

Improved mental clarity, balance, and digestive function, and normalised gait in 63-year-old female under chiropractic care: A case report

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Background: A 63-year-old female presented for care with primary concerns of balance issues, brain fog and difficulty walking. Secondary concerns included tendonitis and digestive issues.

Management: The patient commenced a course of subluxation-based chiropractic care during which numerous techniques were used. These included Sacro-occipital technique, Torque Release Technique, Thompson, Diversified, and Toggle Recoil.

Outcomes: At the conclusion of her care plan, the patient reported significant improvements in all symptomatology, concomitant with reductions in subluxation findings and other objective tests. Additionally, mental clarity, mood, and energy were all improved.

Indexing Terms: Chiropractic; Subluxation; Gait; Balance; SOT; Torque Release Technique; Toggle Recoil.

Introduction

Chiropractic care across the lifespan is an area of academic thought that has many types, targets, groups and subgroups. It presents a challenge to measuring and confirm the non-musculoskeletal impacts of Chiropractic care, especially when it comes to things many people assume go hand-in-hand with ageing: issues such as balance, movement and mental clarity, for example.

Groundbreaking work by Holt et al and Haavik et al established that chiropractic care can improve joint position sense (proprioception) and that it may be valuable for the reduction of falls risk in older adults. (1, 2) Among the findings of Holt's study were statistically significant increases in '*Choice Stepping Reaction time*'. Furthermore, Daligadu et al linked chiropractic care to improved cerebellar processing, an important activity for movement and balance. (3)

... conventional Chiropractic methods are shown to improve subjective well-being especially mental clarity and to reduce 'brain fog' in this 63y female'



These authors provide a foundational understanding of the mechanisms behind Chiropractic; that is, *what happens in the brain when we care for the spine and nervous system? What happens when we deliver subluxation-based care?* The answer to the former is perhaps best answered by those with technical and technological capacity for research-grade data. The answer to the latter is arguably as individual as the person under care.

Gait and mental health

Proprioception, balance, choice stepping time, and cerebellar function are all important in balance and gait. What then of mental clarity or mental health functions?

Numerous case reports in the Chiropractic literature have indicated increases in self-reported mental health, mental processing or mental clarity. (4, 5, 6) With that said, self-reported data doesn't offer a firm baseline or post-intervention metrics and thus investigation into Chiropractic care and mental health, mental processing, and clarity is far from over. Kent (2018) postulated the potential neurobiological mechanisms by which subluxation-based care may contribute to increased autonomic nervous system regulation and thus impact mental health, aptly pointing out that Chiropractic care may have an important role in the care of individuals with mental health issues. (7)

The area of mental health and mental processing is large and psychological research in this area is always advancing; Chiropractic research in this area is in its infancy. Thus, case report data provides foundational examples of how improvements may occur in the life of an individual under care.

This report describes an improvement in mental clarity, balance and gait, as well as digestive function, in a 63-year-old female under Chiropractic care.

Case details

A 63y female presented for care at a Chiropractic clinic. Retired with a history of regular under care from another chiropractor, she commenced a new care plan after an escalation in a range of symptoms related to a poor gait, balance issues and difficulty walking. She also reported tendonitis running from her left hip to her left ankle.

Her medical history includes two episodes of gallbladder issues, tendonitis in her ankle (for which she was concurrently receiving physical therapy), and the use of orthotics with a left heel lift prescribed by her previous Chiropractor. Prior traumatic injuries included whiplash from a motor-vehicle accident, and previous horses-riding injuries. She had also fallen flat on her back on ice two years prior, and had since suffered lower back issues. The patient reported being able to lie flat with no pain.

In addition to her primarily complaints relating to balance, gait and walking, she reported a range of secondary issues. These included lower back pain, digestive problems, allergies, congestion, haemorrhoids, cold feet at night when lying down, as well as occasional right shoulder pain (associated with her gallbladder episodes) and occasional numbness in her hands.

Examination and management

A comprehensive examination was performed upon commencement with the new Chiropractor. During this examination it was found that she had a mild left internal foot flare and a moderate right foot flat while prone. She also had a short right leg (by 6mm or ¼"). Derefield's test was positive on the right, as was the Webster's test on the right (with resistance upon heel to buttock).

Further examination revealed mildly decreased range of motion at the left and moderate decreased range of motion on the right. The patient was positive for R) cervical syndrome and

had decreased R) leg raise. Additionally, there was a high R) shoulder, R) head tilt, and head translation. She returned a positive Romberg's test.

The patient exhibited a left sway with eyes open and with eyes closed, and when a rapid finger movement test was administered, she was slow on the L) side. When undertaking a finger-to-nose test, she was slower with the R) hand. When undertaking the tandem (heel-to-toe) walk, the patient exhibited a L) drift with her eyes open, and a R) drift with eyes open or with dual tasking.

Thermography, sEMG and Heart Rate Variability tests were used to assess areas of subluxation and establish a baseline for autonomic tone. Vertebral subluxation analysis identified subluxation at the following locations: UC region, upper thoracic region, lumbopelvic region.

The primary aims of care were set to correct subluxations. The patient's main health goals were to improve balance, correct gut or digestive issues, increase her walking ability and mobility, relieve her heel and hip pain, and to heal gallbladder issues. To facilitate this, the Chiropractor was focusing on the upper cervical region, upper thoracic region and the lumbopelvic region where subluxation findings were identified. Torque Release Technique was deployed, in addition to Thompson, Diversified, Toggle Recoil and Sacro-Occipital Technique (SOT) adjusting. Integrator instruments, drop table, SOT pelvic sacral blocks and manual HVLA adjusting methods were deployed as indicated two times per week for a period of six weeks.

Outcomes

Progress scan performed after the first 12 visits revealed significant positive changes. The patient reported improved mental clarity, balance and coordination. She now had an easier time ambulating with increased energy and decreased musculoskeletal pain (especially in the mid-back and lower spine), as well as self-reported improved mental health and the resolution of her 'brain fog.'

The primary symptomatology had significantly improved, with balance and mobility increased and tendonitis decreased. Swelling in the left ankle had reduced, as had restless leg syndrome and constipation, the latter indicative of an improvement in gut function. The patient reported improved mood, energy and anxiety levels. Additionally, mid back pain had resolved, despite the patient suffering in an ongoing manner for three years.

The patient reported that the improved mental clarity had been '*life-changing*'. The patient was now more clear headed and able to function better. Additionally, she had been working out and doing more physically due to improved balance, coordination and decreased hip and ankle pain.

Discussion

A reduction in pain and an increase in function alone would be a successful outcome in a patient of this nature. However, the improvement in mental clarity was reported as being the '*life-changing*' element. It is known that subluxation-based care may eliminate or vastly improve the severity of a person's pain experience, allowing them to express health on a higher level. In this case this was evident as improvements in mental clarity. This in turn reflects in how the person under care is then able to interact with work, people and life.

Chiropractic has increasing credibility in non-musculoskeletal areas of health. From this and other case reports, it should be considered that the impact of chiropractic care on mental clarity, and the mechanisms behind its improvement be more thoroughly examined.

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About the Chiropractors

Dr. Bruce Steinberg graduated from the Palmer College of Chiropractic in 2006 and has been in practice since. He is a member of the *New York State Chiropractic Board*, the *International Federation of Chiropractic Organisations*, the *International Chiropractic Pediatric Association*, and more. His reputable career in chiropractic includes running a successful chiropractic practice, *Quantum Chiropractic*, and serving the chiropractic community through his involvement with foundations and organisations serving the profession locally and internationally.

Dr. Kate Clodgo-Gorden graduated from the New York College of Chiropractic in 2014. She practices at Quantum Chiropractic in Queensbury NY and is currently working towards her Certification in Pediatric care via the ICPA.

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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