated her by honoring her emotions while palpating her spine, and let her cry. I emphasized how valuable of a person she was, that she was deserving of respect, honor, and dignity, and provided her with the name of a counselor who helps women who are in abusive relationships. I told her she could call 9-1-1 if she was ever in danger. I was careful not to say negative things about her husband.

She began to keep her regular appointments of once weekly and established more eye contact with me. The symptoms remained consistent on both subjective and objective assessments. Two months passed until she appeared with a black eye and bruised face, falling into my arms in tears. I had built up enough trust in our relationship that she felt safe enough to let me see her bruises. I had not judged either her or her husband for all the past abuses. She admitted that she needed help and I advised her to contact the local law enforcement officers who deal with domestic violence. I gave her the name of an Advocate who could help her. I also told her about classes available for

Table 2 - Vernon-Mior and Oswestry Scales

(numbers show percentage of inability to perform everyday personal and work activities)

Date	Vernon-Mior	Oswestry
9-13-00	48	34
9-16-00	46	44
9-23-00	32	28
10-23-00	8	6
11-25-00	6	2
12-20-00	2	0
2-16-01	4	4
4-12-01	18	14
5-11-01	14	12
6-11-01	14	4
7-12-01	10	8
8-09-01	14	6
9-13-01	6	0
10-25-01	14	10
11-30-01	8	4

Table 3 - Visual Analogue Scale

(numbers indicate level of total physical discomfort on scale of 1-100 with 100 being maximum pain and discomfort)

Date	Scale Reading
6-16-00	60
9-23-00	25
10-5-00	25
10-23-00	42
11-25-00	14
12-20-00	15
2-16-01	10
4-12-01	48
5-11-01	44
6-11-01	35
7-12-01	29
8-9-01	26
9-13-01	24
11-30-01	24

education and support to empower her. She was finally ready to risk the changes and followed through with my advice.

It had taken nearly a year for her to “come clean.” Chiropractic care allowed her nervous system to reduce subluxations and included safety, gentleness, respect, and education. The empowerment associated with a clear spine and healthy nervous system was reflected in her life; old destructive behaviors were cleared and new constructive behaviors were chosen, allowing her to admit the painful truths of her life and build up courage to change the situation. I also encouraged her to begin a self-care program at home with scheduled hot baths, yoga and stretching, breathing exercises, and provided positive affirmation tapes to play when she was feeling stressed. Remarkably, it was only a couple months following this monumental office visit that her symptoms began to stabilize and she elected to continue with her wellness care.

A year after beginning chiropractic care, a follow-up NSA Health Status Questionnaire was completed, rating current quality of life. Nearly all of the areas of mental/emotional and physical stress factors that had previously rated as 4 or 5 (maximum) were reduced to 1 and 2 (minimal). Also, the areas of life enjoyment increased from 1 and 2 up to 3, 4 and 5, and overall quality of life also significantly increased. She is still attending classes, she is still with her husband who attends regular counseling sessions with her, and she is not allowing herself to be abused any longer.

Discussion

This case describes a subluxated battered woman who successfully broke the cycle of abuse in her life after the application of chiropractic care. Chiropractic offers battered women the benefits of: specific adjustments for vertebral subluxations, education on the chiropractic lifestyle, and resource support for changing destructive lifestyles and relationships that are robbing them of life. It should be noted that “low force” chiropractic techniques were utilized in this case. Clinical findings indicate that because of many battered women’s life experiences, they can be more sensitive to physical “force” and do not relax during high-force osseous-type adjustments. Battered women also need more nurturing, as many of their questions and concerns involve their tremendous need for trust and safety. A chiropractor that has good listening skills can establish a tone of confidence and security.

When chiropractors create an environment where a battered woman feels safe enough to get in touch with her pain and non conscious beliefs, she can begin to trust herself to make healing changes, from her nervous system to her life. A battered woman has learned to survive in a constant state of stress. Her body is engaged in some degree of a “fight-or-flight” response at all times in preparation for the next verbal, emotional, or physical attack. The cortical releasing factor (CRF) secreted by the hypothalamus, stimulates production of ACTH that causes adrenalin to be released by the adrenal glands. This has been shown to happen whether the attack is real or perceived. This cycle can lead to adrenal exhaustion, as well as depression. Over time this highly reactive state takes a toll on the organs of the body. At the annual meeting of the American Psychosomatic Society in Monterey, California on March 13, 2001, it was re-

ported that an unhappy marriage can break a woman’s heart, figuratively, and literally.¹⁵ Current work in the fields of psychoneuroimmunology and brain chemistry show the effects of emotional stress in decreasing wellness. *In Molecules of Emotion*, Candace Pert, Ph.D., explains that “CRF is the peptide of negative expectations, since it may have been stimulated by negative experiences in childhood,” and “When emotions are expressed – which is to say that the biochemicals that are the substrate of emotion are flowing freely – all systems are united and made whole. When emotions are repressed, denied, not allowed to be whatever they may be, our network pathways get blocked, stopping the flow of the vital feel-good, unifying chemicals that run both our biology and our behavior.”¹⁶

There is no record of previous literature in chiropractic research documenting the relationship between intimate partner violence and subluxation patterns. This article offers to establish a foundation and promote discourse. Research from the *International J. of Alternative and Complementary Medicine* includes a study that discusses chronic pelvic pain in women who have a history of sexual and/or physical abuse. The author emphasizes the importance of helping these individuals “learn all the necessary steps on how to achieve empowerment and to regain power and control over one’s body.”¹⁷

Chiropractic literature does include discussions on the relationship of stresses causing dis-ease. R.W. Stephenson states in *The Chiropractic Textbook* that “Dis-ease was a failure of organisms to adapt optimally to internal and external stressors because of loss of contact with the inherent organizing principle, or innate intelligence, found in every living organism.”¹⁸ And recent studies show the relationship of chiropractic care to the reduction of the effects of emotional stress.¹⁹ Dr. Donald Epstein, the developer of Network Spinal Analysis, discusses an “emotional motor system” that has the ability to project from the prefrontal cortex and caudal brainstem into the spinal cord. It establishes sensory and motor levels in the caudal brain stem and spinal cord, influences the sympathetic and parasympathetic systems, results in independent movements of the extremities (axial and proximal body movements), establishes specific emotional behaviors, and triggers mechanisms of rhythmical and other spinal reflexes. In his book *The Twelve Stages of Healing*, he provides exercises that integrate breath, touch, and movement in order to provide a mirror to the bodymind and emotional/physical connections.²⁰

Conclusion

Women in abusive relationships have attained what has been described as “learned helplessness.” They have learned to survive but have little hope for improvement in their quality of life. The benefits associated with chiropractic care, including improvements in physical and emotional state, can help these women engage in constructive choices that break the cycle of abuse and make positive changes in their lives.

Intimate Partner Violence is a significant social problem. The chronic nature of abuse adds expenses to an overburdened health care system, as well as the economic impact of lost productivity and creativity of battered women.

The effectiveness of chiropractic care in helping IPV victims to successfully respond to stress and make improvements in

their life situations has never been formally studied. Additional factors to be evaluated are the decreases in medical expenses due to reduced emergency room visits, and the economic impact on business as these women become healthier and more productive. Funding is necessary to proceed with future studies that can evaluate chiropractic's cost effectiveness, safety, and benefits, as applied to the topic of Intimate Partner Violence, and support for funding will be pursued.

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