CASE REPORT

Management of Chronic Migraine Without Aura with Classical Unani Formulations: A Case Report

Fatima Anjum, MD; Abdul Aleem, MD; Usama Akram, MD; Younis Iftikhar Munshi, MD; Nazim Husain, MD

ABSTRACT

Background • Although tension-type headache is the most prevalent primary headache disorder, affecting nearly 26–30% of the population, migraine affects approximately 14–15% globally and is associated with a considerably higher burden of disability. Migraine typically presents as recurrent, pulsatile pain accompanied by nausea, photophobia, and phonophobia. Despite long-term use of conventional treatment, chronic cases often remain refractory. In Unani medicine, this condition corresponds to the melancholic type of migraine (*Shaqīqa Sawdāwiyya*), caused by derangement of *black bile (Sawda')*. This case report presents the therapeutic role of classical Unani formulations in alleviating symptoms of chronic migraine without aura.

Case Presentation • A 23-year-old female presented with a 14-year history of recurrent, unilateral throbbing and pulsating headaches associated with nausea, photophobia, and phonophobia. The episodes occurred 2-3 times per week, with each attack typically lasting approximately 48 hours and occasionally persisting for up to 72 hours. The patient had a positive family history of migraine, and previous conventional as well as homeopathic treatments failed to provide sustained relief. Based on the clinical presentation and Unani diagnostic principles, the patient was diagnosed with *Shaqīqa Sawdāwiyya,* corresponding to chronic migraine without aura. The patient was managed with oral and local Unani formulations along with dietary regulation and was followed up from August 2025 to October 2025, with an additional 2-week post-treatment follow-up.

Results • At the final follow-up, the patient showed substantial clinical improvement, with the Migraine Disability Assessment (MIDAS) score decreasing from 121 to 4, accompanied by a marked reduction in symptom severity.

Conclusion • The classical Unani regimen demonstrated beneficial effects in the management of the patient with chronic migraine without aura. This case highlights the potential of Unani medicine in managing migraine, which can be evaluated in larger clinical trials with robust methodologies. (*Adv Mind Body Med.* 2026;40(5):48-52)

Keywords • Headaches, refractory migraine, neurological disorder, Migraine Disability Assessment, Unani medicine, case report, Shaqiqa

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INTRODUCTION

Migraine is a common, recurrent neurological disorder characterized by episodic attacks of moderate to severe head pain, with a wide range of sensory, cognitive, and systemic symptoms.[1] Migraines affect nearly 1.1 billion people worldwide, with an estimated prevalence of around 14%. It is more common in females, particularly women of childbearing age, with peak onset between 14 and 17 years (for migraine without aura). It is also a major cause of disability among women, especially during the reproductive years.[2]

The International Classification of Headache Disorders, 3rd edition (ICHD-3), provides standardized diagnostic criteria and classifies migraine into several clinical subtypes. Migraine without aura is defined as recurrent headache attacks lasting 4–72 hours, typically characterized by unilateral, pulsating, moderate-to-severe pain associated with nausea and or photophobia and phonophobia. It is characterized by transient visual, sensory, speech, or other neurological disturbances that usually precede or accompany the early phase of headache.[3] Chronic migraine is defined as headache occurring on ≥15 days per month for more than 3 months, with at least 8 headache days fulfilling the diagnostic criteria.[1,4]

The etiology of migraine is complex and multifactorial, involving neurological and neurovascular mechanisms such as

Table 1. Timeline of Clinical Events and Follow-Up

Date	Visit	Clinical Observations	VAS Score
August 06, 2025	Initial consultation	Patient presented with throbbing, pulsatile headaches localized to the bilateral temporal region, associated with nausea and vomiting. The treatment regimen outlined in Table 3 and dietary changes were initiated and continued throughout the study period without modification.	9
August 20, 2025	First follow-up	Mild reduction in headache intensity and frequency noted; nausea persisted.	8
September 02, 2025	Second follow-up	Further reduction in headache frequency and severity; marked improvement in nausea and vomiting.	6
September 15, 2025	Third follow-up	Sustained symptomatic improvement with better sleep, appetite, and bowel habits.	4
October 11, 2025	Fourth follow-up	Sustained symptomatic improvement with better sleep, appetite, and bowel habits.	3
October 27, 2025	Final treatment visit	Marked overall clinical improvement, following which the treatment was discontinued.	2
November 14, 2025	Post-treatment follow-up	No recurrence of migraine symptoms reported after completion of treatment.	2

Abbreviation: VAS, Visual Analogue Scale.

genetic susceptibility, altered neuronal excitability, cortical spreading depolarisation, activation of the trigeminovascular system, and neuroinflammatory processes.[5] Several risk factors have been identified that may contribute to the progression from episodic to chronic migraine. These include obesity, increased frequency of headache episodes, cutaneous allodynia, depression, asthma, non-cephalic pain, snoring, frequent use or overuse of medications taken for acute migraine relief, and poor response to acute migraine treatment. Additional risk factors include female sex, excessive caffeine intake, major life stressors, head and neck injury, and insomnia.[6,7]

Treatment and prevention of chronic migraine are challenging, with some patients frequently reporting medication side effects such as paresthesia, fatigue, nausea, dizziness, drowsiness, constipation, dry mouth, and weight gain. Many of them also suffer from medication overuse headache, with a subgroup having intractable or refractory chronic migraine.[8,9] Therefore, it is essential to investigate alternative therapeutic approaches for the management of chronic migraine. The Unani system of medicine may offer a potential complementary approach in this regard.[10]

In Unani Medicine literature, migraine is described as *Shaqīqa*, denoting the unilateral nature of headache. It is classified under *Sudā' Māddī* (headache due to morbid humoral matter), which is characteristically unilateral, recurrent, and chronic. According to Unani pathophysiological concepts, the condition involves the ascent of *Bukhārāt-i-Raddiya* (morbid vapors) from the gastrointestinal tract or other organs toward the brain, causing headache. Classical Unani physicians have recommended various single and compound herbal formulations for its management.[11]

CASE STUDY

Patient Information

A 23-year-old unmarried female visited the outpatient department (OPD) of the Regional Research Institute of Unani Medicine, Silchar, Assam, India, with complaints of recurrent headaches for the past 14 years. The headaches were characterized by throbbing and pulsating pain predominantly in the unilateral temporal region. The attacks were associated with nausea, photophobia, and phonophobia, which had been persistent for the last 6 years. Patient-reported migraine triggers included emotional stress, social gatherings, bright lights, loud noise, and exposure to strong smells. The patient also reported constipation, decreased appetite, and lack of sleep, which often worsened during headache episodes. The frequency of headache episodes was 2 to 3 times per week, with each episode lasting approximately 48 hours, occasionally extending up to 72 hours. The patient reported a positive family history of migraine, since her father had also suffered from a similar headache.

Previously, the patient had undergone prolonged conventional treatment. The prescription included Vasograin (Caffeine 100 mg + Ergotamine 1 mg + Paracetamol 250 mg + Prochlorperazine 2.5 mg, Migrest NXG (Magnesium Oxide 200 mg + *Ginkgo biloba* extract 60 mg + Coenzyme Q10 50 mg + Ginger Extract 50 mg + Vitamin B2 800 µg), Migon Plus 10 (Flunarizine 10 mg + Propranolol 40 mg) and Placida (Flupenthixol 0.5 mg + Melitracen 10 mg). She took these medications for a period of 1 year, but achieved no significant relief. The patient had also received homeopathic therapy for two years, but symptoms persisted. On presentation at the OPD, the pain intensity on the visual analogue scale (VAS) was recorded as 9 out of 10.[12] The migraine disability assessment score (MIDAS) was 121, indicating severe disability due to migraine. MIDAS score is a five-item questionnaire that measures headache-related disability over the previous 3 months by summing days of lost or reduced productivity in work, household, and social activities. Scores are interpreted as follows: 0–5 (little or no disability), 6–10 (mild), 11–20 (moderate), and ≥21 (severe); a score of 6 or higher indicates clinically significant disability warranting consideration of targeted migraine management.[13]

Timeline

The sequence of the events and follow-ups is illustrated in Table 1.

Diagnostic Assessment

The diagnostic assessment included detailed history taking, physical examination, neurological evaluation, and application of the ICHD-3 diagnostic criteria illustrated in Table 2.[3] General physical and systemic examinations were unremarkable. Neurological examination was normal, with no focal neurological deficits or signs suggestive of secondary headache disorders. Routine laboratory investigations were within normal limits. Migraine severity and disability were assessed using MIDAS and VAS scores.

Table 2. Fulfilment of ICHD-3 Diagnostic Criteria by the Present Case[3]

ICHD-3 Criterion	Requirement	Findings in the Present Case	Status
A	Headache ≥15 days/month for >3 months	Headache 2–3 times per week, with each episode lasting ~ 48 hours (≈16–24 days/month) for 14 years	Fulfilled
B	≥5 attacks fulfilling criteria for migraine with or without aura	Recurrent throbbing, pulsating headaches with nausea, photophobia, and phonophobia	Fulfilled
C	On ≥8 days/month for >3 months, headaches have migraine features or respond to migraine-specific therapy	≥10 days/month with migraine features; partial response to Vasograin and triptans	Fulfilled
D	Not better accounted for by another ICHD-3 diagnosis	No secondary cause identified; normal neurological evaluation	Fulfilled

Table 3. Unani Therapeutic Interventions Prescribed to the Patient

Formulation	Dose and administration	Ingredients (botanical names)
Itrifāl Ustukhuddūs	10 g orally at bedtime with lukewarm water	*Lavandula stoechas* L., *Terminalia chebula* Retz., *Terminalia bellirica* (Gaertn.) Roxb., *Phyllanthus emblica* L., *Paeonia emodi* Wall. ex Royle, *Anacyclus pyrethrum* (L.) Lag., *Prunus dulcis* (Mill.) D.A.Webb, and *Vitis vinifera* L.[14]
Itrifāl Kishnīzī	10 g orally at bedtime with lukewarm water	*Coriandrum sativum* L., *Terminalia chebula* Retz., *Terminalia bellirica* (Gaertn.) Roxb., and *Phyllanthus emblica* L.[14]
Khamīra Gāozabān	10 g orally twice daily before breakfast with water	*Borago officinalis* L., *Coriandrum sativum* L., *Salvia haematodes* L., *Centaurea behen* L., *Santalum album* L., *Lallemantia royleana* (Benth.) Benth., *Ocimum basilicum* L., and *Melissa parviflora* Roxb.[14]
Arq-i-ʿAjīb	Topical application over the temporal and forehead regions twice daily	*Cinnamomum camphora* (L.) J. Presl, *Mentha* × *piperita* L., *Thymus vulgaris* L., and *Trachyspermum ammi* (L.) Sprague ex Turrill.[24]
Habb-i-Muqil	Two tablets (500 mg each) orally twice daily after meals with water	*Terminalia chebula* Retz., *Operculina turpethum* (L.) Silva Manso, *Brassica juncea* (L.) Czern., *Asphodelus tenuifolius* Cav., *Commiphora wightii* (Arn.) Bhandari, and *Terminalia chebula* Retz.[14]

The patient's *Mizāj* (temperament) was assessed as *Sawdāwī* (melancholic). Based on the recurrent pulsatile headaches associated with nausea, photophobia, and phonophobia, along with the fulfilment of ICHD-3 criteria, the patient was diagnosed with chronic migraine without aura, corresponding to *Shaqīqa Sawdāwiyya* in the Unani system of medicine (Table 2).[11] Differential diagnoses, including tension-type headache, cluster headache, sinus headache, and other secondary headache disorders, were considered and excluded clinically.

No major diagnostic challenges were encountered. The prolonged disease duration, frequent headache episodes, and poor response to previous therapies indicated chronicity and substantial disease burden at presentation.

Table 4. Comparison of MIDAS Questionnaire Scores Before and After Unani Treatment

Question	Assessment Item	Before Treatment	After Treatment
1	Days missed from work or school due to headache (last 3 months)	15	0
2	Days with ≥50% reduced productivity at work or school due to headache (last 3 months)	30	1
3	Days unable to perform household work due to headache (last 3 months)	30	0
4	Days with ≥50% reduced productivity in household work due to headache (last 3 months)	20	1
5	Days missed from family, social, or leisure activities due to headache (last 3 months)	26	2
6	Days with headache (last 3 months)	14	3
7	Average headache intensity (VAS, 0–10)	9	2
Total Disability Days (Q1–Q5)		**121**	**4**

Note**:** Grade I (0–5) = Little or no disability; Grade II (6–10) = Mild disability; Grade III (11–20) = Moderate disability; Grade IV (≥21) = Severe disability.

Abbreviation: MIDAS, Migraine Disability Assessment Score.

Therapeutic Intervention

The patient was initiated on an Unani pharmacological regimen, which was continued for 12 weeks (CCRUM, 2009, 2006). Details of the prescribed formulations, their dosages, and their ingredients are summarized in Table 3.

In addition to pharmacotherapy, the patient was counseled on dietary modifications based on Unani principles of *ʿIlāj bil Ghidhā* (diet therapy). The prescribed diet focused on light, moist, and easily digestible foods to counteract *Ghalba-e-Sawdā*' (dominance of black bile), improve digestion, and support neurological balance, thereby aiding in migraine management. This diet helps reduce dryness and coldness, eliminate *Sawdāwi Mādda*, improve digestion (*Quwwat-i Hāzima*), and support brain function (*Dimāgh*), thereby contributing to migraine control.

Follow-Up and Outcomes

The patient was followed at regular intervals over a 12-week treatment period, as detailed in Table 1, with visit timings adjusted according to clinical response and feasibility. A post-treatment follow-up was conducted two weeks after completion of therapy. Furthermore, the patient reported complete adherence to the prescribed Unani regimen and strict compliance with dietary recommendations under *ʿIlāj bi'l Ghidhā* (diet therapy).

The therapeutic interventions were well-tolerated throughout the treatment period. No adverse drug reactions, unanticipated effects, or complications were observed. At 12 weeks, the patient achieved substantial resolution of associated symptoms. VAS score reduced from 9 to 2 (Table 1). The total MIDAS score decreased from 121 (Grade IV – Severe Disability, before treatment) to 4 (Grade I – Little or No Disability, both at treatment completion and at post-treatment follow-up), indicating a marked reduction in migraine-related disability and improvement in daily functioning following Unani therapeutic intervention. The detailed comparison of the MIDAS score components before and after the intervention is illustrated in Table 4. At 2-week post-treatment follow-up, no recurrence of migraine or associated gastrointestinal symptoms was observed.

DISCUSSION

This case demonstrated successful management of migraine without aura within twelve weeks and sustained benefit during post-treatment follow-up, with no adverse events. *Itrifāl Ustukhuddūs* was prescribed for its classical Unani actions such as *Munaqqi-i-Dimāgh* (brain cleanser), *Musaffi-i-Dimāgh* (brain detoxifier), *Muqawwi-i-Aʿsāb* (nervine tonic), and *Mufatteh-i-Sudad* (deobstruent), described in Unani literature.[14] Its key constituents are *Ustukhuddūs* (*Lavandula stoechas* L.) and *Itrifal* (*Triphala*) combination comprising *Emblica officinalis* Gaertn. (synonym of *Phyllanthus emblica* L.), *Terminalia chebula* Retz., and *Terminalia bellirica* (Gaertn.) Roxb.[14] Experimental and clinical evidence suggests that *L. stoechas* alleviates migraine through neuroprotective, anti-inflammatory, and antioxidant mechanisms. It significantly increases brain-derived neurotrophic factor (BDNF) expression, enhancing neuronal resilience and stabilizing cortical excitability.[15] Its phenolic compounds: rosmarinic acid, eriodictyol, ursolic acid, and luteolin-7-O-glucoside, exert strong antioxidant effects, scavenging reactive oxygen species and preventing neuronal oxidative damage.[15,16] The extract also mitigates neurogenic inflammation by inhibiting the release of cytokines and prostaglandins, thereby modulating trigeminal activation.[17] Additionally, constituents such as linalool and camphor provide sedative and vasomodulatory benefits, promoting vascular stability and reducing central nervous system overstimulation.[18] Furthermore, in a placebo-controlled clinical trial, Sasannejad et al. (2012) found that inhalation of lavender essential oil for 15 minutes during migraine attacks significantly reduced pain severity.[19]

Experimental studies show that *Itrifal/Triphala*, comprising *P. emblica* L., *T. chebula* Retz., and *T. bellirica* (Gaertn.) Roxb. inhibits acetylcholinesterase, enhances antioxidant enzymes, and suppresses proinflammatory mediators, thereby protecting neurons and modulating serotonin and gamma-aminobutyric acid (GABA) pathways. It also enhances neurotrophic factors and stabilizes neuronal excitability, which may reduce susceptibility to migraine.[20]

Itrifāl Kishnīzī was included for its classical Unani actions as a *Musakkin-i-Sudā*' (headache-reliever) and *Muqawwī-i-Dimāgh* (brain-tonic) properties.[14] Its principal ingredient, *Coriandrum sativum* L., exhibits analgesic, neuroprotective, anxiolytic, and anticonvulsant effects, largely attributed to linalool and related bioactive compounds. These constituents modulate key neurotransmitter systems, particularly GABA, serotonin, and *N*-methyl-D-aspartate (NMDA) receptors, contributing to anxiolytic and antidepressant activity.[21] Clinical evidence further supports its role in migraine management, with a randomized controlled trial showing that *Coriandrum sativum* syrup significantly reduces the duration, severity, and frequency of attacks, highlighting its promise as a safe and effective adjunctive therapy.[22]

Khamīra Gāozabān was included for *Muqawwi-i Qalb-o-Dimāgh* (cardio- and neurotonic), *Mufarrih* (exhilarant), and *Musakhkhin-i-Badan* (body-strengthening) properties.[14] Its key constituent, *Borago officinalis* L., contains bioactive compounds such as gamma-linolenic acid, phenolic acids, flavonoids, and alkaloids that confer anti-inflammatory, antioxidant, and analgesic effects, providing a pharmacological basis for its use in pain- and inflammation-related conditions, including migraine.[23]

Arq-i-Ajīb was applied topically for its *Muhallil-i-Waram* (anti-inflammatory) and *Musakkin-i-Alam* (analgesic) properties.[24] It primarily contains camphor, menthol, and thymol.[25] These compounds possess significant analgesic and anti-inflammatory activities relevant to migraine management. Menthol activates transient receptor potential melastatin 8 (TRPM8) channels, reducing irritation and pain.[26] A 10% menthol solution applied cutaneously, in a randomized, triple-blind, placebo-controlled trial, showed significant pain relief and reduction of migraine-associated symptoms, indicating its safety and efficacy in migraine treatment.[27] Camphor produces analgesic and anti-inflammatory effects via transient receptor potential ankyrin 1 (TRPA1) inhibition and TRPM8 activation.[27] Thymol also exhibits strong analgesic properties and the most pronounced mechanoreceptor depressant effect.[28] Combined formulation of these constituents has shown significant efficacy against pain and inflammation, supporting their role in headache and migraine management.[29]

Emerging evidence also underscores the role of the gut–brain axis in migraine pathophysiology, with studies showing that improvement of constipation can alleviate migraine symptoms.[30,31] Therefore, *Habb-i-Muqil* was included to relieve constipation. Its key constituent, *Muqil* (*Commiphora mukul* [Hook. ex Stocks] Engl.), has demonstrated beneficial effects in functional constipation in a controlled clinical trial.[32] Additionally, *C. mukul* has shown analgesic, anti-inflammatory, and lipid-lowering effects in clinical studies on neuropathic pain and hyperlipidemia, supporting its broader therapeutic relevance.[33,34]

Strength and Limitations

The present case highlights the potential role of classical Unani formulations in managing chronic migraine without aura, with marked clinical improvement and sustained benefit during pos-treatment follow-up. Detailed clinical evaluation using validated outcome measures such as MIDAS and VAS strengthens the clinical relevance of the findings. However, this being a single-case report, the findings cannot be generalized. Furthermore, the absence of a control group limits definitive attribution of the observed improvement solely to the intervention.

CONCLUSION

This case underscores the potential of Unani regimens as viable adjuncts or alternatives in migraine management, particularly for patients who are intolerant of or reluctant to use conventional pharmacotherapy. The favorable clinical outcomes justify further rigorous evaluation through large-scale randomized controlled trials to validate efficacy and to

develop evidence-based frameworks for integrating Unani interventions into contemporary migraine care.

Patient Perspective

I used to have frequent migraine attacks, which affected my daily life. After the Unani treatment, the frequency and severity of my headaches gradually decreased, and now I rarely experience any attacks. My sleep and appetite have also improved.

FUNDING

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INFORMED CONSENT

Written informed consent for publication of this case report was obtained from the patient.

DECLARATION OF GENERATIVE AI USE

During manuscript preparation, Scopus AI was used solely to assist in identifying relevant and reliable information. All content was critically reviewed, verified, and edited by the authors, who assume full responsibility for the accuracy and integrity of the final manuscript.

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