



# Improvement in migraines and chronic neck pain in a 42 year old male under chiropractic care: A Case Report

Firas Hassan, Ruth Postlethwaite and Clare McIvor

Abstract: A 42-year old male presented for chiropractic care with a chief complaint of migraines and neck pain he believed to be involved with poor posture.

*Objective/Clinical Features:* A course of chiropractic care (Diversified Technique, combined with Chiropractic Biophysics exercises) was concomitant with a decrease in the frequency and severity of migraine, decrease in pain and pain-related stress, and an increase in range of motion and coping skills.

Conclusion: This case report indicates that chiropractic care may be of benefit for the reduction of stress, pain and migraine. Further research is required.

Indexing Terms: Chiropractic; Subluxation; Migraine; Neck Pain; Headache.

### Background

F or more than twenty years research has associated chiropractic care with improved outcomes for people with migraines.

An early randomised controlled trial revealed statistically significant improvements for migraine sufferers under chiropractic care, the majority of the 83 participants reporting improvements in frequency, duration and disability associated with their migraines. (1) However mechanisms behind the improvement were not covered in depth. It was noted that more than 80% of study participants believed stress was a factor in their migraines.

More recent research has supported multimodal chiropractic care as a comanagement option for enhanced usual care for women who suffer from episodic migraine. (2) However, the 422 participant study offered up only preliminary findings. While the these trials focused singularly on the migraine symptomatology, case report data allows us to cast a wider lens and consider other aspects of health that may factor into migraine. In this present case, neck pain (as well as full spine pain) present concomitantly. ... Migraine can be debilitating yet seems to respond well to spinal adjustment by trained chiropractors. This case describes significant improvement achieved with Diversified adjusting ...'



Given the increasing evidence of association even with subclinical neck pain, there is value in considering chiropractic care for the correction of subluxations resulting in decreased neck pain and migraine frequency and severity.

## **History and Examination**

A 42-year-old male presented for chiropractic care with a chief complaint of migraines and neck pain. He also reported chronic lower back pain and full spine pain contributing to a high level of physical stress. It was believed that his migraines and chronic neck pain could be related to his posture.

Upon presentation to the chiropractic clinic a complete examination was undertaken including orthopaedic testing, neurological testing, and digital postural scans. A radiographic examination was also completed, in which a thoracolumbar scoliosis was revealed. Radiographs also confirmed a significant forward head posture which coincided with a diagnosis of phase one degeneration throughout the spine. The chiropractor also noted a non-Parkinsonian resting tremor. Subluxations were identified in the lumbar spine, the anterior thoracic spine and the cervical spine.

### Treatment

Following examination, the patient commenced a course of care in which he was checked and adjusted three times a week for six weeks, and twice a week for nine weeks. Progressive examinations were completed after every 12 sessions, and these included a digital posture scan analysis. In this study, Diversified Technique was deployed as the technique of choice in the trial.

A radiographic examination was also completed which identified thoracolumbar scoliosis and forward head posture. The patient was also diagnosed with phase one degeneration throughout the spine.

After each progressive examination the patient was prescribed 'chiropractic biophysics' corrective exercises to assist with his recovery. The patient so far has completed 32 treatments and will be receiving a comparative x-ray after four more treatments.

#### **Outcomes**

Following the initial course of care, a re-evaluation was undertaken which revealed increased range of motion. This coincided with the patient reporting decreased stress due to decreased pain and increased range of motion. He also reported increased coping ability and the ability to take on more work and life tasks/activities.

His course of care coincided with a cessation of lumbar cervical pain when giving 2-hour lectures (which the patient found to be extremely stressful). The patient perceived chiropractic care plus prescribed stretches to be of benefit for this symptom. The patient believed that his neck pain was directly proportional to stress level, which was assisted by chiropractic care. He has recently undertaken a new CEO role and believes chiropractic will be an integral part of enabling him to cope in this new position.

#### **Discussion**

While mechanisms behind the improvements remain wholly speculative, it is worth noting that the initial presentation in which the patient assumed his migraines were posturally driven do not reflect his position at the end of his course of care, in which the patient noted that he believed chiropractic care assisted him in neck pain, stress and coping.

While the etiology of migraine is complex, it is possible that, in this case, posture, stress, and coping are linked via autonomic nervous system (Autonomic Nervous System) regulation.

From this it is proposed that subluxation-based chiropractic care may assist in the regulation of the ANS, which may in turn impact pain, pain perception and the frequency and severity of migraine.

#### **Considerations and future directions**

The literature reports relationships between chiropractic and migraine but further research is needed to establish a quantitative link between either migraine and neck pain, migraine and stress, or the three in combination. While existing studies do suggest a stress-link, we are yet to discover the exact mechanisms by which chiropractic may release this stress or mitigate and regulate the neurophysiological responses to stress. (2)

Certainly, chiropractic by its very nature targets the balancing of the nervous system. But data is yet to reveal how this might translate to improved migraine measures.

Firas Hassan MChiropr; MClinChiropr Ruth Postlethwaite BBiomedSc Writer, ASRF Clare McIvor BBus(Admin), GD Comms(ProfWrit,Edit), GD(Psych)(Cand) Writer, ASRF

*Cite:* Hassan F, Postlethwaite R, McIvor C. Improvement in migraines and chronic neck pain in a 42 year old male under chiropractic care: A Case Report. A Sia-Pac Chiropr J. 2022;2.5. URL apcj.net/papers-issue-2-5/#HassanMigraine

### References

- 1. Tuchin, P., Pollard, H., and Bonello, R., (2000). A randomised controlled trial of chiropractic spinal manipulative therapy for migraine. Journal of Manipulative and Physiological Therapeutics. Vol 23. Iss: 2. pages 91-95
- Rist, P., Bernstein, C., Kowalski, M., Osypiuk, K., Connor, J., Vining, R., Long, C., Macklin, E., and Wayne, P., (2020). Multimodal chiropractic care for migraine: A pilot randomized controlled trial. Sage Journals. International Headache Society. Vol. 41. Iss: 3, pges 318-328, https://doi.org/10.1177/0333102420963844 retrieved 1 December 2021

#### About the Chiropractor

Dr Firas Hasan, chiropractor, owns the *Platinum Chiropractic Centre* group. He has completed over 9 years of university studies including post graduate studies from Harvard University in Boston USA in the field of medicine.

Dr Hassan started the *Platinum Chiropractic Centre* group in Gympie and was successful in acquiring more clinics to forge a most successful chiropractic clinic brand in Australia. Dr Hasan also provides coaching to other chiropractors and health professionals such as dentists, medical doctors and surgeons. Currently Dr Hasan is completing his medical degree to bring additional and diverse skills and expertise to his patients.

#### About the Case Report project

This Case Report is a part of the ASRF Case Report Project 2021, 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. This project was made possible by the generous fundraising and contributions of ASRF supporters.

