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ABCA Advanced Bio-Structural Correction Australasia

Improvement in mobility and tone in a 6-month-old female under chiropractic care: A case report

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Background: A six-moth old infant was presented for Chiropractic care with parents raising concerns over her inability to roll from side to side. Chiropractic examination revealed low tone contributing to reported difficulty with tummy time.

Intervention: The infant was cared for using the ABC™ technique, amended for the patient's age and tensile strength. Meningeal releases were also delivered as part of her care.

Outcomes: Reducing pelvic restrictions and performing meningeal releases was effective in achieving a quick improvement in the infant's mobility and, in turn, tone.

Conclusion: Minimal intervention did, in this case, elicit significant changes. This case is an example of the impact of Chiropractic care early childhood, where even minimal intervention can significantly impact outcomes.

Indexing Terms: Chiropractic; Subluxation; Advanced Biostructural Correction Technique; ABC; tone; infant; meningeal release.

Introduction

The first year of life is a period of rapid neurological growth and development. During this time, an infant's ability to move freely and develop appropriate muscle tone plays a central role in shaping the brain and nervous system. Mobility and muscle tone are not only essential for meeting physical milestones such as rolling, crawling, and walking, but they also influence sensory integration, balance, coordination, and overall neurodevelopment. (Kanazawa et al)

In fact, a longitudinal study found that movement behaviours like tummy time were associated with gross motor development, earlier achievement of milestones and improved social and interpersonal development. (Carson et al) When mobility is restricted or muscle tone is abnormal, whether too low (hypotonia) or too high (hypertonia), it may interfere with an infant's ability to explore their environment, which can in turn affect cognitive and motor development over time. (Hadders-Algra, 2018)

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In early life subluxation may contribute to altered movement and abnormal tone thus impacting a broad range of issues from head shape and diminished sensory inputs to lowered muscle tone. Gentle, age-appropriate Chiropractic care aims to restore normal joint motion and support healthy communication between the body and brain. Through careful assessment and gentle, effective techniques, Chiropractors may help improve mobility and balance muscular activity, providing an environment where the nervous system can develop optimally. (Pohlman et al., 2019)

The importance of age-appropriate, paediatric Chiropractic care lies not only in addressing immediate concerns such as restricted movement or discomfort, but also in supporting long-term developmental outcomes and integration of primitive reflexes. By improving overall function and supporting optimal movement and tone, Chiropractic care has the potential to positively influence the sensory-motor foundation on which later skills are built. The existing literature suggests that gentle Chiropractic adjustments are safe for infants and may benefit conditions related to mobility, tone, and early neuromotor development. (Todd et al., 2021)

This case report describes the Chiropractic management of an infant using gentle, paediatric-specific techniques, highlighting how subluxation-based care may support improvements in mobility and muscle tone, and by extension, contribute to healthy neurological development.

Case details

A 6-month-old female was presented for care at my Chiropractic clinic. She was new to Chiropractic care and had been brought in by her mother due to concerns that she was only rolling to the right and never to the left. Her parents had noticed this two weeks prior, and had been trying to encourage the rolling to the left which the infant would not do despite her age and developmental stage. The infant was becoming more distressed when they tried to help her.

At the initial appointment it was noted that the mother was under Chiropractic care during the pregnancy, with a primary complaint of low back pain, but otherwise the pregnancy had been normal. She was able to achieve vaginal birth, however the infant was born in a posterior position and the mother received an epidural.

Upon presentation, the infant was examined using Advanced Biostructural Correction Technique protocols, and a thorough medical history was taken. This confirmed restriction while turning the head to the left and laying supine.

Chiropractic examination also confirmed she had increased muscle tone (high for her age and developmental stage) with right body lateral flexion that would not allow right lateral bedding. The infant also showed tenderness to palpation of the left pelvis with wriggles and whinging. She was found to have a short left leg, and subluxations at the left sacral base and L5 anterior, which indicated a left Meningeal Stretch.

The aims of care were to improve the infant's mobility and ability to roll to both sides, and to clear any subluxations. A clear area of focus for this care plan was the infants' meningeal tension.

Management

Following the examination she was managed using the ABC technique and protocols, which were modified for her age and developmental stage. The Left Anterior Meningeal Release was modified and performed as a paediatric protocol in which a modified supine stretch is administered laterally from head to coccyx towards the breakdown side. This is a light force manoeuvre with no HVLA thrusts.

The L5 anterior was adjusted using finger pressure as a roll down and the left sacral base was adjusted using a light finger push. All care was administered within the scope of the Victorian Paediatric Guidelines for infant and paediatric care.

After the first session, it was advised that parents follow up in three to five days, with a review occurring at the five day mark.

Outcomes

As planned, the review was undertaken at the second visit, five days after the initial session. The mother reported that the patient was able to start rolling in both directions the night of the initial care visit. This was possible with parental encouragement on the first where she did not resist like normal, and then she was able to repeat this at will from that evening onwards. Additionally, the infant was happier in general and more comfortable with tummy time.

A Chiropractic re-examination now confirmed that her tone was even on the left and right when in lateral flexion. There was no reaction to palpation of the L5 and sacral base, whereas the infant had reacted negatively to palpation at the first visit. Her left leg was still visibly shorter. Care continued, with the aim of correcting this asymmetry, however, improvements in mood, mobility, muscle tone and function were notable right from the beginning of this care plan.

Discussion

A notable element of this case report is the speed with which the presenting problem was resolved. A single session of Chiropractic care was all it took to resolve the issue with rolling from side to side. This, in itself, is significant, especially as paediatric chiropractors continue to face pressure over our claims. Yet here, gentle techniques instantly resolved the biomechanical restrictions that were causing the dysfunction.

Reducing meningeal tension and restriction in the infant's pelvis was all that needed to be done.

> It is common to see significant improvements quickly in paediatric cases under ABC with meningeal releases done very gently but in a full lateral range of motion. We often see more changes with this one adjustment that we do with any bony adjustments in non weight bearing children.

As ABC checks are performed with the patient standing it is difficult to assess paediatric cases from a protocol point of view, so we do rely on more subjective methods including tone and palpation to determine subluxation. With this said, it can easily be assessed with sufficient clinical certainty to correctly identify the restriction area. Understanding the mechanisms and effects of meningeal tension in infants is significant for the Chiropractic community, as these types of movement deficits are often seen in clinic. If Chiropractors can quickly identify and address the issue through gentle, subluxation-based care, we can quickly contribute to getting the infant moving and developing optimally.

Conclusion

This case is an example of maximal outcomes being achieved through minimal intervention. With neurodevelopment intrinsically linked to gross motor development, Chiropractic care may be even more vital when it comes to supporting optimal childhood neurodevelopment, thus impacting the course of a child's life. While paediatric Chiropractic care remains a topic of much discourse, the turnaround in this case was immediate and profound. As traditional medical research upholds the link between movement and sensorimotor development as well as social

development across the lifespan, the logical recommendation is to investigate paediatric Chiropractic care and back it with more evidence to support observations like this.

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About the Chiropractor

Samantha studied her Bachelor and Masters in Chiropractic at Macquarie University in Sydney. It was in the second year anatomy labs that she met her future husband and business partner Ben Coupe. Throughout university Sam worked in a GP's office which gave her insight into the limitation traditional medicine has with respect to structural body problems.

After graduation Sam worked for almost 4 years in Scotland which is where she learnt Advanced BioStructural Correction™. It was her time in Scotland that allowed her to try many different styles of chiropractic, however after learning ABC™ she was so impressed with its consistent and predictable results she has devoted years to becoming a Master level certified practitioner. She was also one of the first practitioners worldwide to be

accredited to teach the technique. When not in practice she is not only travelling to teach Chiropractors ABC™, but is now also responsible to leading instructor training worldwide.

With two children Arlo 10 and Albie 7, Sam practices part time and is passionate about women's health and longevity. She loves the diverse range of clients she sees in the city office and has a particular focus on pain caused by stress and poor posture. She loves CrossFit and feels movement is a huge factor in good health.