



# Pain and ideation of self-harm in a 49y female addressed with chiropractic care leading to decreased pain and improved QoL: A case report

### Thea Treahy-Geofreda, Brian Lanoue, Ruth Postlethwaite and Clare McIvor

Background: A 49-year-old female patient presented for care with primary complaints of chronic neuropathic pain, depression, insomnia and suicidal ideation, the latter of which was attributed to her pain length and severity, and the lack of ability to achieve relief with other care modalities.

Management: She commenced a course of chiropractic care for subluxation correction. During the care period, the chiropractor used Diversified (manual), Thompson, and Activator methods. Specific protocols were observed for Cervical Syndrome. Derifield Pelvic Analysis was used, as was a drop table.

Outcomes: At the conclusion of the course of care the patient's pain had significantly reduced and numerous symptoms had resolved. The patient reported that she had regained the will to live, and no longer suffered from suicidal ideation.

Indexing Terms: Chiropractic; Subluxation; Suicide; Self Harm; Negative ideation

## Introduction

A s chiropractors care primarily for the nervous system it is unsurprising that people suffering from various neuropathies present to our clinics. What is somewhat more unexpected is the fact that neuropathic pain data are poorly represented in chiropractic literature.

Recent statistics reveal that one in five people in the Western World experience chronic pain, and many of these individuals experience naturopathic pain symptoms. Neuropathic pain is characterised by hyperalgesia (abnormal hypersensitivity to stimuli) and allodynia (nociceptive responses to non-painful stimuli). (1) Typically, the pain is described as a burning or shooting pain and can be localised or a more general sensation.

The development of neuropathic pain stems from both the peripheral and central nervous systems. There are many underlying conditions that can lead to

... Conventional Chiropractic methods are capable of achieving powerful outcomes in patients, especially when our care leads to pain reduction and improved QoL ...'



its development, such as trauma or injury to the nervous system, nerve compression, stroke, neurological diseases, infections, or inherited syndromes. (2) Sometimes, the cause is unknown, or idiopathic.

The impact of chronic pain on an individual's Quality of Life has been well documented and the mission to find effective pain management remains an active field of inquiry. Management of neuropathic pain is commonly pharmacologically based, utilising antidepressants, serotonin-norepinephrine re-uptake inhibitors, and eventually stronger opioids as care progresses without relief. (1) Many other strategies are less commonly used or still under development, such as transcranial brain stimulation and spinal magnetic stimulation, along with therapies that aim to modulate neuro0inflammation. (1) While these treatments are still being examined for efficacy, there remain limited management options for individuals currently experiencing ongoing pain.

There is not a lot of literature describing conservative, non-pharmacological management strategies. While various neuropathies are well-represented in chiropractic case report data, larger studies are yet to be completed, and as such Chiropractic care lacks recognition as a viable option for patients suffering from neuropathic pain.

This case illustrates a conservative approach of neuropathic pain management, where the patient expressed secondary concerns of suicidal thoughts and impaired sleep.

# **Case details**

A 49y female presented for Chiropractic care having previously been a regular patient. She was an accountant by profession, with a mild activity level comprising good mobility, walking for exercise, and some bodyweight strength training.

The patient presented with suicidal thoughts, depression, and insomnia, and with a history of having undergone a cervical block procedure. At the time of presentation she was afflicted by chronic neuropathic pain in her head, neck, face, and shoulders. She reported her pain levels to be between 5 and 10 out of 10 on a numerical pain scale, and stated it had been this way for approximately seven years.

During this time, and more so close to the time of presentation, she had contemplated ending her life due to the severity and relentlessness of this pain, and remarked that she was afraid if she could not get help, she would proceed to do so within the next five years. The patient stated that she 'could no longer tolerate it and [has] no will to live'. She further stated that she felt trapped and held hostage by their body.

It is a serious matter when unremitting pain impacts Quality of Life and the will to live. For this patient the pain duration and severity diminished her ability to live an active life and disrupted her social life.

Prior to presentation at the Chiropractic clinic, she had seen 14 other health professionals for this problem with no relief.

## **Examination and management**

A thorough history and chiropractic examination was undertaken upon presentation. While her primary complaints were the neuropathic pain, depression, and suicidal ideation, she also suffered from a number of secondary complaints which were significantly reducing her Quality of Life and ability to cope. These included insomnia, fatigue, headaches, low back pain, neck pain, brain fog, dizziness, poor concentration, and poor digestive function (with regular stomach upsets and heartburn). She linked her depression to the chronic nature of her pain, and its negative impacts on her ability to function.

Multiple levels of subluxation were found throughout the spine and pelvis. These included C1 (PIL), C4 (BR), T1 and T8 bilaterally, T12 (BR), L5 bilaterally and PI Ilium (left).

Reduced range of motion findings were returned at the cervical spine in left lateral flexion, right lateral flexion and left rotation, as well as in the thoracic spine in left and right rotation.

X-Ray findings revealed a reversed cervical lordosis, moderate Degenerative Disc Disease (DDD) C5-6 and C6-7 as OA. A mild right thoracolumbar scoliosis was found, with Cobb's angle measuring 14°. There was a slight upper left thoracic scoliosis with indicators of early DDD in the mid to lower thoracic spine. Postural changes were noted in the lumbar spinal region, with a 7mm R) leg-length deficiency noted and accompanied by opposite lumbar compression, moderate DDD L5/S1, early DDD upper lumbar spine, with mild OA lover lumbar facet joints.

While grip strength, pulse oximeter readings, and heart rate were all within normal limits, several other abnormal tests were returned. The patient returned a positive Romberg's test, positive Fukuda/Unterberger's test, and weight distribution was heavier by 8kg, 17.6lbs, on the R) side of the body. The lumbar spine was '10/10' on the numerical pain scale when palpated on the left, and the cervical spine was '10/10' on the numerical pain scale when palpated on the right.

The patient was hypertensive with a blood pressure reading of 185/111, and spirometry revealed a reduced lung capacity of 2.4L. Her HRV, sEMG, and thermography readings returned as 'compromised' at 72%, 74% and 70% respectively. Postural abnormalities are also returned, with effective head weight of 12.6kg 27.7lbs (normal is 7kg or 15.7lbs), total lateral shifts of 67mm or 2.63 inches, a total lateral tilt of 14.6°, total fontal shifts of 17mm (0.68in), and a total frontal tilt of 5.6°.

The patient was placed on a care plan comprising two visits per week for 12w during which full spine evaluation and adjusting would occur at each visit. The aim of care was to optimise neural functioning. Following the initial care plan the schedule was adjusted down to weekly visits for 24w and then one visit every 2 weeks for 48w with progress re-evaluations every 12w.

During her care the patient was adjusted using multiple techniques. These included Diversified (manual), Thompson, Activator methods (as a force application). Specific protocols were observed for Cervical Syndrome. Derifield Pelvic Analysis was used, as was a drop table.

Additional care recommendations were offered to enhance the patient's mobility and nutritional support. These included gentle home exercises targeted at enhancing mobility, as well as supplements for Collagen, Vitamin D3, Omega 3, and Magnesium.

### **Outcomes**

Significant improvements were noted at the conclusion of the first care plan, both in terms of objective measures and the patient's self-reported subjective measures. She reported decreased pain in her low back and knees and reduced neuropathic pain. Given she had sought the help of 14 other health providers prior to Chiropractic care, and given the severe state of her mental health relative to the pain, this alone was a significant finding.

She reported that she now had improved sleep, both in terms of quality and comfort. She had fewer headaches, greater mobility leading to a greater ability to be active, and had a more regular menstrual cycle. The patient also communicated that she was able to handle stress better, observed more positive thinking, and stated that her will to live had been restored.

It should be noted that while no extra care apart from Chiropractic was introduced at this time, the Chiropractor did not offer mental health support to have done so is beyond the scope of practice in this jurisdiction. The only care offered was nervous system support through checking and adjusting subluxations. It is likely that it was the reduction of pain and increase in movement and improved sleep leading to a better Quality of Life that allowed the patient to regain hope for a different future.

In terms of objective tests, while Romberg's and Fukuda/Unterberger's remained positive, her weight distribution shifted significantly (from 8kg, 17.6lbs heavier on the right to just 0.8kg 1.8lbs heavier on the right). Her blood pressure had significantly reduced to 127/82 (from 185/111 at entry). Her heart rate, pulse oximetry, and grip strength remained within normal limits and her lung capacity increased slightly, to 2.5L. Heart rate variability, sEMG and thermography all improved, now reading at 80%, 83% and 75% respectively.

Finally, her postural readings improved significantly. She now had no additional head weight, and her head shifts had reduced (Total lateral shifts of 1.95 inches, total lateral tilt of 11.1°, total fontal shifts of 27mm 1.07" and total frontal tilt of 2.4°).

The patient noted that the changes '*exceeded her expectations*' and reported having a new lease on life. She is now capable of being active, has returned to regular exercise, has hope and no longer feels the only way to stop the pain is to take her life.

#### **Discussion**

A number of factors could contribute to the improvement reported in this case. Peripherally, Chiropractic adjustments may affect cortisol release and reduce pro-nociceptive or proinflammatory mediators. Additionally, spinal cord mechanisms include segmental inhibition of the nociceptive process and inhibition of temporal summation.

A reduction in neuropathic pain logically leads to the social and mental changes reported by the patient.

This case demonstrates that Conventional Chiropractic care offers hope and solutions for those who have seemingly tried 'everything', perhaps doe to the mental-emotional impact of pain and how that can be resolved and alleviated. Further research into the impact of Chiropractic care on neuropathic pain and mental health is therefore warranted.

Thea Treahy-Geofreda BHSc, BChiropr Private practice of chiropractic Vancouver, BC drthea@thepowerhousevancouver.com Brian Lanoue BHSc, BChiropr Private practice of chiropractic Vancouver, BC Ruth Postlethwaite BBiomedSc Writer, ASRF Clare McIvor BBus(Admin), GD Comms(ProfWrit,Edit), GD(Psych)(Cand) Writer, ASRF

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#### About the Chiropractors

Dr. Thea Treahy-Geofreda (Lanoue) graduated from Western University in London, Ontario with a Bachelor of Health Sciences, before completing her chiropractic qualification at the New Zealand College of Chiropractic. She is a member of the International Pediatric Chiropractic Association, and the Canadian National Alliance for Chiropractic. She practices at Powerhouse Chiropractic with her husband, Dr. Brian Lanoue

Dr Brian Lanoue is a Life By Design Chiropractor, blogger and speaker on achieving extraordinary health. He graduated from Western University in London, Ontario with a Bachelor of Health Sciences, before completing his chiropractic qualification at the New Zealand College of Chiropractic. He is a member of the International Pediatric Chiropractic Association, and the Canadian National Allicance for Chiropractic. He co-owns at Powerhouse Chiropractic with his wife, Dr. Thea Treahy-Geofreda (Lanoue)

#### About the Case Report project

This Case Report is a part of the ASRF Case Report Project, a project designed to gather client studies from chiropractors and transform them into much-needed case reports, focused on the effects of chiropractic care on clinical presentations highly relevant to chiropractic, such as stress, immunity and adaptability.

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