

TALSKY TONAL CHIROPRACTIC – WHITE PAPER

A Tonal and NeuroSpinal Paradigm for Modern Chiropractic

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Prologue: Vital Aspects of Talsky Tonal Chiropractic

Talsky Tonal Chiropractic (TTC) represents a profound shift in how we interact with the nervous system. For those accustomed to structural models focused on mobilizing joints and releasing segmental fixations, this approach invites a new lens—one that begins with the recognition that the body is an intelligent system that wants to correct.

TTC does not seek to apply force to what is stuck. Instead, it seeks to engage what is ready. We are not looking for what's fixated—we are looking for the best window in. We are not looking for the most resistance—we are looking for the most receptivity.

This is not osseous, not articular.

TTC shifts the paradigm: we are not engaging the nervous system through joint mobilization or osseous thrusts. Instead of applying force into joint spaces to stimulate mechanoreceptors, TTC delivers precise, non-articular input through the soft tissue and meningeal system—communicating directly with the tone and tension of the NeuroSpinal System.

We are not working with bones—we are working with a complex, sensory-rich, mobile suspension system known as the NeuroSpinal System.

This system is not passive—it is active, dynamic, and independently motile, capable of contracting in response to actual or perceived stress, and relaxing as that actual or perceived stress resolves.

The NeuroSpinal System, also referred to as the Cranio-Spinal Meningeal Functional Unit, includes:

The brain, the spinal cord, the multilayered meningeal system—which is the pia mater (including the dentate ligament), the arachnoid space (including the cerebrospinal fluid), and the dura mater—with particular emphasis on where the dura mater attaches to the movable bony segments of the cranium and spine.

This system is a primary conduit for communication transfer to and from the central nervous system and the rest of the body. It enables non-synaptic communication, allowing for information flow that does not rely solely on traditional nerve pathways.

It possesses independent contractile motility—meaning it actively contracts under actual or perceived stress, and can expand and relax as that stress resolves. Because of this, it functions as the primary tone setter in the body, governing the global tension patterns that shape adaptability, breath, posture, energy, and coherence.

The input is non-articular and non-osseous, delivered through soft tissue and dural access points—not through joints.

Every contact is made with the intent to influence the whole, not just a part.

We engage the location where the system is most open, responsive, and receptive to input.

This is not about moving bones—it's about communicating a corrective intent through touch to an intelligent system that wants to respond.

1 · Executive Summary

"Subluxation is always global, and the primary is always NeuroSpinal."

Chiropractic is evolving—and so must our understanding of subluxation. For over a century, the profession has largely focused on the vertebral subluxation: bones misaligned or fixated, interfering with neural communication through compression. While this model served as a structural foundation, modern research and clinical insights now reveal a deeper, more global phenomenon at play.

This white paper substantiates a paradigm shift: subluxation is fundamentally a state of aberrant tone in the NeuroSpinal System—also known as the Crano-Spinal Meningeal Functional Unit (C-SMFU). This seamless unit includes the brain,

spinal cord, multi-layered meninges, cerebrospinal fluid, and the dural attachments that tether these tissues throughout the cranium and spine.

When physical, chemical, or emotional stress exceeds adaptive capacity, the C-SMFU contracts—like a biological circuit-breaker with a dimmer switch. That contraction generates aberrant NeuroSpinal tension, throttling sensory bandwidth, distorting perception, and fragmenting coherence—often before bony structures visibly misalign (Breig, 1978; Ward, 1980). Vertebral subluxation is thus best understood as a compensatory adaptation to the primary tone distortion.

Talsky Tonal Chiropractic (TTC) builds upon foundational chiropractic philosophy while integrating modern discoveries in neurodynamics, fascia research, and biophysics (Breig, 1978; Haavik, 2007; Oschman, 2000; Ho & Knight, 1998). In this model:

- Correction arises not from high-force bone mobilization, but from precise, information-rich input delivered through non-articular contact—aligned with the vector of unwinding parallel to the aberrant tension in the C-SMFU.
- The adjustment becomes a touch-based dialogue that communicates corrective intent to Innate Intelligence, allowing the body to re-initiate its own process of unwinding, de-tensioning, and self-adjustment.

This paper will:

- Trace the historical evolution from bone-on-nerve theory to tone-first, NeuroSpinal-centered models.
- Detail the anatomy and physiology of the C-SMFU, highlighting its contractile motility, liquid-crystal information pathways, and mechanotransductive memory.
- Differentiate OsseoTonal approaches (structural contact with tonal intent) from direct tonal engagement (non-articular NeuroSpinal contacts).
- Map the information-driven pathways—piezo-electric, proton-conductive, and fascial—that the body uses to organize, adapt, and correct.
- Show how TTC integrates with and enhances existing techniques, offering clinicians a tonal lens that preserves their current skill set while unlocking deeper, continuous optimization for patients.

By reframing the adjustment as a neurological communication rather than a mechanical lever, TTC positions principled chiropractic for the next era—precise, system-wide, and rooted in the body's innate capacity for never-ending neurological optimization.

2 · From Bone-on-Nerve to Tone-First: An Historical Arc

Chiropractic's early 20th-century models centered on the vertebral subluxation—misaligned or fixated bones compressing spinal nerves and obstructing neural flow. This bone-first paradigm provided the foundation for many structural techniques and clinical successes.

By the late 1970s, **Alf Breig's** research demonstrated that spinal cord tension, not necessarily compression, could distort neural function—a phenomenon he termed **Adverse Mechanical Tension (AMT)**. Soon after, **Lowell Ward** reframed the spine and meninges as a continuous, tension-regulated unit, rather than a stack of bones (Ward, 1980).

Concurrently, chiropractic pioneers were developing techniques that focused more on **global tone, adaptability, and coherence**:

- Logan Basic, SOT, and Tofness: early tonal pioneers
- DNFT: introduced pressure testing to "ask the body"
- NSA: expanded the model of wave-driven tonal coherence
- TRT: introduced Osseotonal instrument-based adjusting
- In 2001, Dr. Marvin Talsky developed Talsky Tonal Chiropractic: the most advanced approach to directly engage the tone of the NeuroSpinal system, through precise input at the point of greatest receptivity, vectored in the direction of unwinding.

This shift from bone-first to tone-first now allows chiropractic to integrate the latest understanding of the fascia, meninges, and nervous system as a unified communicative whole.

Section 3 · The NeuroSpinal System – Structure, Function, and Communication

3.0 · Overview

The **NeuroSpinal System** — synonymous with the **Cranio-Spinal Meningeal Functional Unit (C-SMFU)** — is a seamless continuum that includes the brain, spinal cord, their meningeal envelope (pia mater, arachnoid, dura mater), and the meningo-fascial connections extending into the entire body. Conventional anatomy describes this as the craniospinal dura or meningo-fascial continuum; we keep the functional label **NeuroSpinal System / C-SMFU** to emphasize its active role in regulating tone, perception, and adaptation.

3.1 · Structural Composition and Continuity

Components. The C-SMFU includes the brain, spinal cord, pia mater, cerebrospinal fluid (CSF)-filled arachnoid space, and dura mater, which attaches at key cranial anchors (occiput, sphenoid, zygoma) and tethers through the spinal canal to the coccyx via the filum terminale.

Fascial blending. The outer dural sheath interlaces with cervical and thoracolumbar fasciae through myodural bridges — creating a **meningo-fascial continuum** that mechanically unites the cranium, cervical musculature, and dura ([Liu et al., 2017]).

Tensegral support. This sleeve behaves as a **tensegrity lattice**, dynamically modulating CSF dynamics and global posture ([Oschman, 2000]; [Schleip, 2003]).

3.2 · Intrinsic Contractile Motility and Tone Generation

Neurosurgeon **Alf Breig** first documented **Adverse Mechanical Tension (AMT)** — showing that stress can cause the dura to shorten under load and produce tension-based interference ([Breig, 1978]). Modern histology reveals α -SMA-positive myofibroblasts within the meninges, providing intrinsic contractile force ([Fede et al., 2018]; [Langevin & Huijing, 2012]).

Though the C-SMFU is not a skeletal muscle, it autonomously sets its own tone — compelling muscles, joints, and posture to compensate around it.

3.3 · Information Transmission, Reception, and Storage

Emerging **living-matrix** literature shows that the dura-fascia network can:

- **Convert mechanical stress to electrical charge** via piezo-electric collagen ([Oschman, 2000]; [Paluch et al., 2022]).
- **Conduct rapid, volume-distributed signals** through liquid-crystalline water layers embedded in collagen ([Ho & Knight, 1998]; [Oschman, 2003]).
- **Retain long-term “tension engrams”** — mechanotransductive memory of prior stress exposures that bias future behavior ([Fede et al., 2018]; [Schleip, 2003]).

Working hypothesis:

The C-SMFU acts as a **high-bandwidth, analogue-digital interface** that regulates the tone through which **Innate Intelligence** coordinates global adaptation.

3.4 · The C-SMFU as the Fountainhead of Tone

Sensorimotor integration studies (Haavik & Murphy, 2007) demonstrate that **aberrant tension** — not mechanical compression — disrupts brain-body communication. Consequently, vertebral misalignments must be recognized as **secondary compensations** to primary tone distortion within the C-SMFU — not initiating lesions.

Section 4 · Rethinking Subluxation – A Centered Paradigm

4.0 · Mechanism of Subluxation: Aberrant Tension over Fixation

Sequence of causation:

Inadequate adaptation to stress → **aberrant NeuroSpinal tension** (C-SMFU) → fascial pull and neuromuscular recruitment → vertebral subluxation as a **structural compensation**.

4.1 · Aberrant Tension — The First Physiological Response

The C-SMFU contracts like a **biological circuit-breaker with a dimmer switch** — dialing down sensory bandwidth whenever adaptive capacity is exceeded.

During an impact (such as a car accident), bones and joints may distort instantaneously. What locks those distortions in place is the **ensuing aberrant NeuroSpinal tension**, which keeps communication “dimmed” between the CNS and the body **until the system receives integrable, de-tensioning input** — removing the need to sustain defense and allowing the body to re-initiate its own unwinding and self-adjusting process.

4.2 · Compensation, Not Causation

An **inability to adequately adapt** to physical, chemical, or emotional stress triggers an **immediate rise in aberrant NeuroSpinal tone** within the C-SMFU. This aberrant tension drives the body to reconfigure joints and posture for stability — producing the observable **vertebral subluxation** as a structural compensation rather than a primary cause.

4.3 · Limits of Fixation-Focused Analysis

Adjusting **fixations alone** can correct surface-level compensations. However, without addressing the **primary dural tone**, compensatory patterns inevitably re-emerge — explaining the **clinical plateaus** observed in purely structural care approaches.

4.4 · Shifting from Force to Information

Talsky Tonal Chiropractic seeks the **best window into the C-SMFU**, delivering **the least amount of the most effective input**:

- The body **re-initiates its own process of self-adjusting**
 - Breath deepens
 - Posture and energy reorganize
 - all as tone normalizes at the source.
-

4.5 · Clinical Take-Aways

Primary diagnostic: Locate the anchor of global tone.

Adjustment intent: Communicate corrective information, not impose motion.

Outcome expectation: Continuous optimization — because the **regulator**, not just its compensations, has been addressed.

5 · TTC Model & Clinical Protocol

5.1 Model, Not Merely Technique:

TTC is a universal tonal model that can either stand alone or amplify any chiropractic technique.

5.2 · Best Window In

The practitioner identifies the **best window** for communication with the C-SMFU through:

- Tonal pressure testing & leg checks

The correct contact point and vector are confirmed when a pressure test produces a **temporary 4–6 second neurological balancing**, resulting in **100% balanced legs** as a reflex. This is the body's way of communicating "yes — I can and do want to unwind in that direction."

This brief balancing reflex can be considered a **neurological breath** — an indication that the system is receptive and ready to initiate unwinding.

5.3 Input Parameters:

A non-articular contact is delivered at the precise NeuroSpinal focal point—along the **vector of unwinding** (parallel to aberrant tension)—with a congruent intent to facilitate the re-initiation of the body's own self-adjusting process

5.4 Communication with Innate Intelligence: The purpose is not to "move bones" but to initiate communication. When tone at the source normalizes, the body re-initiates its own process of:

- Self-adjusting
- De-tensioning

- Restoring coherence
-

6 · Information Pathways & “Best Window In”

Modern fascia and neurobiology research reveal that the **meningeo-fascial continuum** serves as a **living matrix** of information transmission:

- **Piezo-electric collagen** transduces mechanical stress into electrical potentials.
- **Liquid-crystal water layers** enable rapid, volume-based signaling.
- **Mechanotransductive memory** retains prior stress exposures and biases future adaptive tone.

These pathways explain why **precise, light input** at the correct window generates change—whereas high force may amplify defense.

7 · Clinical Outcomes

7.1 Global Assessment: TTC clinical analysis includes posture, breath, tone, balance, energy, and HRV metrics.

7.2 Facilitating receptivity: The goal is not to force change but to facilitate adaptive responsiveness through clear communication with the NeuroSpinal System.

7.3 Preliminary outcomes: Clinical trends suggest:

- ↑ HRV coherence
 - ↑ surface EMG organization
 - ↑ SEP (Somatosensory Evoked Potentials) normalization
 - ↑ subjective well-being
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8 · Conclusion

Talsky Tonal Chiropractic reframes chiropractic care from “moving bones” to communicating directly with tone at its origin point: the NeuroSpinal System.

By addressing this central regulatory system, the chiropractor no longer works *against resistance*, but with the body’s own intelligent capacity for change — opening the way for continuous self-optimization, not just episodic relief.

This model honors and extends the foundational principles of chiropractic — recognizing that **tone is the medium through which Innate Intelligence expresses itself.**

Rather than replacing structural techniques, the TTC model offers a lens that can integrate with and elevate any approach — by giving the chiropractor a deeper understanding of tone, tension, and receptivity.

As our profession continues to evolve, models that unite philosophy, anatomy, and neurophysiology will be essential for advancing both clinical outcomes and scientific credibility.

We invite every chiropractor — whether structural, tonal, OsseoTonal, or otherwise — to explore this next layer of connection:

Where tone meets intelligence, and subtle input facilitates profound reorganization.

9 · Glossary

NeuroSpinal System / C-SMFU — The integrated cranio-spinal meningeal functional unit comprising the brain, spinal cord, meninges, cerebrospinal fluid, and their fascial continuities.

Adverse Mechanical Tension (AMT) — The pathological shortening and tensioning of neural and meningeal tissues under stress (Breig).

Living Matrix — The body-wide fascia, dura, and connective tissue system capable of electrical and mechanical communication (Oschman).

Myodural Bridge — Connective tissue structures linking suboccipital musculature with the dura mater (Liu et al.).

OsseoTonal — Techniques that engage the nervous system through articular contact with tonal intent.

Piezo-electric Collagen — Collagen's ability to convert mechanical deformation into electric potentials.

Mechanotransductive Memory — The capacity of fascia and dura to retain stress patterns and influence tone.

Vector of Unwinding — The line of corrective force or intent parallel to the aberrant tension in the NeuroSpinal system.

Best Window In — The point and moment of greatest receptivity for delivering input to the C-SMFU.

10 · References

Becker, R. O., & Seldon, G. (1985). *The Body Electric: Electromagnetism and the Foundation of Life*. William Morrow.

Breig, A. (1978). *Adverse Mechanical Tension in the Central Nervous System: An Analysis of Cause and Effect*. Almqvist & Wiksell.

Butler, D. (1987). The concept of adverse mechanical tension in the nervous system. *Australian Journal of Physiotherapy*, 33(2), 85–92.

Fede, C., Angelini, A., & Stecco, C. (2018). Does fascia hold memories? *Journal of Bodywork & Movement Therapies*, 22(1), 1–12.

Haavik-Taylor, H., & Murphy, B. (2007). Cervical spine manipulation alters sensorimotor integration: A somatosensory evoked potential study. *Clinical Neurophysiology*, 118(2), 391–402.

Ho, M.-W., & Knight, D. P. (1998). The acupuncture system and the liquid-crystalline collagen fibers of the connective tissues. *American Journal of Chinese Medicine*, 26(3–4), 251–263.

Knight, D. P., & Ho, M.-W. (1998). The acupuncture system and the liquid-crystalline collagen fibers of the connective tissues. *American Journal of Chinese Medicine*, 26(3–4), 251–263.

Langevin, H. M., & Huijing, P. A. (2012). Fascia as a sensory organ—A target of myofascial manipulation. *Medical Hypotheses*, 78, 321–323.

- Liu, P., Peng, L., Dong, W., et al. (2017). The cervical myodural bridge: A review of literature and clinical implications. *Clinical Anatomy*, 30(1), 23–29.
- Oschman, J. L. (2000). *Energy Medicine: The Scientific Basis*. Churchill Livingstone.
- Oschman, J. L. (2003). *Energy Medicine in Therapeutics and Human Performance*. Butterworth-Heinemann.
- Paluch, E. K., Aspalter, I. M., & Sixt, M. (2022). Bio-piezoelectricity: Fundamentals and applications in tissue engineering. *Bioelectronic Medicine*, 5, 7.
- Schleip, R. (2003). Fascial plasticity—a new neurobiological explanation: Part 1. *Journal of Bodywork & Movement Therapies*, 7, 11–19.
- Schleip, R., Müller, D. G., Klingler, W., & Lehmann-Horn, F. (2006). Active contractile properties of fascia. *Clinical Biomechanics*, 21(9), 959–965.
- Ward, L. (1980). *The Dynamics of Spinal Stress*. Self-published monograph.

Appendix A · Evolution of Tonal & OsseoTonal Techniques

Foundational contributions to tonal chiropractic:

- D. D. Palmer — Original statement: "Life is an expression of tone."
- Reggie Gold — Vitalistic philosophy emphasizing Innate Intelligence.
- Sacro Occipital Technique (SOT) — Meningeal and CSF dynamics.
- Logan Basic Technique — Non-articular tonal influences.
- Ralph W. Stephenson — 33 Chiropractic Principles.
- Upper Cervical Chiropractic — Dentate ligament / global tone.
- DNFT — Pressure testing and reflex leg check system.
- Toftness Technique — First fully tonal approach (low-force EM field detection).
- Thompson Technique — Expanded binary indicators.

- CranioSacral Therapy — Meningeal tension and craniosacral rhythm (non-chiropractic).
- Alf Breig — AMT model of dural tension.
- Lowell Ward — Meningeal stress fixation model.
- Network Spinal Analysis — Somatopsychic wave dynamics.
- CLA Insight Technology — Objective tone metrics.
- Torque Release Technique — First OsseoTonal hybrid; Integrator instrument.
- Bio-Geometric Integration — Wave geometry of fascial tone.
- Access Workshop — Non-linear CAN state sensing.
- June Wieder — Harmonic resonance mapping of the spine.
- Recent fascia literature — Schleip, Fede, Langevin, Huijing, Ho & Knight, Paluch et al.