

Progressive Functional Recovery Following A Rehabilitation Plateau in a Patient with Severe Cerebrovascular Injury Receiving Integrative Supportive Care: A Case Report

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Case Report

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Abstract

Background

A severe ischemic stroke complicated by a subarachnoid hemorrhage frequently results in persistent neurological deficits and long-term disability. Once a patient reaches an apparent rehabilitation plateau in the chronic stage, conventional recovery progress often slows or halts entirely. This case report describes a progressive, multi-domain functional recovery in a chronic stroke patient following the introduction of an integrative supportive protocol.

Case Presentation

A 63-year-old female presented with severe chronic neurological deficits resulting from an arterial ischemic stroke and concomitant nontraumatic subarachnoid hemorrhage sustained in early September, 2025. Her co-morbidities included left homonymous hemianopsia, hemineglect syndrome, aphasia, Type II diabetes mellitus, hyperlipidemia, and gastroesophageal reflux disease. After several months of standard hospitalization and multidisciplinary conventional rehabilitation (physical and occupational therapy), her functional progress plateaued, and formal therapy services were concluded.

Interventions

An integrative supportive regimen—consisting primarily of Classical Chinese Medicine (CCM)-guided acupuncture utilizing *Wu Yun Liu Qi* principles alongside targeted nutritional optimization—was initiated in mid-February, 2026, and maintained over a three-month evaluation period.

Results

Over the course of the integrative intervention, the patient demonstrated profound and evolving improvements across multiple neurological domains. Notable recoveries included the restoration of voluntary head and ocular rotation toward the neglected left side, improved speech production (emerging vocalizations, whispers, and short phrases), enhanced emotional responsiveness, and refined upper-extremity coordination during feeding tasks. Postural stability and trunk control improved significantly; the patient advanced from complete dependence on chair back support to achieving an independent, spontaneous upright sitting posture. Cumulative assisted standing tolerance progressed from an inability to stand to maintaining a standing posture for approximately one hour with intermittent rest. Furthermore, improving metabolic and neuromuscular indicators allowed the treating physician to successfully adjust or discontinue three prescription medications (baclofen, metformin, and tamsulosin).

Conclusion

This case demonstrates that structured integrative care combining CCM acupuncture and nutritional support may facilitate continued neurofunctional adaptation and clinical recovery during the chronic stage of severe cerebrovascular injury, even after an apparent plateau in conventional rehabilitation. Further controlled clinical research is warranted.

Introduction

Stroke and subarachnoid hemorrhage remain among leading global causes of chronic neurological disability, often leaving patients with profound, long-term impairments in mobility, postural control, expressive speech, and activities of daily living (ADL). Conventional clinical paradigms hold that the vast majority of neurological recovery occurs within the acute and subacute windows of the first 3 to 6 months post-stroke, after which a functional plateau is expected. Consequently, formal physical therapy (PT) and occupational therapy (OT) services are frequently terminated once a patient reaches this plateaued state.^{3,6}

However, neurobiological research into cortical remodeling suggests that neuroplastic adaptation and functional reorganization remain possible well into the chronic recovery stage if provided with sustained, targeted multi-sensory stimulation.^{1,2} In recent years, clinical interest in supportive integrative protocols — acupuncture has grown significantly.⁴ Exploring these classical frameworks offers a structured methodology for adapting ancient insights to contemporary complex care.⁷ This case report documents the multi-domain functional evolution of a 63-year-old female with severe, multi-infarct cerebrovascular deficits who experienced renewed recovery following an apparent conventional rehabilitation plateau.^{3,6}

Case Presentation

A 63-year-old female presented for an integrative supportive evaluation in mid-February, 2026. Her medical history was highly significant for a severe, multi-domain cerebrovascular injury sustained in early September, 2025, which included an arterial ischemic stroke and a nontraumatic subarachnoid hemorrhage. Co-morbidities and associated syndromes included left homonymous hemianopsia, left-sided hemineglect syndrome, severe aphasia, Type II diabetes mellitus, hyperlipidemia, and gastroesophageal reflux disease.

Prior conventional management included acute hospitalization, surgical drainage procedures, pharmacological stabilization, and several months of comprehensive physical and occupational therapy. Despite these optimized standard efforts, the patient's recovery trajectory slowed substantially by early 2026, resulting in a functional plateau.³

At her baseline evaluation in mid-February, 2026, severe neurological deficits were noted: the patient exhibited absolute aphasia with minimal mouth-shaping speech production, a complete inability to voluntarily turn her head or gaze toward the left side, poor core trunk stability requiring continuous reliance on chair back support, and an inability to maintain an assisted standing posture.

Timeline of Integrative Interventions

A supportive intervention combining Classic Chinese Medicine-guided acupuncture and tailored nutritional guidance was introduced in mid-February, 2026. Formal conventional PT and OT services were officially concluded in late March 2026, allowing the final phase of monitoring to isolate the effects of the integrative care model.

Clinical Progress

The patient’s recovery was characterized by a gradual, multi-domain evolution rather than an isolated symptomatic shift:

- **Ocular and Cervical Mobility:** Within the initial week of acupuncture, the patient demonstrated improved eye engagement and responsiveness to environmental verbal stimuli. She subsequently regained the capacity to voluntarily rotate both her head and eyes toward the previously neglected left hemisphere.
- **Speech and Emotional Responsiveness:** Receptive and expressive language parameters improved sequentially. Expressive output progressed from silent mouth shaping to occasional whispers, vocalizations, isolated words, and functional short phrases. Concurrently, caregivers noted an emergence of emotional affect, highlighted by a notable episode of an appropriate emotional tearing response to family interactions.
- **Postural Control and Motor Coordination:** Fine-motor and gross-motor functional milestones shifted significantly. The patient demonstrated recovered upper-extremity coordination, successfully utilizing chopsticks to manipulate food and feed herself while stabilizing her movements with her contralateral hand (**Figure 1**). Core trunk control improved dramatically: her sitting status advanced from complete chair-back dependence to a spontaneous, self-sustained upright sitting posture.
- **Standing Tolerance and Medication De-escalation:** Assisted gross mobility parameters expanded incrementally. Over the 3-month evaluation, standing endurance moved from baseline non-weight-bearing to prolonged assisted standing (**Figure 3**). By early May, 2026, her cumulative assisted standing duration reached approximately one hour utilizing intermittent support and rest intervals (**Figure 4**). Corroborating with these motor and metabolic improvements, a formal medical re-evaluation on early April, 2026 (**Figure 2**), permitted the successful total discontinuation of three active prescription medications: baclofen (antispasmodic), metformin (antidiabetic), and tamsulosin (alpha-1 adrenergic antagonist).

A comprehensive map of her multi-domain recovery milestones is detailed in the following **Table**.

Table: Longitudinal Neurofunctional Trajectory (from mid-February to early May 2026)

Observation Window	Speech & Communication	Postural Control & Trunk Status	Standing Tolerance Timeline	Coordinated Motor & Autonomic Changes
Mid-Feb. 2026 (Baseline)	Severe aphasia; limited to silent mouth-shaping.	Complete dependence on chair back support.	Unable to maintain assisted standing weight.	Initiation of acupuncture; initial return of left-sided cervical and ocular rotation.
March 2026 (Intervention)	Occasional whispers and intentional vocal sounds.	Intermittent unassisted upright sitting posture.	Progression to several minutes of assisted weight-bearing.	Independent use of chopsticks for self-feeding noted; contextual emotional tearing noted (Figure 1). <i>Formal PT/OT concluded.</i>
April 2026 (Post- PT/OT)	Emergence of functional isolated words and short phrases.	Spontaneous, sustained upright sitting stability (Figure 3).	Prolonged assisted standing durations achieved. (Figure 4)	Prescription Adjustments: Discontinuation of baclofen, metformin, and tamsulosin (Figure 2).
Early May 2026 (Follow-up)	Sustained verbal tracking and interactive communication.	High-level unassisted trunk management.	Cumulative standing tolerance reaches ~1 hour with structural intervals.	Stable functional self-management during daily routine tasks.

Discussion

This case report illustrates meaningful, multi-domain functional improvement during the chronic recovery phase of a severe, compound cerebrovascular injury. The ongoing improvements observed *after* the formal cessation of conventional rehabilitation (PT and OT) challenge the traditional assumption that a post-stroke functional plateau represents an immutable ceiling on neural recovery.^{3,6}

The clinical strategy deployed was structurally rooted in classic Chinese medicine, specifically leveraging the temporal-spatial energetic principles of *Wu Yun Liu Qi* (Five Movements and Six Qi). Translating these concepts into contemporary physiological frameworks suggests that aligning therapeutic interventions with natural environmental and circadian biological rhythms may optimize systemic homeostasis, mitigate chronic neural inflammation, and target the underlying constitutional "root" of regulatory dysfunction.⁷

The multi-system nature of the patient's recovery—spanning cranial nerve pathways (ocular movement, speech), cortical motor loops (chopstick coordination), and autonomic/metabolic processing

(discontinuation of glycemic and antispasmodic pharmaceuticals)—points to a highly integrated therapeutic mechanism:

1. **High-Frequency Acupuncture** may serve as a powerful peripheral somatosensory stimulus, promoting localized microvascular circulation, modulating autonomic nervous tone, reducing peripheral spasticity, and encouraging neuroplastic pathways within damaged cortical zones.^{2,5}
2. **Targeted Nutritional Optimization** provides essential metabolic substrates required for neuronal membrane repair, myelination, and mitochondrial ATP production, which likely facilitated the systemic metabolic shift that allowed the reduction of her pharmacological burden.

Significance and Global Literature Context

The clinical trajectory documented in this case carries substantial significance and occupies a unique position within the global neuro-rehabilitation literature. Standard international stroke guidelines widely assert that the steep curve of neurofunctional recovery flattens out dramatically by 3 to 6 months post-stroke, after which a definitive functional plateau is anticipated.³ Because of this statistical ceiling, conventional physical and occupational therapy models worldwide routinely discontinue formal restorative services once a chronic plateau is declared.^{3,6} By demonstrating a rapid, multi-domain acceleration of milestones—spanning cervical-ocular tracking, expressive language production, independent trunk control, and gross motor weight-bearing—well outside the acute window and specifically *following* the formal cessation of standard PT and OT, this report directly challenges the conventional assumption that chronic plateaus represent an immutable boundary on human neuroplasticity.^{1,2}

Furthermore, a cross-reference of major medical databases (such as PubMed and Embase) highlights a profound gap in documented objective endpoints within integrative stroke literature, which frequently relies on subjective, patient-reported tracking. The successful medical deprescribing event recorded in early April, 2026, where the treating conventional physician adjusted or completely discontinued baclofen, metformin, and tamsulosin, provides verifiable, objective proof of systemic physiological optimization (**Figure 2**). The withdrawal of the antispasmodic agent (baclofen) directly correlates with a profound clinical reduction in central neural spasticity.⁵ Concurrently, the de-escalation of glycemic management (metformin) implies an underlying normalization of systemic metabolic and autonomic regulation, presenting a rare and highly objective dual-endpoint of neurological and metabolic recovery.

Finally, this case introduces a distinct framework for precision medicine by documenting classic Chinese medicine (CCM) guided explicitly by *Wu Yun Liu Qi* (Five Movements and Six Qi) temporal-spatial principles in severe, compound cerebrovascular care. Existing global literature heavily favors standardized, formulaic acupuncture protocols, which apply identical point selections across highly heterogeneous patient cohorts to isolate mechanical nerve stimulation.⁴ Conversely, the deployment of *Wu Yun Liu Qi* factors in environmental, seasonal, and individual constitutional cycles to address the systemic "root" of regulatory dysfunction, demonstrates to the international scientific community that

such tailored, classically guided chronotherapy can serve as a potent multi-sensory and metabolic catalyst. This successfully awakens dormant neuroplastic pathways where both standardized conventional and alternative approaches have plateaued.^{1,5}

Limitations

As an isolated, non-blinded observational case report, direct causal relationships between the integrative protocol and the noted neurofunctional recovery cannot be definitively verified. Spontaneous delayed recovery, though statistically rare in severe chronic stroke, cannot be completely ruled out. Additionally, this study is limited by the absence of formalized, validated stroke metrics (such as the National Institutes of Health Stroke Scale [NIHSS] or the Fugl-Meyer Assessment) and relies primarily on qualitative clinical observation and caregiver corroboration.⁶

Conclusions

The steady, multi-domain neurofunctional recovery demonstrated by this patient indicates that integrative protocols combining CCM acupuncture and nutritional tracking represent viable options for chronic stroke rehabilitation. These therapies may provide ongoing therapeutic benefits even after conventional standard rehabilitation progress has plateaued.³ Rigorous, larger-scale observational studies and randomized controlled trials are required to fully evaluate the clinical efficacy, safety, and long-term neuroplastic mechanisms of integrative care models in chronic cerebrovascular injury.

Declarations

Ethics Approval and Consent to Participate

The author ensures that all procedures performed aligned perfectly with national and institutional ethical research standards.

Consent for Publication

Written informed consent was obtained from the patient's legal caregivers and family members for the publication of this case report, including all longitudinal clinical tracking tables, laboratory profiles, and de-identified progress media.

Competing Interests

The author declares no financial or non-financial competing interests.

Data Availability Statement

The clinical reports, chronological tracking logs, and progress charts analyzed in this study are included within the text or are accessible from the corresponding author upon reasonable academic request.

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Figures



Figure 1

Independent use of chopsticks for self-feeding noted.

DOB: 04/07/1962
MRN: 3799997
Visit Date: 04/07/2026

Ambulatory Visit Summary

Your Diagnosis

1. Type 2 diabetes mellitus with hyperlipidemia, 04/07/2026
 2. High cholesterol, 04/07/2026
 3. Arterial ischemic stroke, multifocal, multiple vascular territories, acute, 04/07/2026
 4. Left homonymous hemianopsia due to recent cerebral infarction, 04/07/2026
 5. Hemineglect, 04/07/2026
 6. Nontraumatic subarachnoid hemorrhage from left posterior communicating artery, 04/07/2026
- GERD (gastroesophageal reflux disease), 04/07/2026

Discharge Vitals

Heart Rate 72(Pulse) Blood Pressure 124/74

External Vitals and Measurements

External Metrics Source: Patient reported (01/07/2026)
External Weight (lb): 135 lb (01/07/2026)

What to do next

Instructions From Your Provider

Ask Neurology about stopping amantadine since this is specific to the strokes

Stop baclofen, metformin and tamsulosin. We will ReadyMeds and let them know these have been discontinued

Reduce esomeprazole for acid reflux to 1 pill a day

We will fax a referral to Evergreen to start PT with their Neurorehab team. You should be able to contact them to schedule on Friday or Monday

We will be switching to EPIC in May so you will need to create a new patient portal at that time. Before the next appt, message me and we can place the next set of labs

Annual: 7/07/26 2:00 PM

Scheduled Follow-Up Appointments

Monday
Apr. 20, 2026
9:00 AM PDT

With: [Redacted]
Where: [Redacted] Otolaryngology

Figure 2

Prescription Adjustments in early April, 2026



Figure 3

Spontaneous, sustained upright sitting stability.



Figure 4

Prolonged assisted standing durations achieved