Impact and Replicability of Dynamic Brain Healing Protocol: A Case Study on Persistent Post-Concussive Symptoms

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Abstract Objective: This case study evaluates the effectiveness of the Dynamic Brain Healing (DBH) protocol on persistent post-concussive symptoms (PPCS) and neurotransmitter levels in a 60-year-old female patient diagnosed with concussion at age 8.

DBH is a fascia-based, non-invasive manual therapy system developed by Simone Fortier, Founder of the Fascia Training Institute. With origins in osteopathic medicine, DBH applies a structured sequence of fascial, osseous, glymphatic, and neuroregulatory protocols to restore brain-body integration. The method is informed by advances in craniosacral decompression, vagal stimulation, and neuro-lymphatic mobilization, offering a new paradigm for treating unresolved neurological symptoms. [8, 17, 25, 26, 19]

Methods: A practitioner who had completed Level 1 training in DBH protocols administered two DBH treatment sessions. The treatment involved seven structured protocols. Neurotransmitter activity (dopamine, acetylcholine, GABA, serotonin) was inferred using the Brain Health Assessment, a 114-question true/false diagnostic tool administered before and after treatment [4, 5, 6, 11, 20, 24, 23]. The use of the BHA is supported by existing literature demonstrating strong correlations between neurotransmitter profiles and specific symptom patterns, reinforcing its clinical relevance as a non-invasive method to monitor neurochemical shifts related to motivation, mood, cognition, and stress regulation [2, 9, 10, 13, 15, 16, 21, 27, 30, 31, 33, 34, 35]**.** A symptom inventory aligned with the Department of Defense Pain Scale was also used. [7, 38]

Results: The subject demonstrated clinically significant improvements in symptom scores and neurotransmitter indicators: dopamine (+37%), acetylcholine (+24%), GABA (+11%), and serotonin (+22%). Self-reported symptom scores were recorded before and after the intervention, revealing improvement across multiple symptoms, including ‘hip pain’ and ‘light sensitivity’, each showing a 50.00% reduction, followed closely by ‘stiffness’ and ‘feeling heavy’, both improving by 42.86%. ‘Difficulty concentrating’ decreased by 40.00%, and ‘social anxiety’ by 37.50%. ‘Neck pain’ saw a 33.33% improvement, while ‘difficulty remembering’ decreased by 30.00%. Moderate changes were observed in ‘wake up rested’ (25.00%), ‘falling asleep’ and ‘fatigue’ (each 20.00%), and ‘don’t feel right’ (12.50%).

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Overall, the data suggests a generally positive trend in symptom reduction, with the most notable improvements in physical discomfort and cognitive challenges.

Conclusion: This case supports the therapeutic potential of the DBH protocol, indicating that targeted cranial and fascial interventions may improve neurotransmitter regulation and reduce PPCS symptoms. Findings suggest that newly trained practitioners can implement the protocols and get results. This merits further investigation through larger sample sizes and controlled studies. [18, 28, 29]

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Introduction

A concussion is a mild traumatic brain injury (mTBI) caused by direct trauma, whiplash, or blast injury that results in brain movement within the skull. Common symptoms include headache, dizziness, vertigo, nausea, fatigue, anxiety, chronic pain, and sensory sensitivities. [19] Persistent post-concussive symptoms (PPCS) may include long-term cognitive and emotional issues such as depression, suicidal ideation, and fatigue. [3, 36] These symptoms can extend beyond the typical recovery window of mTBI. Despite progress in neurorehabilitation, standardized interventions for chronic PPCS remain limited. However, recent research supports the use of fascial therapies in managing unresolved concussion symptoms. [12, 23]

The Dynamic Brain Healing (DBH) protocols, developed by the Fascia Training Institute, apply structured manual interventions rooted in osteopathy and fascial neuromodulation. The premise is that unresolved fascial restrictions may disrupt autonomic and limbic homeostasis.[31] Neurochemical deficits, particularly in dopamine, acetylcholine, GABA, and serotonin, are often present in neurodivergent individuals and may exacerbate recovery timelines following mTBI. [22, 35]

The DBH method addresses this by using fascial release and cranial decompression to influence brain-body signaling. This aligns with evidence highlighting fascia as a regulatory matrix capable of conducting neurochemical and mechanical cues. [17, 25] While research into myoskeletal involvement in concussion is limited and often focused on cervical or vestibular interventions [14], the DBH approach is holistic and targets broader networks.

Objective

This case study investigates whether the DBH protocol can reduce long-standing symptoms (>50 years) in a female patient through just two treatment sessions administered by a newly certified Level 1 practitioner.

Methods

Participant Demographics

The subject was a 60-year-old female with a history of a concussion sustained over 50 years ago. She reported persistent post-concussive symptoms including cognitive impairment, fatigue, anxiety, and musculoskeletal discomfort. She had not experienced

significant long-term relief from traditional interventions before participation. Her case was selected due to the chronic nature of her symptoms and the lack of resolution through conventional treatment models.

Seven standardized DBH protocols were delivered in two sessions over four weeks, with each treatment lasting 35 minutes plus intake and assessment time.

Selection criteria for participants included a history of concussion, symptom duration of one year or more, and the presence of common PPCS symptoms.

Outcome Measures

Brain Health Assessment (BHA): A 114-item instrument measuring neurotransmitter dysregulation. [4, 5, 6, 11, 20, 24, 23] The foundational model behind the Brain Health Assessment was influenced by the work of Dr. Eric Braverman, who popularized the correlation between personality traits and neurotransmitter dominance in his book *The Edge Effect*. [5] Braverman's use of detailed questionnaires to infer neurotransmitter patterns laid the groundwork for tools like the BHA, which were later expanded through clinical refinement and applied to over 1,000 patients. The BHA maps subjective symptoms to functional patterns associated with dopamine, acetylcholine, GABA, and serotonin, enabling clinicians to infer neurotransmitter imbalances non-invasively.

While blood and urine tests may detect neurotransmitter metabolites, they do not accurately reflect central nervous system neurotransmitter levels due to the blood-brain barrier and compartmental differences. As such, symptom-based instruments like the BHA provide a more functionally relevant and practical method for evaluating neurochemical dysregulation in integrative and functional clinical models [27].

A symptom inventory was also collected at each appointment. Adapted from the Department of Defense Pain Scale [7, 1, 38], the Defence and Veterans Pain Rating Scale (DVPRS) tool evaluated symptom intensity pre- and post-intervention. Symptoms were rated on a Likert scale from zero to ten, with smaller numbers associated with less severe symptoms.

Treatment Procedure

Protocols targeted cranial bones, dura, lymphatic flow, and key neurological pathways. Techniques included:

Protocol 1 - Cervical fascial and dural release

Protocol 2 - Frontal bone decompression

Protocol 3 - Vagal and phrenic nerve release

Protocol 4 - Temporal fascia release for auditory modulation

Protocol 5 - Visual system decompression

Protocol 6 - Cranial nerve coordination

Protocol 7 - Endocrine and limbic system stimulation

These methods draw on osteopathic research demonstrating that fascial tissues can adapt and remodel in response to manual interventions (fascial plasticity) and that these changes can influence brain function through interconnected neurological pathways. [8, 26]

Results

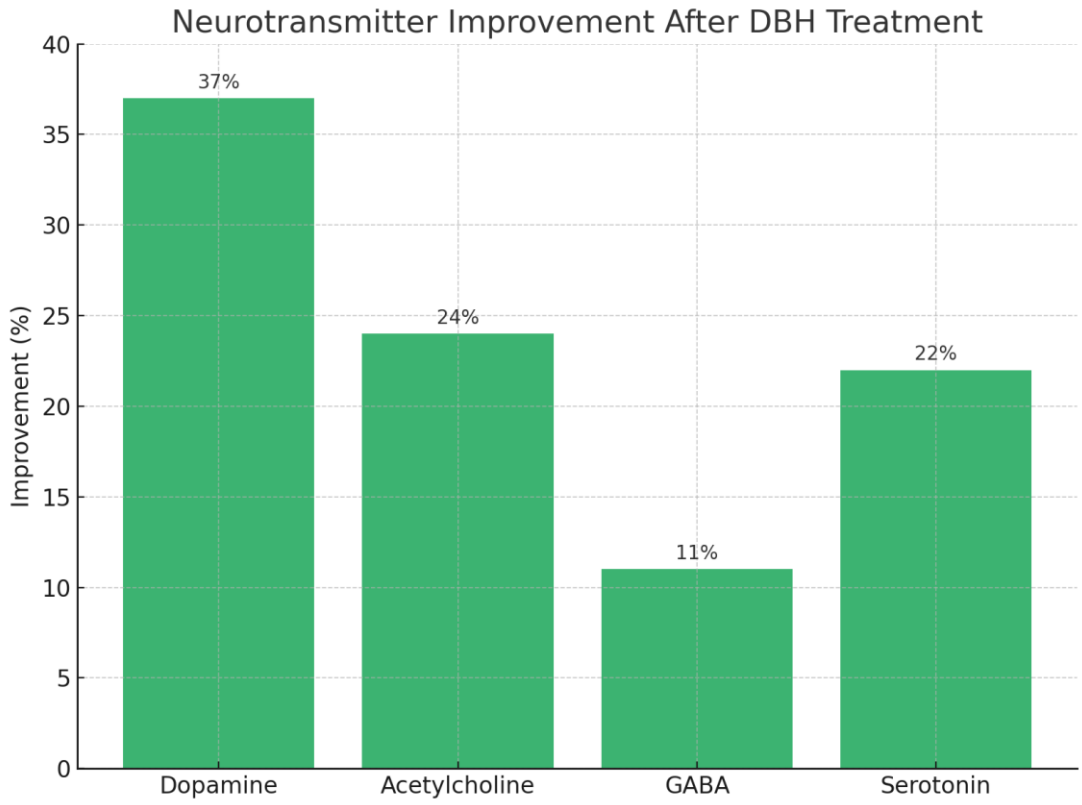

Figure1: Percent Improvement in Neurotransmitter Activity Following DBH Treatment

Figure 1 displays the changes in neurotransmitter activity, based on the BHA, before and after Dynamic Brain Healing (DBH) treatment. Dopamine increased by 37%, acetylcholine by 24%, serotonin by 22%, and GABA by 11%. These improvements support the hypothesis that fascial-based interventions can positively influence neurochemical balance, contributing to emotional regulation, sleep, cognitive clarity, and motivation.

Symptom Changes

Symptoms	Treatment 1	Treatment 2	Percentage Improvement
Stiffness	7	4	42.86%
Hip Pain	8	4	50.00%
Feeling Heavy	7	4	42.86%
Neck Pain	3	2	33.33%
Difficulty Concentrating	10	6	40.00%
Social Anxiety	8	5	37.50%
Difficulty Remembering	10	7	30.00%
Fatigue	10	8	20.00%
Don't Feel Right	9	7	12.50%
Falling Asleep	10	8	20.00%
Wake up Rested	8	6	25.00%
Headache	0	0	-
Light Sensitivity	2	1	50.00%
Noise Sensitivity	0	0	-

Figure 2: Tabular Summary of Key Symptom Improvements Reported by Subject 1
This table presents a concise overview of symptom changes before and after the DBH treatments.

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Quantitative outcome measures from the BHA revealed marked increases in neurotransmitter activity, with dopamine rising by 37%, acetylcholine by 24%, serotonin by 22%, and GABA by 11%. These shifts suggest enhanced neurochemical balance following DBH treatment, potentially contributing to improved emotional stability, sleep quality, motivation, and cognitive function. Correspondingly, the symptom inventory showed consistent reductions in pain, stiffness, concentration difficulties, and anxiety. Hip pain and light sensitivity improved by 50%, while other key symptoms such as stiffness, feeling heavy, and cognitive challenges also saw reductions ranging from 30–43%. These data support the hypothesis that DBH protocols yield observable multisystem benefits after just two treatment sessions.

Discussion

DBH offers a non-invasive, reproducible intervention that aligns with models of fascia as a neurosensory network influencing endocrine, emotional, and cognitive regulation. [17, 25] The significant improvements in neurotransmitter markers suggest potential in treating those with persistent post-concussion symptoms. Dopamine-related changes are associated with motivation and arousal [2, 16, 27, 30, 31], while acetylcholine is tied to memory enhancement. [13, 33] GABA supports anxiety and sleep regulation [15, 34], and serotonin impacts mood stabilization. [9, 10, 21, 32, 35]

These outcomes are comparable to emerging research on craniosacral and visceral therapies in mTBI care [18, 28], yet DBH distinguishes itself through its structured, cross-systemic focus. Previous pilot studies on manual therapies have shown potential in improving post-concussion symptoms and emotional regulation [18, 28]. The integration of fascial release with cranial and neuroendocrine stimulation places DBH within an advanced category of neuromyofascial care [26, 37].

Limitations include using self-reported data, a single-subject design, and unvalidated instruments. While the BHA is not yet validated in peer-reviewed literature, it has been used clinically in over 1,000 patients and demonstrates consistent internal reliability. [6]

Conclusion

This case study provides preliminary evidence that the DBH protocol—a noninvasive, fascia-based intervention developed by the Fascia Training Institute—may support measurable improvements in persistent post-concussive symptoms and neurotransmitter dysregulation. Notably, the subject in this study had experienced chronic symptoms for

over 50 years. It has been demonstrated that substantial reductions in physical pain, fatigue, cognitive impairments, and emotional dysregulation follow only two sessions of DBH treatment. Additionally, improvements in dopamine, acetylcholine, GABA, and serotonin activity suggest that DBH may influence neurochemical pathways implicated in motivation, memory, stress response, and mood regulation [2, 9, 10, 13, 15, 16, 21, 27, 30, 31, 33, 34, 35]. These findings are consistent with emerging models of fascial therapy as a mechanism for both mechanical and biochemical modulation of the nervous system. [17, 25, 26, 29, 31, 37]

Future investigations should include randomized controlled trials, objective outcome measures, and longitudinal tracking to evaluate the durability and reproducibility of DBH's effects. Further exploration into the role of fascial systems in neurological recovery may offer valuable insights into new therapeutic approaches for treatment-resistant post-concussive syndromes and chronic neuroregulatory dysfunction.

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