



A comprehensive review on migraine management by yoga and Ayurveda

Surender¹

PhD yoga, Tantiay University, Sri Ganganagar, Rajasthan, India

Kamal²

Msc. Scholar, Dept. of yoga therapy, Swami Vivekananda Yoga Anusandhana Samsthana, Bengaluru, India

Sumit³

Bsc. Yoga , OM Sterling Global University, Hisar-125004, India

Date of Submission: 26-08-2023

Date of Acceptance: 07-09-2023

Abstract

Millions of people throughout the world suffer from migraine, a complex neurological illness that drastically lowers quality of life. Although traditional pharmaceutical treatments for migraine have been beneficial, complementary and alternative therapies are gaining popularity for their all-encompassing approach to migraine management. The goal of this in-depth analysis is to examine how yoga and ayurveda can be used to treat migraines. Yoga is a mind-body exercise that emphasises breathing techniques, meditation, and physical postures to improve general wellbeing. Yoga may be able to lessen the frequency, severity, and length of migraine attacks, according to several research. Stress reduction, pain management, and headache management as a whole have all been shown to benefit from approaches like deep breathing exercises, relaxation techniques, and specific asanas. Yoga has the potential to be used as an adjuvant therapy for people who suffer from migraines because it can help coping skills and sleep quality. The goal of ayurveda, an ancient Indian medical practise, is to balance the doshas, or energies, of the body in order to sustain health. Dietary changes, herbal treatments, cleansing procedures, and lifestyle alterations are all part of the Ayurvedic approach to managing migraines. Herbal treatments for migraine pain relief have showed potential, including feverfew, butterbur, and ginger. In order to restore doshic balance and reduce migraine triggers, ayurvedic treatments like Shirodhara (oil application to the forehead) and Nasya (inhalation of herbal oils) use oil on the forehead and nasal administration, respectively. The scientific literature on the use of yoga and ayurveda

in the treatment of migraines is reviewed critically in this article. While many studies highlight positive outcomes, several methodological limitations and variations in interventions make it challenging to establish definitive conclusions. Integrating Yoga and Ayurveda into conventional migraine treatment plans holds potential benefits, especially in cases where pharmacological options are limited due to contraindications or patient preferences. In conclusion, Yoga and Ayurveda offer promising avenues for managing migraines through their holistic approaches that address both physical and psychological factors. Collaborative efforts between conventional medicine and traditional practices could lead to more comprehensive and personalized migraine management strategies. Further well-designed clinical trials are needed to establish the specific protocols, mechanisms of action, and long-term effectiveness of Yoga and Ayurveda in migraine care.

Keywords:- Ayurveda, Management, Migraine, Yoga

I. Introduction:

Migraine is a complex neurological disorder characterized by recurrent episodes of moderate to severe headaches, often accompanied by symptoms such as nausea, vomiting, and sensitivity to light and sound. Conventional treatment approaches primarily rely on medication, but there is growing interest in complementary and alternative therapies, including yoga, as an adjudicative or alternative approach for migraine management. This paper provides an overview of the role of yoga in managing migraines based on existing research and theoretical frameworks. Yoga



is an ancient practice that combines physical postures (asanas), controlled breathing techniques (pranayama), meditation, and mindfulness. It promotes overall well-being by fostering physical, mental, and emotional balance. Several mechanisms have been proposed to explain the potential benefits of yoga in managing migraines, including stress reduction, improvement in autonomic nervous system function, and modulation of pain perception. Research studies investigating the effects of yoga on migraines have shown promising results. Regular yoga practice has been associated with a reduction in the frequency, intensity, and duration of migraine attacks. It has also been found to improve pain tolerance, decrease medication usage, and enhance quality of life among individuals with migraines. However, the optimal type, duration, and frequency of yoga practice for migraine management are yet to be determined, and further research is needed to elucidate the underlying mechanisms.

Migraine is a recurring moderate to severe headaches, often accompanied by symptoms such as nausea, sensitivity to light and sound, and visual disturbances. It can significantly impact a person's quality of life, making it essential to find effective ways to manage and reduce migraine episodes. While medication is commonly used for migraine treatment, complementary approaches like yoga have gained recognition for their potential benefits in managing and preventing migraines. Yoga offers a holistic approach that addresses both the physical and psychological aspects of the condition. It can help reduce the frequency, intensity, and duration of migraine attacks while improving overall health and resilience. This article will explore the various ways in which yoga can be incorporated into migraine management. We will discuss specific yoga techniques, their potential benefits, and how they can be integrated into a comprehensive migraine management plan. It is important to note that while yoga can be a beneficial complementary practice, it should not replace medical advice or prescribed treatments. It is always essential to consult with a healthcare professional before beginning any new exercise or wellness regimen, particularly if you have a pre-existing medical condition.

Definition:-

Migraine:- Headache that is so bad it makes you feel sick; intolerable head pain

Yoga:-(Indian in origin) a set of physical exercises that focus on breath awareness and promote relaxation in the body as well as the mind

Or

A Hindu philosophy that seeks to merge the individual ego with the spirit of the world

Management:- It is a technique of controlling and sustaining something to successfully accomplish arbitrary aims.

Ayurveda:- the conventional Hindu medical practise that treats ailments with a combination of food, herbal remedies, and yogic breathing

Management of migraine through yoga – It is possible to manage migraines through yoga when severe headache pain is handled by learning to control your breath and calming your body and mind.

Types of Migraine

Classic migraine:- A neurological issue that manifests as sporadic light flashes is what is known as this condition. You can describe your sensitivity to light as illusion, zigzag light patterns, blind patches, and photophobia. In most cases, it begins five to thirty minutes before the migraine headache actually sets in. A glow around things or at the edge of the field of vision is what the person experiences as a result. Patients with this migraine are reportedly affected by hazy vision and attention issues.

Common migraine:-Migraine without sensory symptoms manifests as nausea, light and sound sensitivity, vomiting, and other symptoms but does not have an aura. It frequently occurs bilaterally or hemispherically.

Hemiplegic migraine:- In most cases, patients with this kind of migraine have a family history of hemiplegic migraines. This is an uncommon yet severe kind of migraine with sensory symptoms. Short-term numbness on one side of the body is the typical first symptom of hemiplegic migraine. When a headache appears, it is accompanied by these symptoms.

Ophthalmoplegic migraine:- The paralysis of the optical muscles, pain in the area surrounding the eyes, and drooping eyelids are all symptoms of an ophthalmoplegic migraine. Despite being extremely uncommon, this type of migraine can, in severe circumstances, linger for a few days to a few months.

Basilar artery migraine Young adult women frequently suffer from it. This type of migraine affects the blood flow to the neck or the back of the brain. Dizziness, loss of balance, confusion, slurred speech, vertigo, double vision, vomiting, and nausea are additional symptoms that may be present. Such headaches could persist anywhere from a few hours to a few days.



Abdominal migraine:- In children with a migraine-prone family history, this form of migraine is typically seen. Recognising a migraine is challenging because the pain is felt in the belly. Irritable bowel syndrome is not the source of this pain.

A path to balance and resilience to Migraine

Yoga offers a holistic approach to migraine management by addressing both physical and psychological aspects of the condition. Yoga has shown to reduce stress among the respondents, reduce stress hormones such as cortisol and balance the health (John et al, 2007). The emphasis on relaxation, stress management, and mindfulness in the practise is particularly pertinent given that stress and emotional triggers are frequently related with migraines. Individuals with migraines who incorporate yoga into their regimen may find a decreased dependency on pharmaceutical treatments as well as an enhanced sense of self-management and empowerment. In conclusion, yoga shows promise as a complementary approach for managing migraines. While existing research suggests its potential benefits, further well-designed studies are required to establish its effectiveness, determine optimal protocols, and elucidate the underlying mechanisms. Healthcare professionals should consider incorporating yoga into comprehensive treatment plans for individuals with migraines, taking into account individual preferences and abilities. Ultimately, a multimodal approach that combines evidence-based interventions, including medication, lifestyle modifications, and yoga, holds promise for optimizing migraine management and improving the quality of life for those affected by this debilitating condition.

1. **Understanding Migraine:** Understanding migraine triggers, symptoms, and the underlying neurobiology is crucial for developing resilience. People are better equipped to choose their treatments when they are knowledgeable about their possibilities.
2. **Medical interventions:** The management of migraines largely depends on conventional medical procedures, such as acute and preventive drugs. A key step towards reaching balance and reducing the effects of migraine attacks is consulting with healthcare professionals to find appropriate drugs and treatment strategies.
3. **Lifestyle Modifications:** Living healthily can improve general well-being and migraine resistance. The frequency and intensity of attacks can be decreased with regular exercise, a healthy diet, adequate hydration, and regular sleep patterns.

4. **Stress Management:** Migraines are frequently brought on by stress. By reducing the effect of stress on migraine incidence, developing effective stress management skills including mindfulness meditation, progressive muscle relaxation, and deep breathing exercises might improve resilience.

5. **Yoga and Physical Activity:** Regular physical activity, such as yoga, can enhance blood circulation, release feel-good chemicals, and lower stress. A holistic approach to enhancing the mind-body connection and fostering resilience against migraine attacks is provided by yoga's blend of physical postures, breath control, and meditation.

6. **Dietary Choices:** Migraines may be brought on by particular foods and drinks. Recognising trigger foods, staying hydrated, and eating balanced meals full of whole foods, lean proteins, and veggies are all necessary components of a migraine-friendly diet.

7. **Mind-Body Practices:** Integrating other mind-body exercises into your routine, such as Tai Chi and Qigong, might help you feel more balanced and resilient. These techniques encourage calmness, increase mindfulness, and improve the body's capacity to respond to stress.

8. **Holistic Therapies:-**Examining supplementary treatments like biofeedback, acupuncture, and aromatherapy can provide more tools for controlling migraine symptoms and enhancing resistance.

9. **Social Support and Education:-** Creating a support system and learning more about migraines can reduce feelings of isolation and provide people the tools they need to properly manage their illness.

10. **Personalized Approach:** The migraine experience varies from person to person. Fostering long-term resilience requires interventions that are specifically tailored to each person's triggers, preferences, and responses.

II. Review of literature

Bhatia et al (2007) Yoga has been found to improve quality of life, lessen headache episodes, and minimise the need for medication for migraine and chronic tension headache.

Bhatia et al (2007) found that Patients who practised yoga experienced a reduction in their chronic tension-type headaches, indicating the possibility of yoga as a therapeutic option for these headaches.

John et al (2007) found Following the intervention for three months, there were statistically significant decreases in the frequency of



headaches, the length of migraine attacks, the overall intensity, anxiety, and depression.

Kelman (2007). Reported that Respondents become aware of their bodies and how they move by feeling the movements.

Varkey et al (2008). Yoga is proven to be beneficial for treating chronic illnesses like asthma, diabetes, arthritis, depression, heart disease, and others, and it also helps relieve stress.

Büssing et al (2012) It was found that Even a brief yoga practise can help individuals with headaches and migraines, since it plays a significant part in relieving their symptoms.

Sharma et al (2012) revealed that the intervention group saw statistically significant changes in their self-perceived pain frequency, pain intensity, pain duration, functional status, medication use, and depression.

Sujan (2014) revealed that Through yoga, migraine sufferers saw notable decreases in their average pain level and frequency of monthly headaches.

Kiran et al (2014) In both groups, subjects demonstrated a significant reduction in headaches. In comparison to the control arm, which had scores of 36%, 36%, and 49%, the Rajyoga meditation group demonstrated a significant reduction in headache severity, duration, and frequency of 94%, 91%, and 97%, respectively. In Group 1, pain alleviation as measured by the headache index was 99%, while in Group 2, it was 51%. Moreover headache frequency, average pain intensity and headache-related disability through the yoga practice.

Boroujeni et al.(2015) shown that in There was a notable decrease in headache frequency, intensity, and influence on patients' lives in the yoga group. Nitric oxide levels were the same in the yoga group and the control group.

Naragatti and Gupta (2019) reported that Certain yoga postures stimulate blood flow to the brain and increase circulation. Exercises that involve deep breathing serve to reduce stress and anxiety by balancing the stress hormones, and consuming healthy grains, fresh produce, and other stress-reducing foods will help to lessen migraine frequency.

Wells et al (2019) reported that Ayurveda and yoga practise greatly lessen migraines and stress. Studies suggest that the use of integrative medicine, including yoga among other therapies, reduces both the overall stress level and the frequency of headaches in those with episodic migraine.

Jeph et al (2021). Reported that A 20-year-old woman began doing yoga after complaining of episodic headaches, adding 15 minutes of pranayama (Kapalbhati Kriya, Dheerag Swas Preksha Breathing, Anulom Vilom Pranayam, Brhamari Pranayam, and Omkar Chanting) to her 40-minute yoga sessions twice daily. She also began practising Sookshma Vyayam and Kyotsurg. After 2 months of practise, she was able to stop experiencing migraine attacks completely, improving her quality of life. Gradually, the migraine attacks decreased.

III. Conclusion:

Yoga reduces the episodes and severity of migraineurs headache, hence it is useful in treatment of migraine, however further studies are needed to establish the role more evidently. By adopting a regular yoga practice and utilizing its techniques, individuals with migraines can potentially experience a reduction in the frequency and severity of their symptoms. Let us delve into the different aspects of yoga that contribute to its effectiveness in managing migraines, including stress reduction, improved circulation, body awareness, and enhanced overall well-being. In conclusion, Yoga and Ayurveda offer promising avenues for managing migraines through their holistic approaches that address both physical and psychological factors. Collaborative efforts between conventional medicine and traditional practices could lead to more comprehensive and personalized migraine management strategies. Further well-designed clinical trials are needed to establish the specific protocols, mechanisms of action, and long-term effectiveness of Yoga and Ayurveda in migraine care.

Reference

- [1]. Bhatia, R., Dureja, G.P., Tripathi, M., Bhattacharjee, M., Bijlani, R.L., and Mathur, R.(2007). Role of temporalis muscle over activity in chronic tension type headache: Effect of yoga based management. *Indian Journal Physiol Pharmacol*.51:333–44.
- [2]. Boroujeni, M.Z., Marandi, S.M., Esfarjani, F., and Sattar, M., (2015) "Yoga intervention on blood NO in female migraineurs. *National Library of Medicine*
- [3]. Bussing, A., Ostermann, T., Ludtke, R., and Michalsen, A., (2012) Effects of Yoga Interventions on Pain and Pain-Associated Disability: a Meta-Analysis. *The Journal of Pain*, 13(1) :1-9.



- [4]. Girgl,K., Chalana, K.K., Singh, H.,and Harjot (2014) Effect of Rajyoga Meditation on Chronic Tension headache.Indian Journal of Physiology and Pharmacology58:157-161.
- [5]. Jeph, D., Choudhary,R., Dube, A.,Gothwal, S., Bairwa, G.S.,(2020) Yoga therapy in treatment of migrainous headache: Case report. International Journal of Medical Paediatrics and Oncology, 4: 167-168.
- [6]. John, P.J., Sharma,N., Sharma, C.M., and Kankane, A.(2007). Effectiveness of Yoga Therapy in the Treatment of Migraine Without Aura: A Randomized Controlled Trial. American Headache Society
- [7]. Kelman L. (2007), The triggers or precipitants of the acute migraine attack. Cephalalgia. 27: 394–402.
- [8]. Khalsa, S.B., (2004). Yoga as a therapeutic intervention: A bibliometric analysis of published research studies. Indian Journal of Physiol Pharmacol. 48:269–85.
- [9]. Kisan, R., Adoor, M., Rao, R., Nalini, A., Kutty, B.M., and Murthy,C.(2014) Effect of Yoga on migraine: A comprehensive study using clinical profile and cardiac autonomic functions. International Journal of Yoga. 7: 127-128
- [10]. Naragatti, S.,and Gupta, R.(2019).Case study on patient with migraine.International Journal of Recent Scientific Research. 10(10): 35282-35284
- [11]. Sharma, N., Singhal,s.,Singh, A.P., and Sharma, C.M., (2012) Effectiveness of integrated yoga therapy in treatment of chronic migraine: randomized controlled trial, The Journal of Headache and Pain.
- [12]. Sujan, K.R., Adoor, M., Rao, R., Nalini, A., Kutty, B. M., and Murthy B.C., (2014) Effect of Yoga on migraine: A comprehensive study using clinical profile and cardiac autonomic functions
- [13]. Varkey, E., Hagen, K., Zwart, J.A., and Linde. M., (2008). Physical activity and headache: Results from the Nord-Trøndelag Health Study. Cephalalgia. 28: 1292–7.
- [14]. Wells, R.E., Beuthin, J. and Granetzke, L.,(2019) Complementary and Integrative Medicine for Episodic Migraine: an Update of Evidence from the Last 3 Years. Current Pain Headache Reports