

## A CLINICAL COMPARATIVE STUDY WITH *SHADBINDU TAIL* AND *JYOTISHMATIADI GHRIT*, IN THE MANAGEMENT OF *VATIK SHIRASHOOL* W.S.R.T. TENSION HEADACHE

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### ABSTRACT

Nowadays our life style has been drastically changed and our growing needs have no end. 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. Headache is one of them, which can be compared with *Vatika Shirashoola* as described in Ayurvedic texts and can be correlated with 'tension headache' in terms of modern science. *Nasya karma* has been advised as the prime management for *urdhwajatrugata vikara* in almost every Ayurveda text. So considering the *nidana* and nature of the disease *Jyotishmatiadi ghrít nasya*, mainly containing *medhya* and *rasayana drugs*, has been chosen for management of *vatic shirshool* w.s.r. tension headache. It has been compared with *Shadbindu tail nasya karma* as the classical treatment for *vatic shirshool* as mentioned by *Bhavprakash*. Approx 20 patients were chosen randomly from VYDSAMC hospital according to classical symptoms of *vatic shirshool* and divided into two groups of 10 each for *shadbindu tail nasya karma* and *jyotishmatiadi nasya karma*. Both drugs provided good improvement in *Vatika Shirashoola* (tension headache), but *Jyotishmatiadi Ghrít nasya* provided better improvement in classical symptoms of *Vatic shirshool*.

**Keywords:** *Vatika Shirashoola*, *urdhwajatrugata vikara*, *Jyotishmatiadi ghrít nasya*

### INTRODUCTION

Headache is one of the commonest symptoms, and primary headache disorders are among the most ubiquitous disorders, affecting people in all countries<sup>1</sup>. India appears to be no exception<sup>2</sup>. The Global Burden of Disease Study 2010 (GBD2010) found tension-type headache (TTH)

and migraine to be the 2<sup>nd</sup> and 3<sup>rd</sup> most prevalent disorders worldwide<sup>3</sup>. Yet India is home to over 16 % of the world's inhabitants<sup>4</sup>. Lack of knowledge of the prevalence of and burden attributable to headache disorders among such a large community has an impact on the quality

and meaning of global statistics. In India itself, it stands in the way of effective health-care policy and planning, the delivery of services and the means of remedy.

It is estimated that 82% of headache occurs due to tension. (Kaplan & Sadock, 1995) 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.

Keeping in mind the above said words *vatik shirashoola* w.s.r. tension headache has been chosen for present study.

*Manahsantapa* is the leading factor in creating the disease *Shirahshoola* according to *Charaka*<sup>5</sup>. It is clearly mentioned by *Charak* and *Harita* that *Shoka and Bhaya* is specifically responsible for *Vatika Shirashoola*<sup>6</sup>. 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, gastro - intestinal disorders, weight gain etc. and tend to be habit forming. Therefore, search for a safer management is of great importance.

*Medhya Rasayanas* described in *Samhitas* are primarily meant for the enhancement of the *Dhee* (Intelligence power), *Dhriti* (Grasping Power) *Smriti* (memory power) like intellectual function. If we can successfully enhance these functions, it may help to combat against various causes of headache like stress, tension, anxiety, fear, grief, anger etc. by which it can help a lot in the management of *Vatika Shirahshoola* also. *Shirahshoola* is a chief symptom of *Shiroroga*, which comes under *Urdhwajatrugata Vikara*. *Nasya* is indicated by almost all the *Acharyas* for its effective management.<sup>7</sup> Medicines administered through the nose, goes into the

*Mastishka* and expels out the vitiated *Doshas*. *Bhavprakash* has mentioned two *Anubhuta Yogas* in the management of *Shirorogas*. *Tailas* like *Kumari Taila*, *Shadbindu Taila* when used for *Nasya Karma* will be helpful in controlling *Shirorogas*.<sup>8,9</sup> The classical drug *Shadbindutail* was compared with a self prepared combination of *rasayan* and *medhya* drugs as “*Jyotishmatiadi Ghrita*” to know its efficacy in the treatment of *Vatika Shirahshoola* with special reference to tension headache. For *Jyotishmatiadi Ghrit*, the drugs like *Jyotishmati*<sup>10,11</sup>, *Mandukaparni*<sup>12,13</sup> and *Shankhapushpi*<sup>14</sup> were selected and for *Sneha*, *Goghrita* was taken. This combination has been named as “*Jyotishmatiadi Ghrita*”.

Therefore this clinical study is to compare the action of *Jyotishmatiadi Ghrita* and *Shadbindu tail* as *nasya* in the management of *Vatika Shirahshoola* with special reference to tension headache.

### Aim & Objectives

- 1) To evaluate the role of *Nasya* performed with *Shadbindu Taila* in the management of tension headache.
- 2) To evaluate the role of *Nasya* performed with *Jyotishmatiadi Ghrita* in the management of tension headache.
- 3) To compare the efficacy of *Shadbindu tail nasya* and *Jyotishmatiadi ghrit nasya* in the management of *Vatik Shirshool* w.s.r. tension headache.

### Material and Methods:

Total 25 patients of *Vatika Shirahshula* were registered from O.P.D. and I.P.D. of *Kayachikitsa* department of VYDSAM, Khurja, and Bulandshahr. The patients were selected randomly irrespectively of their age, sex and

religion. Only 20 patients continued the treatment.

### Criteria for diagnosis:

The criterion of diagnosis was based on clinical parameters of *Vatika Shirahshoola*<sup>6</sup> and tension headache i.e.

1. *Shankhanistoda* (Bitemporal headache)
2. *Ghatasambheda* (Pain in occipital region)
3. *Bhrumadhya Evam Lalatapanam* (Pain and burning in frontal region)
4. Lack of concentration and headache increasing by evening along- with other signs and symptoms mentioned in the texts.

Detailed clinical history was taken and complete physical examinations were done on the basis of a special proforma incorporating all the signs and symptoms of *Vatika Shirahshoola* vis-à-vis tension headache. Routine urine, blood examinations, biochemical investigations like FBS, PPBS were conducted wherever required before and after treatment.

### Exclusion Criteria:

1. Secondary headaches arising due to any other pathological conditions were excluded.
2. Headaches arising due to meningitis, encephalitis, psychosis, neurosis, hypertension, sinusitis.
3. Hypoglycaemic patients were also excluded.
4. Pathological conditions occurring in eye, ear, nose and oral cavity were also excluded for this study.

### Plan of Study:

Total 20 patients of *Vatika Shirahshoola* (Tension headache) were studied under two groups. Group 1: *Shadbindu tail nasya* (STN Group): 10 patients of *Vatika Shirahshoola* were treated by *Nasya* given with *Shadbindu tail*. The dose

of *Nasya* was 16 to 32 drops in each nostril according to patient's tolerance, once in a day for a period of 10 days at a stretch. Three such sittings were carried out in each patient with an interval of 7 days, thus covering the total duration of 44 days.

The routine diet was advised to the patients of both the groups during the entire course of treatment.

Group 2: *Jyotishmatiadi Ghrita Nasya* Group (JGN Group):

10 patients of *Vatika Shirahshoola* were treated by *Nasya* given with *Jyotishmatiadi Ghrita*. The dose of *Nasya* was 16 to 32 drops in each nostril according to patient's tolerance, once in a day for a period of 10 days at a stretch. Three such sittings were carried out in each patient with an interval of 7 days, thus covering the total duration of 44 days.

The routine diet was advised to the patients of both the groups during the entire course of treatment.

### Administration of Nasya:

The procedure of giving *Nasya* therapy may be classified into the following three headings:

1. *Purvakarma* (Pre-measures)
2. *Pradhanakarma* (*Nasya* therapy)
3. *Paschatkarma* (Post measures)

**Purvakarma:** Before giving *Nasya*, prior arrangement of the material and equipments should be done. There should be a special room "*Nasya Bhavana*" free from direct blow of air and dust; and lighted appropriately. In it the following articles should be collected.

- (i) *Nasya Asana* –
  - (a) A chair for sitting purpose
  - (b) A cot for lying purpose.

(ii) *Nasya Aushadhi* –

1) *SHADBINDU TAIL*: *Shadbindu tail* was prepared by standard procedure as mentioned in Ayurveda classics.

2) *JYOTISHMATIADI GHRITA*: *Jyotishmati, Mandukparni* and *Shankhpushpi* were collected according to the classics and *Jyotishmatiadi ghrit* was prepared by standard procedure of *Ghrit Kalpana* as mentioned in Ayurveda Classics.

(iii) *Nasya Yantra* - For *Snehana, Avapida, Marsha* and *Pratimarsha Nasya*, there should be a dropper or *Pichu*.

Besides this one needs efficient assistant, dressing material, spitting pots, bowl, napkins and towels also.

- Selection of the patient: The patient should be selected according to the indications and contraindications of *Nasya* described in classics.
- Preparation of patient: According to Sushruta's description following regimens are given to the patient to prepare him for *Nasya Karma*.

Diet should be given to the patient who has passed his natural urges like urine, stool etc. After some time, tooth brush (and other routine daily activities like bath, prayer, light breakfast (not feel hungry) etc.) should be done. Now the patient gets ready for *Nasya karma*. He should lie down on *Nasya Shayya*. Before *Nasya, Mridu Abhyanga* (massage) should be done on scalp, forehead, face and neck for 3 to 5 minutes by medicated oil like *Bala Taila, Panchaguna Taila* etc.

**Pradhana Karma:** The following procedure should be adopted for performing the *Nasya Karma*.

The patient should lie down in supine position with ease on *Nasya Shayya*. *Shira* (head) should be "*Pralambita*" (lowered i.e. hanging down) and foot part is to be slightly raised. Head should not be excessively flexed or extended. If the head is not lowered, the nasal medication may not reach to the desired distinction and if it is lowered too much, there may be the danger of getting the medication to be lodged in brain. After covering the eyes with clean cotton cloth, the physician should raise the tip of the patient's nose with his left thumb and with the right hand the luke warm medicine (*Sukhoshna* drug) should be dropped in both the nostrils in proper way.

The drug should be neither less nor more in the dose i.e. it should be in the proper quantity. It should also be neither very hot nor very cold. i.e. it should be luke warm. The patient should remain relaxed while taking *Nasya*. He should avoid speech, anger, sneezing, laughing and head shaking during *Nasya Karma*.

**Paschat Karma:** After administration of medication through nasal passage patient should lie supine (*Uttana*) for about 2 minute time interval consumable for counting numbers upto 100. After an administration of *Nasya*, feet, shoulders, palms and ears should be massaged. The head, cheek and neck should be again subjected to sudation.

The patient should avoid swallowing of *Nasya Aushadhi*. The oil that has been dropped in the nose may be repeatedly drained out together with the morbid *Doshas*, especially mucous; should be eliminated by the patient by sneezing slowly and care should be taken that no portion of the medicated oil is left behind. Patient should spit out the excessive medicine which has come into the oropharynx. Medicated

*Dhumapana* and *Gandusha* are advocated to expel out the residue mucous lodged in gullet (*Kantha*) and *Shringataka*. Patient should stay at windless place. Light meal (*Laghu Aahara*) and luke warm water (*Sukhoshna Jala*) is allowed. One should avoid dust, smoke, sunshine, alcohol, hot bath, riding, anger, excess fat and liquid diet. Day sleeping and cold water for any purpose like *Pana*, *Snana* etc. should be avoided after *Nasya Karma*.

Follow up study:

After the completion of treatment, all the patients were advised to attend the outdoor patient

department upto two months for the follow up study.

## OBSERVATIONS

### Treatment Group:

Total 13 patients were registered in *Shadbindu tail nasya* group; amongst them 10 patients completed the treatment and 3 left against medical advice. In *Jyotishmatiadi Ghrita Nasya* group 10 patients have completed the treatment and 2 patients left against medical advice.

Hence, the total number of patients is 20 for the present study. So observation and results of 20 patients are given below.

**Table 1:** Chief complaints wise distribution of 25 patients of *Vatika Shirahshoola*. (T.H.)

Chief Complaints	Number of Patients			Percentage %
	STN Group	JGN Group	Total	
1. Shankhanistoda	13	11	24	96.00
2. Ghatasambheda	12	9	21	84.00
3. Bhrumadhya tapanam	12	9	21	84.00
4. Shrotranishkasanvat Pida	6	5	11	44.00
5. Akshinishkasanvat Pida	11	6	17	68.00
6. Shiroghurnanam	9	9	18	72.00
7. Sandhimokshanvat Pida	8	8	16	64.00
8. Lack of concentration	13	12	25	100
9. Disturbed sleep	13	12	25	100
10. Heaviness in head	13	11	24	96.00

## EFFECT OF THERAPY

**Table 02:** Effect of *Shadbindu tail nasya* on Chief complaints in the 10 patients of *Vatika Shirahshoola* (T.H.)

Chief Complaints	Mean		%	Mean	S.D.	S.E.	t	p
	B.T.	A.T.						
1. Shankhanistoda	3.3	0.6	81.81	2.7	0.48	0.15	17.67	<0.001
2. Ghata Sambheda	3.2	0.8	75.00	2.4	0.51	0.16	14.69	<0.001
3. Bhrumadhya Evam Lalatapana	2.9	0.3	89.65	2.6	1.35	0.42	6.09	<0.001
4. Shrotranishkasanvat Pida	1.2	0.0	100	1.2	1.62	0.51	2.34	<0.05
5. Akshinishkasanvat Pida	3.0	0.5	83.30	2.5	0.71	0.22	11.18	<0.001
6. Shiroghurnanam	2.0	0.6	70.00	1.4	1.17	0.37	3.77	<0.01
7. Sandhimokshanavat Pida	1.6	0.2	87.50	1.4	1.35	0.42	3.27	<0.01
8. Lack of concentration	3.4	0.9	73.52	2.5	0.52	0.16	15.00	<0.001
9. Disturbed sleep	3.3	0.8	75.75	2.5	0.52	0.16	15.00	<0.001
10. Heaviness in head	2.9	0.5	82.75	2.4	0.44	0.15	15.11	<0.001

**Table 3:** Overall effect of *Shadbindu taila nasya* in 10 patients of *Vatika Shirahshoola*

Overall effect of Jyotismatiadi Ghrita	No. of patients	%
Complete remission	0	0
Marked improvement	8	80
Moderate improvement	2	20
Improvement	0	0
Unchanged	0	0

**Table 4:** Effect of *Jyotismatiadi Ghrita Nasya* on Chief Complaints in 10 patients of *Vatika Shirahshoola*

Chief Complaints	Mean		%	Mean	S.D.	S.E.	t	p
	B.T.	A.T.						
1. Shankhanistoda	2.8	0.1	96.42	2.7	1.25	0.39	6.82	<0.001
2. Ghata Sambheda	2.3	0.2	91.30	2.1	1.10	0.35	6.03	<0.001
3. Bhrumadhya Evam Lalata Tapana	2.1	0.3	85.71	1.8	1.48	0.46	3.86	<0.001
4. Shrotranishkasanvat Pida	1.2	0.2	80.00	1.0	0.92	0.29	2.75	<0.05
5. Akshinishkasanvat Pida	0.9	0.1	88.88	0.8	1.13	0.36	2.23	>0.05
6. Shiroghurnanam	2.1	0.1	95.23	2.0	1.15	0.36	5.48	<0.001
7. Sandhimokshanavat Pida	2.0	0.3	85.00	1.7	0.95	0.30	5.66	<0.001
8. Lack of concentration	2.8	0.4	85.71	2.4	0.96	0.30	7.85	<0.001
9. Disturbed sleep	2.9	0.4	86.20	2.5	0.71	0.22	11.18	<0.001
10. Heaviness in head	2.7	0.2	92.59	2.5	0.97	0.31	8.13	<0.001

**Table 5:** Overall effect of *Jyotismatiadi Ghrita Nasya* in 10 patients of *Vatika Shirahshoola*

Overall effect of Jyotismatiadi Ghrita Nasya	No. of patients	%
Marked improvement	9	90.00
Moderate improvement	1	10.00
Improvement	0	00.00
Unchanged	0	00.00

## DISCUSSION

In Ayurvedic literature almost all *Acharyas* have described that the *Shiroroga* and *Shirahshoola* are most common features in *Shiroroga*. As per various types of *Shiroroga* all the three *Doshas* are able to produce various types of *Shirahshoola*. Amongst them *Vatika Shirahshoola* is most frequently available because causative factors like *Uchcha* and *Ati Bhashana*, *Prajagara*, *Shita Marutasamsparsa*, *Vyavayadhikya*, *Vegnigraha*, *Upvasa*, *Atibharavahana* and *Atimargvahana* (in labouring life) are usually

adopted by all human beings due to their busy life style. Other most common causative factors of *Vatik Shirahshoola* are Psychogenic which are *Shoka*, *Bhaya* and *Trasa*. Advancement of modernization, development of industrial phase, business competitions, excessive uses of internet, increase in unemployment are really capable to provide a man a status of *Bhaya-Shoka-Trasa* etc. due to which *Vatik Shirahshoola* caused by psychological factors is also most frequently observed. So that for correlation purpose Tension Headache was selected in the present study. From the conceptual study it is clear

that symptomatology of tension headache is quiet resembling with *Vatik Shirashoola*. But area of causative factor is too broad for *Vatik Shirahshoola* as various dietetic, psychogenic and behavioral factors are quoted for *Vatik Shirahshoola* whereas tension headache has relatively less causative factors which are psychological factors. So tension headache is a situation which can be taken under the heading of *Vatik Shirahshoola*. After correlating this condition under *Vatika Shirahshoola*, Ayurvedic line of management can be planned to manage tension headache. It is very clear that first and foremost thing to manage tension headache is to remove anxiety, depression and emotional stress. For that purpose in Ayurveda various *Medhya Rasayana* drugs are quoted. From them *Mandukaparni*, *Shankhpushpi* and *Jyotishmati* were selected. *Jyotishmati*<sup>10,11</sup> have *Vedanasthapana*, *Medhavardhaka*, *Shirovirechanopaga* and *Smritiprada* properties (P. V. Sharma, B. R.). *Mandukaparni*<sup>12,13</sup> and *Shankhpushpi*<sup>14</sup> are mentioned in *Medhya Rasayana*<sup>15</sup> group by *Acharya Charaka*. *Medhya Rasayana* being very beneficial in releasing the tension arising due to *Vata* vitiation has been selected for the present study. The selected *Medhya Rasayana* drugs are *Jyotishmati*, *Mandukaparni* and *Shankhpushpi*.

The role of above drugs has already been evaluated individually and also in compound form for their *Medhya* and *Manovyadhihara* effect by different scholars.

*Mandukaparni* and *Shankhpushpi* are *Vedana Shamaka* and *Jyotishmati* is *Vedanasthapana*. All these drugs are having mild tranquilizer and sedative effect with benefits of memory enhancing effect. So these three drugs were selected in the form of *Ghrita* preparation. Because, *Ghrita* also has qualities like *Nidrajanana*,

*Smritivardhana*, antioxidant, etc. *Ghrita* also has high rate of absorption i.e. 96% So, *Ghrita* preparation is really capable to increase activities of the drugs *Shankhpushpi*, *Mandukaparni* and *Jyotishmati*. Route of administration always has its own importance in management of any disease. According to Ayurvedic classics, in the diseases which are occurring above the clavicle, *Nasya* therapy is most favorable.

#### **Discussion on obtained observations and results of therapy is follows as under:**

*Shadbindu tail nasya* provided better relief in the symptoms of *Bhriumadhya Evam Lalatatapanam*, *Shrotaranishkasanvat Pida* and *Akshinishkasanvat Pida*, while *Jyotishmatiadi Ghrita Nasya* provided better relief in *Shankhanistoda*, *Ghata Sambheda*, *Akshinishkasanvat Pida Shiroghurnanam*, Lack of Concentration, Disturbed Sleep and Heaviness in Head.

Therefore, it can be said that *Medhya* drugs *Nasya Karma* is practically more effective than *Shadbindu Taila nasya karma* on the chief signs and symptoms of *Vatika Shirahshoola*.

#### **Overall Effect:**

The overall effect of therapies showed that in *Shadbindu tail nasya*, there was marked improvement in 8 patients i.e. 80%, Moderate improvement in 2 patients with 20%, whereas in *Jyotishmatiadi Ghrita Nasya* group, there was marked improvement in 9 patients (90%) and moderate improvement in 1 patient (10%), there was no complete remission and improvement in both the groups. There were no patients in the unchanged category as well.

### Mode of Action:

Chief complaints like *Shankhanistoda*, *Ghatasambheda*, *Bhrumadhya* *Evam Lalatatapanam*, *Shrotra & Akshi Nishkasanavat Pida* and *Sandhimokshanavat Pida* were improved highly significantly with healthy change of percentage which was due to *Vatahara* properties of drugs, which helped to cure the *Shoola*. So it can be said that *Shadbindu tail* for the present study was capable to normalize *Vata dosha* by its *prabhava* and *rasayana* properties.

In case of *Jyotishmatiadi ghrit Nasya* lack of concentration, loss of memory and disturbed sleep were improved significantly which was due to *Medhya* properties of *Ghrita* prepared for the study. *Shankhpushpi* and *Mandukparni* are having properties like *Medhavardhana*, *Smritivardhana* while *Jyotishmati* is known for its memory enhancing effects. Here *Ghrita* is also helpful media by its *Medhya* and *Smritivardhana* properties. So the formulated preparation is capable to provide patent, stable and healthy mental functions which improves mental health and due to which sleep disturbance can be cured.

Severity, frequency and duration of Headache were also improved highly significantly which indicates that *Jyotishmatiadi Ghrita nasya* was able to cure disease as whole. So the therapy was found better than other therapies which are providing symptomatic relief.

Lying down in head lowered position, heat fomentation on the face etc. steps of *Nasya Karma* help the drug to absorb and to reach in brain which lastly results in stimulation in higher centers. So, the effect of the drugs extends upto whole neurovascular system. So, the *Nasya* of *Jyotishmatiadi Ghrita* provided better relief in all signs and symptoms of *Vatika Shirahshula* (Tension headache).

### CONCLUSION

Both drugs provided good improvement in *Vatika Shirahshula* (T.H.), but *Jyotishmatiadi Ghrita* given by *Nasya* provided better improvement in *Shankhanistoda*, *Ghata Sambheda*, *Akshinishkasanavat Pida*, *Shiroghurnanam*, lack of concentration, disturbed sleep, heaviness of head, *Sirajalaspurana*, *Shiroghurnanam*, vertigo, blurring of vision, stiffness of neck, stiffness of shoulders, photophobia, phonophobia and memory loss.

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