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ASRF
CASE REPORT PROJECT

Improvements in pain, fatigue and gastrointestinal function in a 32-year-old female with fibromyalgia and pudendal neuralgia under upper cervical chiropractic care

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Background: A 32-year-old female business owner with a 15-month history of fibromyalgia and an existing diagnosis of pudendal neuralgia presented for chiropractic care with primary concerns relating to widespread body pain, chronic fatigue, brain fog and depression.

Intervention: The patient underwent a course of upper cervical chiropractic care using the Knee Chest Upper Cervical Specific (KCUC) technique. The initial care plan comprised twice-weekly visits for six weeks, followed by progressive reduction in visit frequency.

Outcomes: Over thirty-six visits spanning approximately six months, the patient demonstrated marked improvements in cervical active range of motion, postural alignment, weight distribution, and functional neurological indicators. Patient-reported outcomes included significant reductions in widespread pain, chronic fatigue, brain fog, pelvic pain, gastrointestinal symptoms, tinnitus, depression, and respiratory difficulty. Quality of life was substantially improved.

Conclusion: This case suggests that upper cervical, subluxation-based chiropractic care may positively influence the symptom burden associated with fibromyalgia and pudendal neuralgia. Further controlled research is warranted to investigate this relationship.

Indexing terms: Chiropractic; subluxation; pudendal nerve; fibromyalgia; neuralgia; Knee-Chest.

Introduction

As evidence continues to establish the role of Chiropractic for conditions that lie far outside the scope of neck, back or musculoskeletal pain, its potential impact on the symptomatic burden of conditions that can be difficult to manage or remedy become a vital area of focus.

Two such conditions are fibromyalgia and pudendal neuralgia, both of

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which are reported here.

Fibromyalgia is characterised by chronic widespread pain accompanied by non-refreshing sleep, physical exhaustion and cognitive difficulties .(Häuser et al., 2015) Symptom prevalence in the general population has been estimated at between 2% and 4%, although the proportion of people formally diagnosed is considerably lower. (Häuser et al., 2015) Contemporary diagnostic criteria have moved away from tender-point examination toward the assessment of widespread pain together with the severity of associated symptoms such as the above mentioned. (Wolfe et al., 2016) Contemporary accounts describe fibromyalgia as one of several centralised pain states, in which amplified processing of sensory input within the central nervous system is accompanied by fatigue, memory problems, and disturbances of sleep and mood. (Clauw, 2014; Woolf, 2011) Recommended management is usually multimodal, combining education, exercise and cognitive behavioural therapy with pharmacological agents including tricyclic antidepressants and gabapentinoids. (Clauw, 2014; Häuser et al., 2015)

Pudendal neuralgia describes neuropathic pain within the territory of the pudendal nerve, which supplies the perineal, genital and anorectal regions. The Nantes criteria set out five essential features: pain in the anatomical territory of the pudendal nerve, pain worsened by sitting, the patient not being woken at night by the pain, no objective sensory loss on examination, and relief following an anaesthetic pudendal nerve block. (Labat et al., 2008) A formalised expert consensus has since recommended initial monotherapy with tricyclic or tetracyclic agents or gabapentinoids, noted a lack of effect from opiates, and regarded physiotherapy, transcutaneous electrical nerve stimulation and cognitive behavioural therapy as likely to be relevant pending further controlled study. (Levesque et al., 2022) The patient described in this report was taking amitriptyline and pregabalin at presentation, a regimen consistent with these recommendations. Chiropractic was absent from consideration in that consensus paper, and thus must be considered separately as we build our own evidence base.

While both of these conditions describe very real symptoms, the treatment (while multimodal) often includes those commonly used for mental illnesses, which sometimes leaves sufferers feeling that they are being treated as if the issue is 'in their head'. While the Chiropractic approach is not about chasing symptoms, but rather focuses on caring for the nervous system and allowing the body to do the rest, our evidence base pertaining to improvements in Fibromyalgia and Pudendal Neuralgia is still in its infancy.

A systematic review undertaken for the Council on Chiropractic Guidelines and Practice Parameters found strong evidence for aerobic exercise and cognitive behavioural therapy, and limited evidence for spinal manipulation. (Schneider et al., 2009) A more recent narrative review identified 38 relevant publications and reported that higher-quality controlled studies were few and their results mixed, that lower-quality studies were more likely to report benefit, and that clinical practice guidelines ranged from recommendations against spinal manipulation to its consideration as one component of multimodal care. (Roecker & Hewawasam, 2025)

> There are no large clinical studies on Chiropractic and fibromyalgia, however, individual case reports do exist.

Within the upper cervical literature, several case reports have described Knee Chest upper cervical care for patients with fibromyalgia. These include:

- a 45-year-old female with an 11-year history of fibromyalgia who reported resolution of most complaints; (Alibhoy, 2011)
- a 64-year-old female who reported 80% relief of symptoms after three months of care, in whom subluxation was assessed by radiographs, paraspinal thermography, leg length analysis and posture; (Bennett & Tedder, 2012)
- a 31-year-old female who received five adjustments over 18 months and later reported taking no medications ;(Apatiga & Soriano, 2014) and
- a 32-year-old female who was seen 41 times over six months, adjusted on eight of those occasions, and reported complete resolution of fibromyalgia symptoms. (Tedder et al., 2015)

General Chiropractic reports concerning pudendal neuralgia are fewer, and those identified by us describe multimodal care directed at the lumbopelvic region and the soft tissues through which the pudendal nerve passes. (Olson et al., 2023; Percuoco et al., 2018) We did not locate a published report of non-Knee Chest upper cervical Chiropractic care in a patient with pudendal neuralgia.

This report describes the KCUC management of a 32-year-old female with fibromyalgia, a recent diagnosis of pudendal neuralgia, and a range of concurrent gastrointestinal, auditory and mood-related complaints. It adds to earlier reports from the same clinical setting in which KCUC care was described for Ménière's disease and trigeminal neuralgia' (Rai et al., 2025; Wong et al., 2025).

Case details

A 32-year-old female presented for Chiropractic care with primary complaints relating to fibromyalgia and widespread body pain. She was a business owner who reported leading a sedentary lifestyle, and was novice to Chiropractic at the time of her presentation. She had received her fibromyalgia diagnosis elsewhere fifteen months prior to first presentation, and her diagnosis of pudendal neuralgia was by a urologist only two weeks prior. An incidental finding was also noted at that appointment, where the patient learned of a congenital renal anomaly wherein she has two ureters.

In addition to these complaints she also reported having Vitamin C and D deficiencies that were being monitored by her rheumatologist. However, it was also noted that her body did not tolerate supplements well.

Relevant childhood history included a fracture of the left forearm at approximately seven years of age, sustained when she fell while carrying her sister, and an impact of the jaw against a window grill around the same age.

At the time of her first visit, the patient was prescribed Paracetamol (Panadol), Pregabalin (Lyrica), Amitriptyline, and Probiotics.

The patient's primary complaints centred on fibromyalgia symptoms and widespread body pain. She had been experiencing progressive chronic fatigue and brain fog over the preceding three years, despite sleeping 10 to 12 hours per night. She reported depression, lightheadedness, and persistent left-sided tinnitus characterised by ringing, vibration, and a sensation of aural fullness.

Gastrointestinal disturbances were significant, with constant abdominal pain and chronic diarrhoea, despite clear colonoscopy and endoscopy results. Three months prior to presentation, she developed bladder pain, and she had experienced increased urinary frequency since a COVID-19 infection; urinary tract infection testing had returned negative.

Secondary complaints included recurrent episodes of gastroenteritis (which had become less frequent), occasional tremors, morning clicking and pain in the right jaw, neck and shoulder stiffness, difficulty breathing in an upright sitting position with abdominal discomfort compelling her to slouch, and a dull lower back pain radiating bilaterally into both legs with intermittent toe numbness.

Clinical findings

Upon presentation, the patient underwent a thorough clinical history and examination by the Chiropractor. The Knee-Chest Upper Cervical technique was used for her assessment and management, and was supported by computer infrared thermography nerve scans guiding where and when adjustments were necessary. This examination revealed numerous abnormal findings.

A cervical active range of motion assessment revealed restriction in extension, left rotation, and right rotation. Right-sided neck pain was present on extension, and pain was noted throughout flexion, left lateral flexion, left rotation, and right rotation. Postural analysis identified a rightward head tilt and right shoulder tilt. Upper limb muscle testing was weak bilaterally. Romberg's test revealed balance impairment. Weight distribution assessed by balance scale revealed 25.0 kg on the left and 23.55 kg on the right, representing a 1.45 kg leftward loading asymmetry. A right short leg was observed, and pelvic listing was recorded as CSR positive. The patient scored 46 out of 70 on the Bournemouth Questionnaire, indicating significant functional and symptomatic burden. The left eye red desaturation test returned a positive result, indicating functional neurological compromise

In addition to thermography and the Bournemouth Questionnaire, biomechanical open-mouth radiographs were used for subluxation analysis. These tests suggested a listing of Atlas ASR (Atlas Superior Right).

Management

Following assessment, the patient commenced a course of Chiropractic care during which she was managed using the Knee Chest Upper Cervical technique. Paraspinal thermography was performed at every visit, before and after any adjustment, and an adjustment was delivered only when the pre-adjustment scan indicated it. Following each adjustment the patient rested supine on a bone shaped cervical pillow for 15 minutes.

Additional care recommendations included encouraging the patient to engage with light movement as exercise, as well as suggested improvements for her sleep hygiene and diet. The proposed care plan comprised twice-weekly visits for the first six weeks (12 visits), weekly visits for the following 12 visits, and fortnightly visits for the subsequent 12 visits. Formal reassessments were scheduled at the 12th, 24th, and 36th visits. The patient was also encouraged to increase daily movement and was given advice on sleep hygiene and diet.

> The stated aims of care were to reduce upper cervical subluxation and thereby support nervous system function, and to improve the patient's Quality of Life.

Outcomes

At the 6th visit (approximately three weeks into care), the patient self-reported a marked improvement in pelvic pain. This was followed by significant improvements in objective findings noted at the first formal reassessment (12th visit, six weeks into care). Here, it was noted that her cervical AROM had improved, though extension was still somewhat limited, with discomfort persisting on extension and on left and right rotation. The right head tilt was no longer present. Leg length was now symmetrical. Weight distribution was recorded as 25.00 kg on the left and 24.05 kg on the right, reducing the asymmetry to 0.95 kg.

The left-eye red desaturation test was negative. The patient reported improvements in energy, strength, social and sex life, stress and mood, breathing, flexibility, exercise tolerance and pain, with less neck stiffness and fewer shoulder aches. She described her mood as markedly better and her fatigue as improved to the point that she was able to go out. She felt mentally clearer, with less ringing and fullness in the left ear. Right jaw pain had resolved, although some tightness occasionally remained. She no longer experienced abdominal pain or diarrhoea. Shoulder stiffness and posture had improved, and low back pain now occurred only after walking for more than an hour. She found deep breathing easier, and left inner thigh pain and bladder pain were reduced in both intensity and frequency.

At the 20th visit (prior to her second formal review), the patient remarked that she now stood at the same height as her husband, which she attributed to a straighter posture. (This was a patient observation and was not measured).

At the second reassessment (24th visit), cervical AROM was full and pain free, leg length remained symmetrical, and weight distribution had improved further. The patient reported that

she was generally much better. The ringing in her ear had resolved, with aural fullness now occurring once or twice a month. Jaw pain had resolved. Bowel function had normalised, with regular bowel movements. She reported no longer experiencing depressive episodes, and her breathing and sleep were significantly improved.

Thermography scans were recorded throughout care, and the Bournemouth Questionnaire was retaken at her 36th visit, when she returned a score of 8/70. Given a falling score between visits is indicative of improvement, a shift from 46 to 8 was a marked change.

At the 36th visit, the patient also reported that her fatigue and brain fog were significantly improved and that she had experienced complete resolution of jaw pain, low back pain, aural fullness, and ringing or vibration in the ears. She reported that episodes of stomach ache and diarrhoea were now rare, and that bowel movements had now become '*very regular*'. The patient reported feeling that her immune system was '*getting stronger*', and that symptoms of neck and shoulder stiffness, pelvic pain and bladder pain were markedly decreased. Difficulty breathing had significantly eased along with episodes of heart palpitations that she used to experience while lying supine.

The patient expressed relief over her decreased pain, improvement of bowel movements, sleep, mobility, mood, and social life. She now reported significant improvements in her depression, and less dependency on painkiller medication (Lyrica and amitriptyline). The patient was able to resume exercise in the form of pilates and yoga, thus evidencing the significant functional, movement and Quality of Life improvements.

While the overall picture is that of widespread improvements across Quality of Life, as well as neurological and physiological systems, as we would expect with nervous-system based care, this last outcome (being reduction of reliance on painkillers) is significant all on its own. Improved digestive function and pelvic pain means she can now consume oral supplements to help with her vitamin C and D deficiency, as prior to this, oral supplements were not tolerated.

> In terms of her daily activities her Quality of Life is significantly improved as the widespread body discomfort and depression are reduced. She was able to enjoy life, spend quality time with her family and friends, eat the food she likes as well as travel again. Prior to engaging with care, she found these aspects of life to be significantly impacted due to her pain and disability.

Discussion

The goal of upper cervical Chiropractic care is to remove any nerve interference that may be inhibiting normal functions of the nervous system. In this case of fibromyalgia, the patient's improvement may have been achieved through the correction of subluxation in the upper cervical spine, which influenced the nervous system and thereby improved mood, digestion, bowel movement as well as reduced pain. While this study is N of 1 and thus not allowing generalisations to the wider population, it does bear resemblance to prior case report data in

which female fibromyalgia sufferers have described symptomatic improvement while undergoing chiropractic care. (Alibhoy, 2011; Bennett & Tedder, 2012; Tedder et al., 2015)

While this report did not control for other influences, and theChiropractic experience did involve ergonomic and dietary advice, it is plausible that the Chiropractic adjustments in the upper cervical area played a role, especially since the patient experienced significant improvements in multiple areas of life and health, in a short amount of time, after battling fibromyalgia symptoms for three years.

This case suggests that Chiropractic care, specifically upper cervical care, may have a positive impact on patients with fibromyalgia and similar widespread body symptoms. It highlights the potential for improved pain management, better nervous system function, and enhanced overall well-being through specific upper cervical care. It indicates that a neurologically focused approach could be a valuable component of their treatment plan.

> Interestingly, care was directed largely at the upper cervical area, far away from the site of her pudendal neuralgia.

Fibromyalgia is associated with altered central pain processing and increased sensitivity to sensory input, and therefore pain is not necessarily determined solely by pathology at the site of the discomfort. Given emerging research indicating that Chiropractic may change aspects of pain processing, there lies a yet-unconfirmed possibility that Chiropractic care might impact the nervous systems interaction with how pain is processed and experienced. (Navid, 2019) Changes in pain modulation could be one explanation as to why the patient experienced improvements in pelvic pain, despite care being directed primarily at the upper cervical region.

We recommend further study into the role of Chiropractic care in managing chronic, complex conditions like fibromyalgia. As to pudendal neuralgia, the Chiropractic literature is even more scarce. It is a rare condition and can be difficult to treat by conventional medicine, with treatment mostly limited to nerve pain medications such as amitriptyline and gabapentin as well as strong painkillers, and physiotherapy. In this case, it is plausible that Chiropractic care was able to help remove the nerve interferences that were causing symptoms of pelvic pain, and thus the patient's quality of life was tremendously improved.

Further investigation into pelvic function and chiropractic care would be beneficial, especially as it pertains to pudendal neuralgia.

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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, adaptability, and Quality of Life.

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