ORIGINAL RESEARCH

Analysis of the Effect of Yoga in Patients Suffering from Migraine: An Institutional Based Study

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ABSTRACT

Aim: Migraine is a complex disorder with a genetic influence, characterized by episodes of moderate to severe headaches, often affecting one side of the head and accompanied by nausea and heightened sensitivity to light and sound. The aim of the study was to explore this possibility and the potential effect of yoga on managing migraine.**Materials and Methods:**In this study, 40 migraine patients aged 18-65 meeting specific diagnostic criteria, were recruited. After thorough diagnosis and exclusion of certain medical conditions and recent traumas, participants were randomly assigned to receive either conventional care only (CC) or conventional care alongside Yoga therapy (Y).Patients also rated the perceived benefit of the therapy and its effect on their condition. Data analysis was done using SPSS software. **Results:**InGroup CC (n=20), none of the participants reported that the therapy was "more harmful than helpful," seven reported it was "neither harmful nor helpful," and thirteen reported it was "more helpful than harmful." In Group Y (n=20), all participants reported that the therapy was "more helpful than harmful," and none reported it as "neither harmful nor helpful" or "more harmful than helpful."**Conclusion:** The comprehensive benefits of yoga suggest its potential as a complementary therapy for managing chronic conditions, particularly those characterized by stress-related manifestations, offering promising outcomes within an integrative healthcare approach.

Keywords: Yoga, Headaches, Migraine.

INTRODUCTION

Migraine is a complex disorder with a genetic influence, characterized by episodes of moderate to severe headaches, often affecting one side of the head and accompanied by nausea and heightened sensitivity to light and sound. The term "migraine" has its origins in the Greek word "hemikrania," which was later adopted into Latin as "hemigranea," and further translated into French as "migraine."[1,2]

Migraine is more prevalent in women than men, likely due to hormonal factors, and can start at puberty, affecting individuals between the ages of 35 and 45, as well as younger individuals, including children.[3] Migraine attacks are often moderate to severe in intensity, typically one-sided, pulsating, and worsened by routine physical activity.[4] These attacks can last for hours or even days, often accompanied by nausea.[4]Stress, anticipatory anxiety, and poor pain management can exacerbate migraine symptoms, leading to maladaptive behaviors and a decreased quality of life. It is essential to address stress and pain associated with migraine to improve overall well-being and reduce disability.[5]Scientific research has shown that yoga may be beneficial in reducing stress, anxiety, and depression, and improving pain management in chronic diseases. This evidence suggests that incorporating yoga into existing biomedical treatments for migraine could potentially alleviate the burden on healthcare resources and contribute to the goal of universal healthcare.[6,7]Therefore the aim of the study was to explore this possibility and the potential effect of yoga on managing migraine.

MATERIALS AND METHODS

In this study, 40 migraine patients aged 18-65 meeting specific diagnostic criteria, were recruited. After thorough diagnosis and exclusion of certain medical conditions and recent traumas, participants were randomly assigned to receive either conventional care

only (CC) or conventional care alongside Yoga therapy (Y).

The CC group received conventional care for 4 weeks, maintaining headache diaries, with confirmation of diary maintenance at the 1-week mark. The Y group underwent 20 Yoga sessions over 4 weeks, also maintaining headache diaries, with diary verification during sessions. The Yoga intervention included various exercises and postures, with attendance closely monitored.Patients also rated the perceived benefit of the therapy and its effecton their condition. Data analysis was done using SPSS software.

RESULTS

The comparison between Group CC (n=20) and Group Y (n=20) revealed no significant differences in the proportion of patients with Migraine with Aura (MA) to Migraine without Aura (MOA), the duration of illness, the frequency of headaches per month, and the intensity of headaches. The p-values for these comparisons were 0.634, 0.537, 0.647, and 0.398, respectively. This suggests that the two groups were similar in these key migraine-related variables, establishing baseline equivalence for the subsequent intervention comparison.

It was also seen that in Group CC (n=20), none of the participants reported that the therapy was "more harmful than helpful," seven reported it was "neither harmful nor helpful," and thirteen reported it was "more helpful than harmful." In Group Y (n=20), all participants reported that the therapy was "more helpful than harmful," and none reported it as "neither harmful nor helpful" or "more harmful than helpful."

Table 1: Baseline Characteristics of Migraine Patients in Group CC and Group Y

Variable	Group CC(n=20)	Group Y(n=20)	p value
MA: MOA	2:18	1:19	0.634
Duration of illness(years)	11.12	13.51	0.537
Frequency of headache/ month	12.44	13.70	0.647

MA= migraine with aura
MOA= migraine without aura

Table 2: Perceived Benefit of Therapy Assessment in Migraine Patients: A Comparison between Group CC and Group Y

	Group CC(n=20)	Group Y(n=20)
More harmful than helpful	0	0
Neither harmful nor helpful	7	0
More helpful than harmful	13	20

DISCUSSION

Migraine is a debilitating condition that significantly impacts the quality of life for many individuals. The incorporation of yoga as a complementary therapy alongside conventional care presents a promising avenue for addressing the challenges posed by migraine.[8] Yoga has been linked to stress reduction, improved pain management, and enhanced overall well-being, making it a potential beneficial addition to migraine treatment. The combined approach of conventional care and yoga therapy has the potential to offer comprehensive support for migraine patients, targeting both the physical symptoms and the mental and emotional impact of the condition.[9,10]

In our study, we observed that in Group CC (n=20), none of the participants indicated that the therapy was "more harmful than helpful," seven reported it as "neither harmful nor helpful," and thirteen reported it was "more helpful than harmful." Similarly, in Group Y (n=20), all participants described the therapy as "more helpful than harmful," with none reporting it as "neither harmful nor helpful" or "more harmful than helpful." Kisan R et al evaluated the efficacy of Yoga as an adjuvant therapy in migraine patients by assessing clinical outcome and autonomic functions tests.Migraine patients were randomly given either conventional care (n = 30) or Yoga with conventional care (n = 30). Yoga group received Yoga practice session for 5 days a week for 6 weeks along with conventional care. Clinical assessment (frequency, intensity of headache and headache impact) and autonomic function test were done at baseline and at the end of the intervention.Yoga with conventional care and convention care groups showed significant improvement in clinical variables, but it was better with Yoga therapy. Improvement in the vagal tone along with reduced sympathetic activity was observed in patients with migraine receiving Yoga as adjuvant therapy.Intervention showed significant clinical improvement in both groups.[11]Kumar et al evaluated the effectiveness of yoga as an adjuvant to conventional medical management on clinical outcomes in patients with episodic migraine. A prospective, randomized, open-label trial with blinded endpoint assessment was carried out. Patients were aged 18–50 years. They were randomized into medical and yoga groups (1:1). Yoga intervention was given for 3 months. The primary endpoint was a decrease in headache frequency, headache intensity, and Headache Impact Test (HIT)–6 score. Secondary outcomes included change in Migraine Disability Assessment (MIDAS) score, pill count, and proportion of headache-free patients. A total of 114 patients out of 160 completed the trial. Baseline

measures were comparable except for a higher mean headache frequency in the yoga group. Compared to medical therapy, the yoga group showed a significant reduction in headache frequency headache intensity, HIT score, MIDAS score, and pill count. Hence, Yoga as add-on therapy in migraine seems more effective than medical therapy alone. This evidence needs validation with double-blind trials and matched control groups.[12]

CONCLUSION

In conclusion, the comprehensive benefits of yoga suggest its potential as a complementary therapy for managing chronic conditions, particularly those characterized by stress-related manifestations, offering promising outcomes within an integrative healthcare approach.

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