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A CLINICAL STUDY OF NASYA PROCEDURE IN THE MANAGEMENT OF MIGRAINE

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ABSTRACT

Migraine is a chronic neurological disease characterised by recurrent moderate to severe headache associated with other neurological symptoms. Migraine is considered as a *Shiroroga* due to having headache as a main symptom. *Vata dosha* is main cause of pain in any part of the body. There are two main procedures used for shaman of *Vata dosha* internal and external *Snehana*. In the management of *Shiroroga N*asya karma is indicated in *Ayurveda* and practiced most commonly. The *nasya dravya* medicine acts by reaching *Sringataka marma* (a main vital point situated on the brain corresponding to the nerve centre which consisting of nerve cells and fibers). *Shiromarma* (vital vascular structure) by micro channels and spreads in the brain and scratches the morbid *dosha* in upper part of body and extract them from nose. A clinical study was undertaken to evaluate the efficacy of *Tarpana Nasya* in the patients of migraine. It also improves the feeling of wellbeing in daily living. This measure significantly reduces the intensity, duration and frequency of headache.

KEYWORD: *Shiromarma, Shiroroga, Nasya, Vata Dosha.*

INTRODUCTION

A migraine is a primary headache disorder characterized by recurrent headaches that are moderate to severe. Typically, the headaches affect one half of the head, are pulsating in nature, and last from two to 72 hours. Associated symptoms may include nausea, vomiting, and sensitivity to light, sound, or smell. The pain is generally made worse by physical activity. Up to one-third of people have an aura: typically a short period of visual disturbance that signals that the headache will soon occur. Occasionally, an aura can occur with little or no headache following it. Migraines are believed to be due to a mixture of environmental and genetic factors. Changing hormone levels may also play a role, as migraines affect slightly more boys than girls before puberty and two to three times more women than men. The risk of migraines usually decreases during pregnancy. The underlying mechanisms are not fully known. They are, however, believed to involve the nerves and blood vessels of the brain. People cannot pay attention to their physical and mental health. Irregular food habits, suppression of natural urges, lack of proper sleep and less time for relaxation are being part of our life, which enhances incidences of many diseases mainly having psychosomatic origin are increasing due to urbanization, high industrial growth, deforestation at a drastic speed. It is estimated that 82% of headache occurs due to tension. Its increasing global incidence is a cause of concern for all which has forced to initiate the research work to discover an effective medicine for the better management of this challenging ailment. Majority of the drugs employed in modern medicine for this disease are almost limited to suppress the symptoms. A repeated and long term use of such drugs is found to cause serious side effects like memory loss, gastrointestinal disorders, weight gain etc. and tend to be habit forming. Therefore, search for a safer management is of great importance. A clinical study was undertaken to evaluate the efficacy of *Tarpana Nasya* in the patients of migraine. It also improves the feeling of wellbeing in daily living. This measure significantly reduces the intensity, duration and frequency of headache.

MATERIAL AND METHOD

20 Patients attending OPD and IPD, Department of *Panchakarma* and *Shalakya Tantra* of *R*ishikul *A*yurvedic P.G College and Hospital, full filing the criteria for diagnosis were selected randomly.

T*arpana nasya yoga*: *Jeevaniya ghrita* (Ch.Chi.26/176)

***Jeevaniya Ghrita*:** It was given in a dose of 6 to 8 drops; once daily. The *Ghrita* was administered in form of *Nasya* (by nasal route). The *Nasya* was given for a week then after a gap of one week it was again given for one week.

AIM AND OBJECTIVE

Since *N*asya karma is considered as the most important *Panchakarma* process in management of headache and other aliments related to brain. Therefore the significance of present study is support the principle and extent the knowledge about the effect of *Nasya karma* as on effective measure for the treatment of migraine.

Tarpan nasya has been advocated as an effective measure for all *Shirovyadhi* in *Ayurvedic* texts.

1. To study *Ardhavbhedaka* in reference of migraine with critical analysis of the literature available in *Ayurvedic* texts and modern science.
2. To evaluate the effect of *Tarpan Nasya* in the management of Migraine.
3. To find measure for improving the quality of life of the patient of Migraine.

Inclusion Criteria

1. Age: 20-70 years
2. Clinical features suggesting migraine
3. Patient of conventional long term therapy with no significant response

Exclusion Criteria

The patient suffering from the following conditions were excluded –

- Sinusitis, hypertension, fever
- Secondary headache caused by meningitis, tumour, encephalitis, cervical spondylitis and refractive errors.
- Cardiac patients
- Patient of diabetes mellitus, cluster headache stress or other psychological problems.

Investigations

- Routine haematological, urine and stool examination has been conducted to access the present condition of the patient as well as to exclude the other pathological lesion.
- X-ray has been advised to exclude the sinusitis.
- Opthalmological examination was done in doubtfull cases.

Criteria For Assesment

The diagnosis was made based on the criteria for migraine provided by international headache society.

- At least 5 attack in history
- Headache attack lasting 4-72 hours

OBSERVATION

Following Sign and Symptoms Observed

- Decreased tolerance for sound
- Aura
- Nasal congestion
- Watering of eyes
- Nausea
- Decreased tolerance for light

The Total Effect of Therapy Was Assessed

- **Complete remission**

100% relief in signs and symptoms and no relapse of attack within two months of stopping the drug were considered as complete remission.

- **Excellent**

Improvement Patients showing more than 75% of relief in signs and symptoms were taken as excellent improvement.

- **Moderately improvement**

Patients showing between 50% to 75% of relief in signs and symptoms were taken as moderately improvement.

- **Mild improvement** Patients showing 25% to 50% of relief in signs and symptoms were taken as mild improvement.
- **Unimproved** Patients showing less than 25% of relief in signs and symptoms were taken as unimproved.

Table no. 1: The Effect of *Tarpana Nasya* on Other Complaints of Migraine.

Symptoms	B.T	A.T	%	$\bar{X}$	S.D±	S.E±	't'	p
Aura.	2	0.25	87.5	1.75	0.5	0.25	7	<.01
Nausea	2.5	0.5	80	2	1.182	0.264	2.459	<.01
Nasal congestion	2	0.6	70	1.4	1.14	0.509	2.74	>.02
Watering eye	2.5	0.562	77.5	1.93	0.25	0.062	31	<.001
Dec. tol. For light	2.15	0.26	87.80	1.89	0.458	0.105	18	<.001
Dec. tol. For noise	2.17	0.35	83.78	1.82	0.458	0.105	14.73	<.001

The above table reveals that there is 87.8% improvement in decrease tolerance for light($p<.001$), followed by 87.5% improvement in aura, there is a improvement of 86.66% in nausea ($p<.01$, statistically markedly significant result), Aura and Nasal congestion shows that there is only a mild improvement.

Table no.2:- The effect of *Tarpan Nasya* on Headache.

Symptoms	B.T	A.T	%	$\bar{X}$	S.D±	S.E±	't'	p
Intensity	2.5	0.15	94	2.35	0.8127	0.1817	12.931	<.001
Frequency	2.35	0.45	80.85	1.9	0.7181	0.1605	11.83	<.001
duration	2.2	0.3	86.36	1.9	0.640	0.1432	13.261	<.001

The above table shows that there is 94 % improvement in the intensity of headache ($p<.001$ which means statistically highly significant result), followed by improvement of 86.36% in duration of headache ($p<.001$) and 80.85% improvement in frequency of headache ($p<.001$).

DISCUSSION

The clinical part of the study covered the observation made from 20 patients of migraine registered after inclusionary criteria to evaluate the disease incidence and its clinical profile. The therapeutic trial has been done on 20 patients after excluding the dropouts.

The study of incidence of age showed that maximum numbers of patients were found belonging to age group of 20-40 years i.e. 54% and about 82% patients were female. This indicates that females are more prone to migraine and in general, patients suffer from headache in their middle age group, striking individuals early in their peak productive years. The prevalence of Migraine is higher in females can be explained on the basis of close relationship between ovarian hormones.

The intensity of headache was excruciating in 79% of the patients, maximum patients (46%) were having chronicity of 2-3 years. Maximum patients (71%) were having acute onset of headache.

Maximum patients (92%) were having the duration of >12 hours per day and frequency twice/week in 58% of the patients. Maximum patients (87%) were found to be having intermittent nature of headache. This shows the chronicity of disease as well as sustained stress, which may change the course of disease or aggravate the disease condition badly. Migraine usually results from sustained stressful conditions and during the present time livelihood are not easily accomplished without being stressed and strained. Thus the patients depend upon the over-the-counter method of relieving their headache and this contribute to one reason to a long lasting headache history, which may be motivated to consult a doctor late in life. When there is onset of a different type of headache superimposed upon the original. This new headache may be an important indicator of a new disease.

20 patients have completed their course out of patients registered. The effect of therapies on intensity/severity, duration and frequency of headache showed that there was highly significant (P<0.001) improvement in the *Tarpana Nasya* with 94%, 80.85% and 86.36% respectively relief. Thus *Tarpana Nasya* therapy provided better relief in severity, frequency and duration of headache. The patients of Aura showed only mild improvement. The 80% of improvement in the patients of nausea is with p<.01, Nasal congestion the value of p >.02 which shows only mild improvement, Watering of eyes in watering of eyes there is an improvement of 77.5 % with p<.001, Decrease tolerance for light have improvement of 87.8%with p<.001, Decrease tolerance of noise there is an improvement of 83.78%, which means statistically markedly significant result.

CONCLUSION

The *nasya dravya* medicine acts by reaching *Sringataka marma* (a main vital point situated on the brain corresponding to the nerve centre which consisting of nerve cells and fibers). *Shiromarma* (vital vascular structure) by micro channels and spreads in the brain and scratches the morbid *dosha* in upper part of body and extract them from nose. A clinical study was undertaken to evaluate the efficacy of *Tarpana Nasya* in the patients of migraine. It also improves the feeling of wellbeing in daily living. 20 patients have completed their course out of patients registered. The effect of therapies on intensity/severity, duration and frequency of headache showed that there was highly significant (P<0.001) improvement in the *Tarpana Nasya* with 94%, 80.85% and 86.36% respectively relief.

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