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Case Report

Yoga therapy in treatment of migrainous headache: Case report

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ABSTRACT

Migraine is a neurological disorder with variable prevalence, affecting females more commonly. Pharmacological treatment is well known. Role of yoga is not well known in treatment of Migraine. Here we present a case of migraine, which treated with structured yoga sessions under supervision of qualified instructor.

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1. Introduction

Migraine is a serious neurological disorder which includes headache with or without aura. Prevalence of migraine is variable. It is twice more commoner in females than in males. Pharmacological treatment is well known. However, role of yoga is not well known in treatment of Yoga. Here we present a case of migraine, which treated with yoga.

2. Case Report

Forty three year old female was presented to yoga OPD with complains of episodic headache, aura in from of whistling, photophobia and phonophobia for last 20 years. Initially the symptoms were mild but increased in severity and frequency from last 5 years since the delivery of her younger son. There was a family history of migraine in her father and sister. Her illness was labeled as vascular headache by a neurologist. Other provisional diagnosis was excluded by relevant investigations including hemogram, electrolytes, renal function test, liver function tests,

lipid profile, thyroid function test, electroencephalogram, fundus examination and neuro-imaging. She was being treated with pharmacological treatment including NSAIDs, amytryptline, beta blocker and triptans. In spite good compliance to pharmacological therapy, the patient was having repeated episodes of migraine and has compromised quality of life.

We advised and trained her to yoga. The Yoga sessions were 40 minutes twice daily. The yoga module included Pranayam for 15 minutes (Kapalbhati Kriya, Dheerag Swas Preksha Breathing, Anulom Vilom Pranayam, Brhamari Pranayam and Omkar Chanting) Sookshma Vyayam and Kyotsurg . She had a good compliance to the yoga therapy. Gradually the episodes of migraine were reduced and at 2 month follow up she is free from migraine and had a better quality of life without any pharmacological medication.

3. Discussion

Migraine is a primary headache disorder characterized by recurrent unilateral headaches that are moderate to severe last from 2 to 72 hours. Other associated clinical symptoms may include nausea, vomiting and sensitivity to light, sound

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or smell and pain may be exaggerated by physical activity.

Etiological factors include female sex, depression, allergies, structural defects, hormonal imbalances, low blood sugar, hard work, brain tumors, hypoxia, hypertension and genetic factors.^{1,2} Neuropeptides substance P, calcitonin gene-related peptide (CGRP), vasoactive intestinal polypeptide (VIP) and altered Nitric oxide distribution cause migraine.³ Diagnosis is mainly clinical, but it should be differentiated with primary headaches. Pharmacological treatment is the first choice.

As disease has a high recurrence rate, hence other mode of treatment is on demand and medical Yoga is most promising in this regard. John et al,⁴ conducted a randomized control trial and found evidence regarding efficacy of yoga in patients with Migraine. Ravikiran Kisan et al studied the effect of Yoga and concluded that headache frequency and intensity were reduced more in Yoga with conventional care than the control group.⁵ Yoga also affects psychological parameters like anxiety and depression which are the causes of the headache impact on the life of migraine sufferers.⁶ Yoga asanas also improve the body's physical and mental fitness which may help control blood pressure, respiration, and heart and metabolic rates.⁷ Nasal water cleansing (Kriya-Jalaneti) which is followed by forced exhalation (Kapalbhati) stimulates and regulates the vagus nerve tone along with glands, and other organs of the face, nasal passage and cranium.⁸ Pranayama is useful for hypoxia associated migraine as it increases the oxygen consumption.⁹

Other possible mechanism for the improvement is an acute rise in the blood NO level. Some other studies demonstrated increased l-arginine/NO pathway activity in platelets from patients with migraine, and this influence is particularly noticeable during the attacks.¹⁰

4. 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.

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6. Conflict of Interest

The authors declare they have no conflict of interest.

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