

## Acupuncture Treatment for Patients with Xuan Yun Syndrome with Kidney Yin Deficiency and Liver Hyperactivity at Griya Sehat Metta Tegal Alur, West Jakarta

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### Abstract

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#### Keywords:

*Vertigo; Acupuncture; Kidney Yin Deficiency; Liver Yang Rising*

*Vertigo or Xuan Yun is a vestibular disorder causing spinning sensations and significantly affecting quality of life. Pharmacological management may cause adverse effects; therefore, complementary therapy is required. This study aimed to analyze the effectiveness of acupuncture care in a patient diagnosed with Kidney Yin Deficiency and Liver Yang Rising syndrome. A single-case study design was applied to a 43-year-old female with chronic vertigo. Five therapy sessions were conducted. Evaluation used the Visual Analog Scale (VAS) and Dizziness Handicap Inventory (DHI). Results showed a decrease in VAS score from 7 to 0 and DHI score from 56 to 8. Clinical improvement was also observed in Wang, Wen, and Qie examinations. Acupuncture was effective in reducing vertigo intensity and improving functional activity through Qi regulation and Yin–Yang balance restoration.*

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### INTRODUCTION

Vertigo is a disorder of the vestibular system characterized by the sensation of the illusion of spinning motion and postural balance disorders (Bisdorff et al., 2025; Bronstein, 2025; Kaski et al., 2024; Pagarkar, 2022). Globally, the prevalence of vertigo and dizziness reaches 15–20% in the adult population and increases significantly in the age of over 40 years (Bisdorff et al., 2015). This condition has an impact on the risk of falling, psychological disorders such as anxiety and depression, as well as decreased productivity and quality of life (Mukherjee et al., 2024; Muntyanu et al., 2023; Özenoğlu et al., 2023; Wulandari et al., 2025).

Pharmacological approaches such as antihistamines and vestibular suppressants are effective in the acute phase, but long-term use has the potential to cause side effects in the form of sedation and cognitive impairment (Krause & Robinson, 2021). Therefore, complementary therapies such as acupuncture are becoming an alternative that is increasingly being researched scientifically.

Li et al. (2021) through meta-analysis reported that acupuncture was effective in lowering the intensity of dizziness and improving the quality of life of chronic vertigo patients. Wang et al. (2020) showed a significant improvement in DHI scores after acupuncture interventions. Zhang et al. (2022) explain that stimulation of certain acupuncture points can modulate the activity of the vestibular cortex and increase cerebral perfusion.

Vertigo is not only a clinical symptom but also a complex disorder involving multiple physiological mechanisms within the vestibular system (De Hertogh et al., 2025; Faralli et al., 2025; Lee & Choi, 2025; Takeda et al., 2024). The vestibular system plays a crucial role in maintaining spatial orientation and postural stability through the integration of visual, proprioceptive, and vestibular sensory inputs. Disruption in this integration may lead to

dizziness, imbalance, and impaired functional ability in daily activities. Chronic vertigo patients frequently experience limitations in mobility, reduced productivity, and decreased quality of life.

In recent years, complementary and alternative medicine approaches have gained increasing attention in managing vestibular disorders. Among these approaches, acupuncture has been widely explored due to its potential neurophysiological effects. Several experimental studies have suggested that acupuncture stimulation can influence central nervous system activity, regulate autonomic function, and improve cerebral circulation. These physiological effects are believed to contribute to symptom relief in patients with vestibular dysfunction.

Traditional Chinese Medicine explains vertigo through several pathological patterns, including Liver Yang Rising, Phlegm-Damp obstruction, and Kidney Yin Deficiency. In this study, the dominant syndrome identified in the patient was Kidney Yin Deficiency with Liver Yang Hyperactivity. This pattern is commonly associated with chronic conditions characterized by fatigue, sleep disturbances, and persistent dizziness.

Nevertheless, the existing literature still leaves an important research gap. Much of the published evidence focuses on broad diagnostic categories such as dizziness, vestibular disorders, or Ménière's disease, whereas fewer studies examine acupuncture effectiveness through detailed Traditional Chinese Medicine syndrome differentiation combined with modern outcome instruments in real clinical settings. The uploaded study itself shows that the case concerns chronic vertigo classified as Xuan Yun with Kidney Yin Deficiency and Liver Yang Hyperactivity, evaluated using both syndrome assessment and modern measures such as VAS and DHI. This indicates a gap between generalized evidence on acupuncture for vertigo and syndrome-specific, clinically documented evidence that integrates traditional diagnosis with objective functional evaluation.

That gap creates clear research urgency. Chronic vertigo often persists beyond the acute phase and may involve not only vestibular dysfunction but also psychological distress, sleep disturbance, and progressive limitations in daily living. Reviews of vestibular disorders also report possible cognitive impacts, while scoping evidence on chronic dizziness shows that the evidence base is still fragmented and often limited by small-scale or heterogeneous studies. Therefore, studies that document clinical response carefully, even at the case level, remain important for building more precise evidence about who may benefit, through what mechanisms, and with what measurable changes over time.

The novelty of this research lies in its integrative orientation. Based on the uploaded manuscript, the study does not assess acupuncture solely as a generic intervention for vertigo, but specifically analyzes acupuncture management for Xuan Yun in a patient with Kidney Yin Deficiency and Liver Yang Hyperactivity, using a prospective clinical case approach and repeated evaluation through VAS, DHI, and Wang-Wen-Qie examinations. This design is novel because it brings together syndrome-based individualized treatment, objective symptom scoring, and sequential clinical observation in one analytic framework, thereby linking Traditional Chinese Medicine reasoning with contemporary evaluative standards.

Accordingly, the purpose of this study is to analyze the effectiveness of acupuncture therapy in the management of chronic vertigo through the integration of Traditional Chinese Medicine syndrome diagnosis and modern clinical evaluation. In operational terms, the study seeks to determine whether acupuncture at selected points can reduce vertigo intensity, lessen

functional disability, and improve the patient's overall clinical condition across successive therapy sessions. By formulating the purpose in this way, the research moves beyond describing treatment procedures and instead positions itself to assess therapeutic change systematically and coherently.

The contribution of this research is both theoretical and practical. Theoretically, it contributes to the development of evidence-based integrative medicine by showing how traditional syndrome differentiation can be examined alongside validated modern instruments rather than in isolation. Practically, it offers a clinically relevant model for documenting acupuncture outcomes in chronic vertigo patients who may require alternatives or complements to prolonged pharmacological management. In this sense, the study contributes to the literature on vertigo management, acupuncture evaluation, and the methodological integration of traditional and biomedical perspectives.

Ultimately, the objective of this research is to produce a clearer scientific understanding of whether acupuncture can improve subjective symptoms and functional status in chronic vertigo patients with the syndrome pattern of Kidney Yin Deficiency and Liver Yang Hyperactivity, while the benefit of the study lies in providing reference material for practitioners, researchers, and integrative health services. For practitioners, the findings may support more individualized and measurable acupuncture care; for researchers, they may serve as a basis for larger controlled studies; and for patients and health services, they may widen the evidence base for safer, more holistic management of chronic vertigo. In this way, the study holds value not only as a clinical report, but also as a step toward stronger translational evidence in acupuncture research.

## **METHOD**

This study used a single case study design with a clinical prospective approach and will be carried out at Griya Sehat Metta Tegal, Alur West Jakarta in April 2025. The study subjects were a 43-year-old woman with chronic vertigo  $\pm 2$  years.

Prior to therapy, a comprehensive clinical assessment was performed to determine the patient's condition and syndrome classification. The assessment included subjective complaints, medical history, lifestyle factors, and physical examination based on Traditional Chinese Medicine diagnostic principles.

The Wang examination focused on observing facial complexion, tongue color, tongue coating, and body posture. The Wen examination involved detailed questioning regarding the duration of vertigo, triggering factors, associated symptoms such as nausea and tinnitus, sleep quality, emotional condition, and energy levels. Meanwhile, the Qie examination assessed pulse characteristics and palpation findings around the head and neck area. Each therapy session lasted approximately twenty minutes. Sterile disposable filiform needles were inserted at specific acupuncture points including Baihui (GV20), Fengchi (GB20), Taichong (LR3), Taixi (KI3), and Zusanli (ST36). Needle manipulation techniques were applied according to the therapeutic principle of tonifying Kidney Yin and reducing excessive Liver Yang activity.

Patient progress was monitored at every therapy session using both subjective and objective evaluation methods. The Visual Analog Scale (VAS) was used to measure vertigo intensity, while the Dizziness Handicap Inventory (DHI) assessed the functional impact of

dizziness on daily activities. Changes in Wang, Wen, and Qie findings were also documented to observe syndrome progression during treatment

Inclusion criteria included chronic vertigo >6 months, not undergoing active pharmacological therapy, willingness to attend five therapy sessions, and signing an informed consent. Exclusion criteria included acute head trauma, severe neurological disorders, and uncontrolled systemic diseases.

The diagnosis is established through Wang examination (tongue and facial examination), Wen (anamnesis), and Qie (palpation of the pulse and head).

Therapy was carried out for five sessions ( $\pm 20$  minutes/session) using disposable sterile filiform needles at GV20, GB20, LR3, KI3, and ST36 points with tonification and reduction techniques according to the syndrome principle.

The evaluation instrument used the Visual Analog Scale (VAS) and Dizziness Handicap Inventory (DHI). The data were analyzed descriptive-comparatively.

## RESULTS AND DISCUSSION

The evaluation results showed a gradual improvement in the patient’s condition across the five therapy sessions. At the beginning of treatment, the patient reported severe vertigo symptoms with a VAS score of 7 and a DHI score of 56, indicating a moderate functional impairment.

After the second therapy session, the VAS score decreased to 5 and the DHI score decreased to 40, suggesting a reduction in vertigo intensity and improved daily functioning. The patient also reported better sleep quality and reduced frequency of dizziness episodes.

Further improvement was observed during the third and fourth sessions, where the VAS score decreased to 3 and 1 respectively. Correspondingly, the DHI score dropped to 24 and 15, indicating a transition from moderate to mild functional limitation.

By the fifth therapy session, the patient reported no vertigo symptoms with a VAS score of 0 and a DHI score of 8. This result reflects a significant clinical improvement and demonstrates the potential effectiveness of acupuncture therapy in managing chronic vertigo.

**Table 1.** VAS and DHI Score Changes

Session	VAS	DHI
1	7	56
2	5	40
3	3	24
4	1	15
5	0	8

Source: Primary data obtained from patient clinical records and initial assessment conducted at the Acupuncture Clinic during the research period (2025)

**Table 2.** Wang Examination

Parameter	S1	S2	S3	S4	S5
Tongue color	Pale	Reddish pale	Pink	Pink	Normal
Moss	Thin dry	Thin	Humid	Humid	Clean

Source: Primary data obtained from Traditional Chinese Medicine diagnostic examination conducted by the researcher during patient consultation and clinical observation sessions

**Table 3.** Wen Inspection

Parameter	S1	S2	S3	S4	S5
Vertigo	Severe	Medium	Lightweight	Rare	None
Sleep	Difficult	Awakening	Improve	Sleep Improved	Stable

Source: Primary data derived from patient self-reported pain and vertigo intensity measurements using the Visual Analog Scale during each treatment session

**Table 4.** Qie Examination

Parameter	S1	S2	S3	S4	S5
Pulse	Weak drowning	Drowning	Stable	Strong	Strong

Source: Primary data obtained from patient responses to the Dizziness Handicap Inventory questionnaire administered before and after acupuncture therapy sessions

## Discussion

Upon closer examination, the clinical responses demonstrated by the participants not only reflected symptomatic improvement, but also indicated the presence of a gradual and systematic physiological regulatory process. A consistent decline in VAS scores from the first to the fifth session indicated that the intervention given had a cumulative effect, not just a temporary effect. This is important in the context of chronic vertigo, where many therapies provide only short-term improvements without addressing the underlying imbalance of the disorder.

In the vestibular system, the stability of the body's balance depends on the integration of sensory information from three main systems, namely the vestibular, visual, and somatosensory systems. When one of the systems is disrupted or there is a bilateral input imbalance, the brain needs time to carry out the central compensation process. This compensatory process involves neuronal reorganization of the brainstem and vestibular cortex. Acupuncture stimulation at certain points is thought to provide neurosensory modulation that can accelerate the adaptation process.

From a neurophysiological point of view, several studies have shown that acupuncture is able to affect the activity of the autonomic nervous system. Regulation of the autonomic nervous system plays an important role in stabilizing blood pressure, heart rate, and stress responses, which often worsen vertigo symptoms. In this case, the improvement in sleep quality and emotional stability reported by participants indicated the possibility of more optimal parasympathetic regulation after several sessions.

Furthermore, a significant decrease in DHI scores showed that the intervention not only reduced the perception of vertigo, but also improved the functional impact on daily life. DHI measures physical, emotional, and functional dimensions. Therefore, a decrease in scores from moderate to minimal indicates clinically meaningful changes, not just subjective variations.

Within the framework of Traditional Chinese Medicine, Yin Kidney Deficiency syndrome with Liver Hyperactivity is a pathological pattern that is often found in patients with chronic vertigo accompanied by sleep disturbances and fatigue. The kidneys in the PTT concept act as the Yin and Yang roots of the body. When the Yin Kidneys weaken, the Yang becomes relatively excessive and rises to the head, thus giving rise to the symptoms of spinning dizziness. The therapeutic approach in this study is focused on the principle of nourishing Yin and lowering Yang simultaneously.

Changes in Wang's examination showed a transformation of the color and moisture of the tongue from pale and dry to pinker and moister. This indicates an increase in Yin fluid and a more harmonious circulation of Qi. On Qie examination, the change in pulse character from sinking and weak to more stable and stronger reflects the increase in internal Qi power. The consistency of these changes shows that the intervention not only suppresses the symptoms, but also affects the root of the syndrome gradually.

Another important aspect to look out for is the psychological effects of chronic vertigo. Patients with recurrent vertigo often experience anticipatory anxiety, which is the fear of the appearance of the next attack. This condition can worsen symptoms through stress mechanisms. With the improvement of clinical conditions and the reduction in the frequency of vertigo, there is a high probability of a decrease in anxiety levels which contributes to the stability of the vestibular system.

From an integrative perspective, the results of this study show that the PTT syndrome approach can be explained through modern physiological mechanisms. The concept of "That goes up to the head" can be analogous to dysregulation of blood flow or excess neuronal activity in certain areas. Meanwhile, the concept of "Yin deficiency" can be attributed to regulatory deficiencies or stabilization of internal systems. Although the terminology is different, there are conceptual slices that allow for the integration of understanding between the two medical systems.

However, it should be realized that the design of the case study has limitations in terms of generalization of results. One individual's response does not necessarily represent the broader population. Individual factors such as age, duration of illness, psychological condition, and biological response can affect the outcome of therapy. Therefore, further research with controlled experimental designs and larger sample numbers is urgently needed to strengthen the evidence of effectiveness.

Despite its methodological limitations, this study provides a fairly strong clinical picture of the potential of acupuncture in the management of chronic vertigo. The advantage of this approach lies in its relatively safe nature, minimal side effects, and can be applied as complementary therapy without interfering with conventional medical therapy.

In addition, the syndrome-based approach allows for more specific individualization of therapies according to the patient's condition. In clinical practice, therapeutic personalization is an important factor in increasing the success of interventions. This principle is in line with the trend of modern medicine that is starting to lead to precision medicine.

Overall, this additional analysis strengthens the argument that acupuncture care in Yin Renal Deficiency syndrome and Liver Yang Hyperactivity is not only symptomatically effective, but also has the potential to provide broader systemic regulation. The integration of objective evaluations such as VAS and DHI with traditional syndrome diagnosis provides a more comprehensive scientific framework for assessing the effectiveness of therapy.

### **Clinical Implications**

The findings of this study provide important clinical implications for the application of acupuncture in the management of chronic vertigo. The gradual reduction of vertigo symptoms observed in this case indicates that acupuncture may serve as an effective complementary therapy for patients experiencing persistent vestibular disturbances. By targeting both the root cause and symptomatic manifestations according to Traditional Chinese Medicine principles,

acupuncture offers a holistic therapeutic approach that integrates physiological and energetic regulation.

In clinical practice, many vertigo patients rely primarily on pharmacological therapy. Although medication may provide short-term symptom relief, long-term use can lead to side effects such as sedation, fatigue, and decreased cognitive function. Therefore, integrating acupuncture therapy into conventional treatment strategies may provide additional benefits while minimizing pharmacological dependence.

Furthermore, the improvement in functional outcomes measured through the DHI score demonstrates that acupuncture not only reduces symptom severity but also improves the patient's ability to perform daily activities. This suggests that acupuncture may contribute to improved quality of life in patients suffering from chronic vertigo.

### **Study Limitations**

Despite the positive findings observed in this study, several limitations should be acknowledged. First, this research was conducted using a single case study design, which limits the generalizability of the results. The response of one patient may not fully represent the outcomes that may occur in a larger population of vertigo patients.

Second, the duration of the intervention was relatively short, consisting of only five therapy sessions. Although significant improvements were observed within this period, longer treatment durations may provide more comprehensive insights into the long-term effectiveness of acupuncture therapy.

Third, the evaluation instruments used in this study were limited to VAS and DHI scores. While these instruments provide valuable information regarding symptom intensity and functional impact, additional objective measurements such as vestibular function tests or neurophysiological assessments could provide a more comprehensive evaluation of treatment outcomes.

### **Recommendations for Future Research**

Future studies are recommended to involve larger sample sizes and controlled experimental designs to further investigate the effectiveness of acupuncture therapy in managing vertigo. Randomized controlled trials comparing acupuncture with conventional therapy or combined therapy approaches may provide stronger scientific evidence regarding its clinical benefits.

Additionally, future research may explore the neurophysiological mechanisms underlying acupuncture therapy in vestibular disorders. Investigating changes in cerebral blood flow, autonomic nervous system activity, and neural regulation within the vestibular pathway may provide deeper insights into how acupuncture contributes to symptom improvement.

## **CONCLUSION**

This study showed that acupuncture care in *Xuan Yun patients* with Yin Kidney Deficiency syndrome and Yang Liver Hyperactivity gave significant results both subjectively and objectively. The decrease in the VAS score from 7 to 0 and the decrease in the DHI score from 56 to 8 reflect the improvement in the intensity of vertigo and its impact on daily activities in a meaningful way.

Clinically, chronic vertigo involves disruption of the integration of the vestibular system that causes sensory imbalances. Progressive therapeutic responses suggest that acupuncture has the potential to support central vestibular compensation.

In the perspective of Traditional Chinese Medicine, Yin Kidney Deficiency as the root of the pathology is successfully restored through targeted therapy. Wang, Wen, and Qie changes indicate Qi stabilization and Yin–Yang balance.

The improvement observed in this study may be associated with several physiological mechanisms triggered by acupuncture stimulation. Previous studies have indicated that acupuncture can enhance cerebral blood circulation and regulate neural activity within the vestibular pathways. Improved cerebral perfusion may help stabilize sensory processing within the vestibular system, thereby reducing dizziness symptoms.

Another possible mechanism involves the modulation of the autonomic nervous system. Chronic vertigo is often associated with increased sympathetic activity, which may exacerbate symptoms such as dizziness, anxiety, and sleep disturbances. Acupuncture has been reported to activate parasympathetic responses, promoting relaxation and restoring autonomic balance.

From the perspective of Traditional Chinese Medicine, the improvement observed in this patient can be explained through the restoration of Yin–Yang balance. Kidney Yin plays a crucial role in nourishing the brain and maintaining internal stability. When Kidney Yin becomes deficient, excessive Liver Yang may rise to the head and trigger symptoms such as vertigo and insomnia. By tonifying Kidney Yin and subduing Liver Yang, acupuncture helps restore internal equilibrium.

The selected acupuncture points in this study were based on classical therapeutic principles. Baihui (GV20) is known for its role in regulating the brain and calming excessive Yang energy. Fengchi (GB20) is commonly used to treat dizziness and disorders related to the head and neck. Taichong (LR3) helps regulate Liver Qi and reduce Liver Yang hyperactivity. Taixi (KI3) nourishes Kidney Yin, while Zusanli (ST36) strengthens Qi and overall vitality.

Physiologically, the possible mechanism involves modulation of neurotransmitters and increased cerebral perfusion. The integration of syndrome diagnosis and modern instruments is the strength of this research.

Although this study is a single case study, the findings make a scientific contribution to the development of evidence-based acupuncture practice in chronic vertigo. Further research with experimental designs is needed to reinforce the generalizations.

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