



# Improvement in reproductive health in a 38-year-old female under chiropractic

Care: A case report

### Bruce Steinberg, Kate Gordon, Ruth Postlethwaite and Clare McIvor

Background: A 38-year-old female patient presented for chiropractic care with chief complaints relating to irregular menstrual cycles and infertility as well as tension in her neck, shoulders and low back. She commenced a course of chiropractic care for the reduction of subluxations using a variety of techniques to facilitate her care.

Outcomes: Following a course of chiropractic care a range of objective findings indicating improved autonomic nervous system function were noted alongside a reduction in the length of her menstrual cycle from 60-90 days to 43 days. We consider this indicates improved hormonal and reproductive health.

Indexing terms: Chiropractic; subluxation; fertility; reproductive health; pregnancy

#### Introduction

Reproductive health is a vital part of life and wellbeing for a female patient, regardless of whether or not she is planning to conceive. With longer menstrual cycles linked to increased pain and blood loss, low mood, increased anxiety, anovulatory cycles, and poor sleep, it is vital to understand that menstrual health is not just a clinical endpoint in and of itself, but that it is also a risk factor for chronic disease and an indicator of fertility. (1, 2) When caring for people with menstrual presentations such as amenorrhea or dysmenorrhea, clinicians must first understand that this presents a significant quality of life concern with feasible impacts on many aspects of wellbeing.

Numerous studies have linked menstrual cycle length to measures of fertility. A study of 6,271 In Vitro Fertilisation treatment cycles indicated that menstrual cycle length was correlated with pregnancy and delivery rates. Furthermore, the study found that this effect was independent of age. (3) A study of more than 600,000 menstrual cycles using smartphone data indicated that less than 1% of cycles were longer than 50 days in length. In this cohort, pregnancy and conception planning is potentially complex as ovulation may not occur, or may not occur within a predictable window. (4)

... Chiropractors often a chieve pleasing outcomes with conditions of 'quiet concern' to the patient, such as dysmenorrhea, a menorrhea and infertility. most notable outcome in this case was that it resulted in the patient becoming pregnant ...'



For chiropractors, menstrual dysfunction represents an insight into and symptomatic indicator of hormonal regulation as well as autonomic nervous system health. (5, 6) While case report data has indicated that chiropractic care may be helpful in dysmenorrhea, amenorrhea and infertility, larger studies remain absent, which maintains the importance of more case report data in their absence. This case adds to that evidence base.

#### Case details

A 38-year-old female presented for chiropractic care with primary complaints of irregular menstrual cycles, infertility, as well as tension in her neck, shoulders and low back. As an insurance agent she had a sedentary activity level, and had received chiropractic care sporadically in the past.

The patient also listed secondary complaints of poor sleep, poor circulation and low energy, as well as allergies, constipation and symptoms relating to stress, anxiety and low mood. Significant medical history included a history of Caesarean section birth following a long labour three years prior, and a motor vehicle accident eight years prior in which the car became airborne after being hit at a right angle and the patient had to be extracted from the car.

Following presentation at our clinic the patient underwent a thorough history and examination using digital thermography, surface EMG, heart rate variability readings and full spine radiography as well as a battery of orthopaedic and neurological tests. Analysis identified vertebral subluxations localised in the upper cervical region of the spine, lumbopelvic spine, cervicothoracic spine, and mid-thoracic region.

Additional clinical findings included a left external foot flare, decreased left-sided straight leg raise, high left shoulder while standing. Romberg's tests were positive for left sway with eyes open, head back and eyes closed. The patient also had a right head tilt while standing, and leg length inequality tests revealed a short left leg (by 3-4mm or ½th of an inch) while prone.

The patient returned a positive test for Cervical syndrome (left), and a positive left Webster (BP Sacrum). When tested on her ability to rapidly open and close her hands, repeatedly touch her thumb to her index finger and rapidly touch her thumb to her fingers, the left side was slower than the right. Her tandem heel/toe walk test revealed a +1 drift to the left with eyes open, and a +2 drift to the left with eyes closed. When she was multitasking, this increased to a +3 left and right drift.

# **Management**

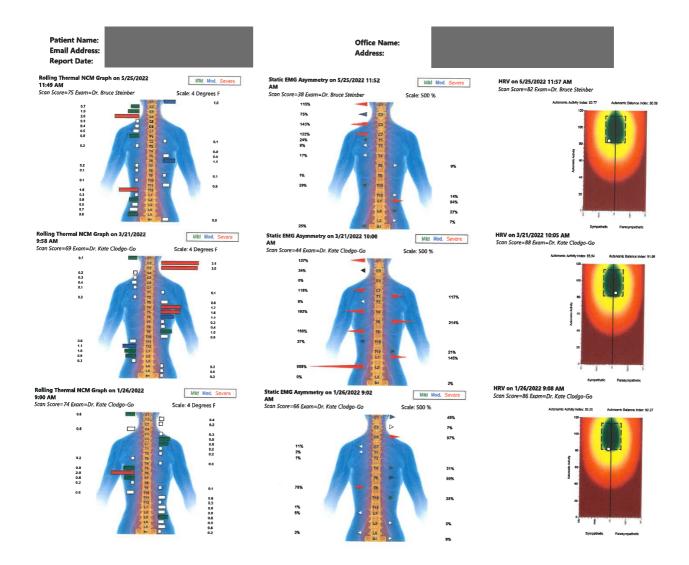
A course of chiropractic care was initiated in which she received adjustments two times per week for six weeks with an evaluation after the 12<sup>th</sup> visit. The aims of care included better, more restful sleep, improved menstrual cycles and fertility, and reduced stress.

Care was delivered using a variety of techniques including: Torque Release, Thompson, Toggle Recoil, Gonstead and Diversified techniques. Instrument (integrator) and manual (HVLA) adjustments were used, and SOT pelvic sacral blocks were deployed along with drop table adjusting for the sacral and pelvic areas.

### **Outcomes**

At the re-evaluation session, significant improvements were noted across both subjective and objective outcome measures. Improved heart rate variability was noted, thus indicating an improvement in autonomic nervous system tone. Surface EMG findings revealed significant improvements (primarily in the lower cervical region), and thermography scans revealed improvements in the mid-lumbar and mid-thoracic regions.

Improved posture was also noted by the chiropractor.



The patient self-reported an improvement in mood, energy, motivation, anxiety, focus and patience. She also reported significantly improved sleep quality. Additionally, her menstrual cycle had become more regular, with a length of 43 days as opposed to a range of 60-90 days. This was thought to be indicative of improved hormonal regulation and reproductive health, which may be linked to improved fertility prospects. She remarked that since starting chiropractic care, she was more motivated to focus on self care.

However, the most notable outcome in this case was that it resulted in the patient becoming pregnant.

## **Discussion**

Infertility is undoubtedly an emotive issue with the potential to contribute to psychological stress. In this case, subluxation-based care was directed at restoring optimal nervous system function, and was concomitant with a reduction in menstrual cycle length and immediately preceded the patient becoming pregnant.

Given the whole of spine nature of care, including care in the lumbar and pelvic regions, it is feasible that numerous changes may have contributed to this effect.

This may include hormone regulation, improved function throughout the reproductive system, decreased psychological stress, or central nervous system involvement in improved regulation and function. Without larger studies, it remains difficult to predict which of these factors contributed most significantly to the listed outcomes.

#### Conclusion

Future studies with larger cohorts with chiropractic care and its impacts on hormone regulation, menstrual cycle length and fertility outcomes would be of benefit to the profession, in particular to explore associations between pelvic listings and conception.

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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 Gordon 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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