



Research Article

CLINICAL STUDY TO COMPARE THE EFFICACY OF *NASYA KARMA* WITH *SHADBINDU TAILA* AND *ANU TAILA* IN MIGRAINE VIS-O-VIS *ARDHAVABHEDAKA*

Akhilanath Parida^{1*}, Satyasmitha Jena², Varun Sawant³

¹ Professor, Dept. of PG Studies in Panchakarma, VYDS Ayurveda College, Khurja, Uttara Pradesh, India.

² Lecturer, Dept. of PTSR, VYDS Ayurveda College, Khurja, Uttara Pradesh, India.

³ Lecturer, Dept. of Samhita and Siddhanta, VYDS Ayurveda college, Khurja, Uttara Pradesh, India.

KEYWORDS: *Nasya Karma*, *Shadbindu Taila*, Migraine, *Anu Taila*, *Ardhavabhedaka*.

ABSTRACT

Migraine is one of the *Ardhavabhedaka roga* in which there is vitiation of *Vata & Kapha dosha*. Currently, conventional medicine has no effective treatment for *Ardhavabhedaka*. Because of the facts, particularly considering the side effects in the existing methods of treatment, there is the need to develop a treatment protocol. *Vairechanika Nasya* is the line of treatment as per *Acharya Sharangadhara*. Therefore, *Nasya* has been selected as a treatment modality for the present study. "*Nasa hi siraso dwaram tena taddapyahanthi tana*". The nose is the gateway of the head; hence it acts as an inlet for the *Nasya Karma*. It destroys the disease of the head. Patients of group A were treated with *Shadbindu Taila Nasya* for 7 days & patients of group B were treated with *Anu Taila Nasya* for 7 days. The dose of *Nasya* is 6 *Bindu*. The percentage success rate of Group is 57.5% & Group-B is 56.8%. There is no significant difference among the results of the treatment of Group-A and Group-B by paired proportion test of significance for i.e. $p < 0.001$. Patients of group A treated with *Shadbindu Taila Nasya* have shown better results compared to group B which was treated with *Anu Taila*. There were no complications observed during the treatment.

*Address for correspondence

Dr. Akhilanath Parida

Professor,

Dept. of PG Studies in

Panchakarma, VYDS Ayurveda

college, Khurja, India.

Email: tarinitirupati@gmail.com

Mob. No. 7520495165

INTRODUCTION

Panchakarma is a unique approach of Ayurveda specially designed with five procedures of purification through the nearest possible route. That includes *Vamana*, *Virechana*, *Niruha & Anuvasana Basti*, *Nasya*.^[1] In the Uttara tantra, *Acharya Sushruta* has devote done separate chapter to *Ardhavabhedaka* after explaining *Shirogataroga*. The disease *Ardhavabhedaka* considerably attracted the ancient physicians, which are evident from their, detailed description classification, symptomatology, complications & management written in *Samhita*. Though it has been said that the disease *Ardhavabhedaka* in the initial phase, is a curable entity but if it takes a chronic course may lead to many associated complications. This fact itself shows that *Ardhavabhedaka* has been a major problem for the physicians since long back. In Ayurveda, three categories of treatment are described for each & every ailment Viz.,

Samshodhana, *Samshamana*, *Nidana parivarjana*.^[2] Here key importance is given to *Shodana* followed by further treatments. *Ardhavabhedaka* is well known for recurrence & chronicity. Recurrence of the disease occurs when the vitiated *Dosha* have not been evacuated completely. Migraines recurring frequently attaining the *Jeerna avastha*. Migraines first & foremost among the *Ardhavabhedakaroga* in which there is vitiation of *Vata* and *Kapha dosha* resulting in profuse sneezing, blocking of the nose, watery discharge, dryness of the gullet & lips, continuous pain in the temple & alteration of voice. Migraine can be co-related with *Ardhavabhedaka*, most commonly encountered in day to day practice often due to allergens. It is a very common ailment affecting roughly 20% of the population. Bestowing to *Acharya Sharangadhara vairechanik Nasya* is the line of treatment. Therefore, *Nasya* has been selected as a treatment modality for the present

study. "*Nasa hi sirasodwaram tena taddapya hanthi tana*". The nose is the gateway of head hence it acts as an inlet for the *Nasya Karma*. It destroys the disease of the head. *Nasya* is one of the Panchakarma therapy. The widely held of the drugs mentioned in *Vairechanik Nasya* will be having *Tikshna, Ushna guna*, these medications exasperate the mucous membrane of the nose, increase the nasal discharge & removes the morbid *Dosha* from the Nasal cavity & head. *Shadbindu Taila* drugs are having *Ushna, Tikshna guna, Vata Kapha hara* property & having anti-inflammatory action does *Shothahara, Vedana sthapana, Lalatardha vedana* here analgesic action on *Migrain (Ardhavabhedaka)*. Here *Anu Taila* drugs are also *Ushna, Tikshna* property & *Vata-Kapha hara* property. Both the *Taila* are mentioned for in general *Shirogata rogas*, so to know the efficacy of both drugs particularly in *Ardhavabhedaka*, this study was taken up with *Nasya Karma* with *Shadbindu Taila & Anu Taila*. Majority of the drugs mentioned in *Vairechanik Nasya* will be having *Tikshna, Ushna guna*, these drugs irritate the mucous membrane of the nose, increase the nasal secretion & eliminates the morbid *Dosha* from the Nasal cavity & head.

OBJECTIVES

To compare the efficacy of *Nasya Karma* with *Shadbindu Taila & Anu Taila* in *Ardhavabhedaka*.

MATERIALS AND METHODS

Study Design: It is a comparative, non-controlled, open-labelled, and parallel clinical study.

Trial Drugs

Table1. Showing the Ingredients of *Shadbindu Taila*^[3]

No.	Ingredients	Quantity
1.	<i>Eranda (Ricinus communis L.)</i>	19.0 g
2.	<i>Tagara (Valeriana wallichii DC.)</i>	19.0 g
3.	<i>Shatahva (Anethum sowa Roxb.),</i>	19.0 g
4.	<i>Jivanti (Leptadenia reticulata [Retz.] Wight and Arn.)</i>	19.0 g
5.	<i>Rasna (Alpinia galanga (L.) Swartz)</i>	19.0 g
6.	<i>Bhringa (Eclipta alba (L.) Hassk.)</i>	19.0 g
7.	<i>Vidanga (Embelia ribes Burm.f.)</i>	19.0 g
8.	<i>Yashti (Glycyrrhiza glabra L.)</i>	19.0 g
9.	<i>Shunthi (Zingiber officinale Roscoe.)</i>	19.0 g
10.	<i>Saindhava Lavana (Rock salt)</i>	19.0 g

Collection of Drugs: All the required raw materials are collected freshly from the surrounding villages near VYDSAM, Khurja, U.P. *Tila Taila* was purchased from VYDSAM pharmacy, Khurja.

Preparation of oil: The reference from Ayurvedic Formulary of India was followed for *Murcchana* of *Krishna Tila Taila*.^[4]

Preparation of *Bhringa Rasa*: Fresh juice obtained from macerated whole plant of *E. alba* was considered as *Bhringa Rasa*.

Preparation of *Kalka*: Each *Kalka Dravya* (19.0g powder) was taken in a vessel and mixed, followed by addition of sufficient amount of water until a uniform paste was obtained preparation of *Shadbindu Taila: Krishna Tila Taila* (0.768 ltr) was indirectly heated on a mild flame (by placing a pan between burner and vessel to avoid direct heating) with *Bhringa Rasa* (3.072 ltr), *Saindhava Lavana* (19.0g powder) and *Kalka* obtained from *Kalka Dravya*. Mixture was stirred intermittently till it became slimy. The heating was stopped and *Aja Paya* (3.072 ltr) was added. The mixture was kept standing overnight. Next day, the heating was continued till the mixture attained *Sneha Siddhi Lakshana* (completion test for chief desired characteristics) like *Gandha-Varna Rasotpatti* (desired smell, colour and taste), *Shabdahinata* (no cracking sound), *Phenodgama* (appearance of froth) and *Vartivat Kalka* (rolling of paste of herbal drugs between fingers). Finally, the mixture was filtered when hot through muslin cloth and stored in amber coloured bottle until use.

Ingredients of *Anu Taila*^[5]

Chandan, Agru, Tejpatra, Daruharidra twak, Yashti, Bala, Neelkamal, Sukshma Ela, Vidanga, Bilwa, Utpal, Bhadramusta, Dalchini, Musta, Sariva, Shaliparni, Jeewanti, Prushniparni, Devdaru, Shatawari, Kapikachchu, Renukbeeja, Kantakari, Padmakeshar, Aja Dugdha, Til Taila and Rain Water.

Collection of Drugs: All the required raw materials are collected freshly from the surrounding villages near VYDSAM, Khurja, U.P. *Tila Taila* was purchased from VYDSAM pharmacy, Khurja.

Preparation of oil: *Anu Taila* is prepared in VYDSAM College pharmacy, Khurja. All the drugs are taken in equal quantity for preparation of *Kalka* (40g each total 280g). According to *Acharya Charaka's* concept of *Siddha Taila* preparation, all herbs were mixed in equal quantity in 100 times of water and it is reduced till 1/10 is remained. Thus, decoction is made. Decoction + 1/10 *Tila taila* of the decoction are mixed and boiled till only oil remains. Process is repeated for 9 times more. At

10th time oil and equal quantity of Goat Milk is boiled till only oil remains.

Study Population: An accessible population of *Ardhavabhedaka* patients in and around Khurja, who were representative of the target population, participated in the study.

Sampling: Simple random sampling

Study sample: Patients attending the OPD and IPD of *Panchakarma* VYDSM Ayurveda College, Khurja.

Sample size: 40

Study setting: The study was carried out in VYDSM Ayurveda College, Khurja from 2017 to 2019.

Diagnostic criteria: Diagnosis is established by clinical examination. Sign & Symptoms of *Ardhavabhedaka* are as follows.

1. *Manya-vedana*
2. *Karnakshi vedana*
3. *Lalatardha vedana*
4. *Bhru-shankha vedana*
5. *Shastra-Arani nibha vedana*^[6]

Inclusion criteria

1. Patients suffering from classical signs & symptoms of Migraine & correlated disease *Ardhavabhedaka* will be selected.
2. Patients fit for *Nasya Karma*.
3. Patient of both sexes.
4. Patients of age 16 - 65 years.

Exclusive criteria

1. Patients unfit for *Nasya Karma*.
2. Age below 16 yrs. more than 65 yrs.
3. The patient suffering from another systemic infectious disease.
4. Patients suffering from SOL etc. Requiring surgical intervention.

Intervention

Patients randomly allotted to 2 groups namely Group A & Group B with 20 patients in each group.

Group A: *Shadbindu Taila Nasya Karma* for 7 days.

Group B: *Anu Taila* for 7 days.

Procedure: *Nasya Karma*

Dose: 6 *Bindu*

Duration of the treatment: 7 days

Follow up period: 14 days after the treatment. i.e., 7th day; & 21st day.

Procedure

1. Patients should have passed natural urges.
2. Patient should be empty stomach before *Nasya Karma*.
3. *Nasya* procedure was explained to the patients in detail & they were mentally prepared by giving assurance & consent was obtained for the treatment.

Purvakarma

Nasya was performed in the '*Nasya room*' located in *Panchakarma* theatre, the place is having sufficient daylight & is devoid of direct atmospheric influences like dust, wind, etc. Blood pressure & pulse were recorded before the *Nasya Karma* for observation purpose.

Snehana: *Abhyanga* with Luke warm *Tila Taila* was done on face, scalp, temporal & neck region for about 10-15 minutes.

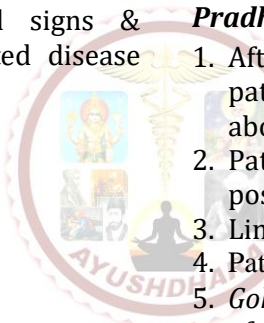
Swedana: *Swedana* was done by a clean cotton Napkin dipped in bowl of hot water. Holding both the ends of a napkin, it was twisted to squeeze properly so that water is completely removed.

Pradhana Karma

1. After completion of *Purvakarma*, the position of patients was changed i.e., bending the head at about 45° angles from the edge of the table.
2. Patients were instructed to be in a relaxed posture
3. Limbs were placed apart & on both sides.
4. Patients were asked to shut their eyes.
5. *Gokarnika* was held in right hand & with the help of the left index fingertip of the nose is pushed up.
6. With the assistance of *Nasya Pali (Gokarnika)* 6 *Bindu* of *taila* was instilled in individual nostril in an on-stop stream.

Paschat Karma

1. After performing the *Nasya karma*, patient's were asked to remain in the same position till 100 *Matra*.
2. *Abhyanga* & *Swedana* were done in the regions specified formerly. Here time duration was changed to 3-5 minutes only.
3. Simultaneously rub both the hands (palm sole) vigorously raising them slightly, for 1 to 2 minutes, at the same time foot soles are also rubbed.
4. The patient was advised to spit out the nasal secretions reaching the throat & to do gargle with warm water.



RESULTS

Table 2: Pradhana Vedana wise distribution of patients of both groups

Pradhana Vedana	Group-A		Group-B		Total	
	N	%	N	%	N	%
Manya-vedana	20	100	20	100	40	100
Karnakshi vedana	20	100	20	100	40	100
Lalatartha vedana	13	45	14	70	27	67.5
Bhru-shankha vedana	10	50	7	35	17	42.5
Shastra-Arani nibha vedana	4	20	4	20	8	20

Table 3: Manya-vedana in two groups of patients studied

Manya-vedana	BT	AT	AF	% Change
Group A (n=20) Grading				
0	0(0%)	5(25%)	8(40%)	40%
1	3(15%)	9(45%)	12(60%)	45%
2	2(10%)	6(30%)	0(0%)	-10%
3	14(70%)	0(0%)	0(0%)	-70%
4	1(5%)	0(0%)	0(0%)	-5%
Group B (n=20) Grading				
0	0(0%)	4(20%)	14(70%)	70%
1	5(25%)	11(55%)	6(30%)	5%
2	0(0%)	4(20%)	0(0%)	0%
3	15(75%)	1(5%)	0(0%)	-75%
4	0(0%)	0(0%)	0(0%)	0(0%)
P Value	0.458	0.767	0.111	-

85% in group-A shown improvement with $p < 0.0001^{**}$ and 80.0% in group-B improvement is significant $p < 0.001^{**}$ (paired proportion test).

After follow up of 21 days 45% recurred mild in Group-A. After follow up of 21 days 5% reoccurred mild in Group-B. Efficacy of Nasya Karma with Shadbindu Taila and Anu Taila in Migraine (Ardhavabhedaka).

Table 4: Karnakshi vedana in two groups of patients studied

Karnakshivedana	BT	AT	AF	% Change
Group A (n=20) Grading				
0	0(0%)	11(55%)	16(80%)	80.0%
1	6(30%)	8(40%)	4(20%)	-10.0%
2	11(55%)	1(5%)	0(0%)	-55.0%
3	0(0%)	0(0%)	0(0%)	0.0%
4	3(15%)	0(0%)	0(0%)	-15.0%
Group B (n=20) Grading				
0	0(0%)	12(60%)	19(95%)	95.0%
1	12(60%)	7(35%)	1(5%)	-55.0%
2	7(35%)	1(5%)	0(0%)	-35.0%
3	1(5%)	0(0%)	0(0%)	-5.0%
4	0(0%)	0(0%)	0(0%)	0.0%
P Value	0.056+	1.000	0.342 -	-

80.0% improvement in Group A is statistically significant ($p < 0.001^{**}$) and 95% improvement in Group B is significant with $p < 0.001^{**}$ (paired proportion test).

Table 5: Lalatardha vedana in two groups of patients studied

<i>Lalatardhavedana</i>	BT	AT	AF	% change
Group A (n=20) Grading				
0	7(35%)	11(55%)	18(90%)	55.0%
1	6(30%)	6(30%)	2(10%)	-20.0%
2	2(10%)	1(5%)	0(0%)	-10.0%
3	5(25%)	2(10%)	0(0%)	-25.0%
4	0(0%)	0(0%)	0(0%)	0.0%
Group B (n=20) Grading				
0	6(30%)	14(70%)	19(95%)	65.0%
1	11(55%)	5(25%)	1(5%)	-50.0%
2	0(0%)	0(0%)	0(0%)	0.0%
3	3(15%)	1(5%)	0(0%)	-15.0%
4	0(0%)	0(0%)	0(0%)	0.0%
P Value	0.304	0.686	1.000	-

55% improvement in Group-A is significant with $p < 0.001^{**}$ and improvement of 65% in Group-B is statistically significant with $p < 0.001^{**}$.

Table 6: Shastra-Arani nibha vedana in two groups of patients studied

<i>Shastra-Araninibhavedana</i>	BT	AT	AF	% change
Group A (n=20) Grading				
0	16(80%)	18(90%)	19(95%)	15.0%
1	3(15%)	2(10%)	1(5%)	-10.0%
2	1(5%)	0(0%)	0(0%)	-5.0%
3	0(0%)	0(0%)	0(0%)	0.0%
4	0(0%)	0(0%)	0(0%)	0.0%
Group B (n=20) Grading				
0	16(80%)	16(80%)	18(90%)	10.0%
1	1(5%)	3(15%)	2(10%)	5.0%
2	2(10%)	1(5%)	0(0%)	-10.0%
3	1(5%)	0(0%)	0(0%)	-5.0%
4	0(0%)	0(0%)	0(0%)	0(0%)
P Value	0.695	0.661	1.000	-

Improvement of 15% in Group-A & Group-B is statistically significant with $p = 0.038$ After follow up of 21 days 5% reoccurred mildly in Group-B.

Table 7: Bhru-shankha vedana in two groups of patients studied

<i>Bhru-shankhavedana</i>	BT	AT	AF	% change
Group A (n=20) Grading				
0	10(50%)	16(80%)	17(85%)	35.0%
1	10(50%)	4(20%)	3(15%)	-35.0%
2	0(0%)	0(0%)	0(0%)	0.0%
3	0(0%)	0(0%)	0(0%)	0.0%
Group B (n=20)				

Grading				
0	13(65%)	15(75%)	17(85%)	20.0%
1	5(25%)	4(20%)	2(10%)	-15.0%
2	2(10%)	1(5%)	1(5%)	-5.0%
3	0(0%)	0(0%)	0(0%)	0.0%
P Value	0.120	1.000	1.000	-

35% improvement in Group-A is significant with $p=0.004^{**}$ & 20% improvement in Group B is also significant with $p=0.019^*$.

DISCUSSION

It is difficult to co-relate the disease Migraine with *Ardhavabhedaka* bearing in mind the diverse etio-pathological factors and features cited in Ayurveda with that of contemporary medical science. In this study the co-relationship of Migraine with *Ardhavabhedaka* made on the following ground only.

Table 8: Showing the comparison between Migraine and *Ardhavabhedaka*

Ayurvedic Description	Modern Description
<i>Nidana- Ardhavabhedaka</i> is caused due to <i>Rukshashana, Atyashana, Adhyashana, Purva-vata, Avashyaya</i> , excessive <i>Maithuna, Vegadharana, Ayasa</i> , and excessive <i>Vyayama</i> .	Migraine is caused due to atmospheric pollution, change in humidity & psychological factors.
<i>Lakshana-</i> The <i>Lakshana</i> of <i>Ardhavabhedaka</i> mentioned in <i>Ayurvedic</i> classics are <i>Manya vedana, Karnakshi vedana, Lalatardha vedana, Bhru-shankha vedana, Shastra-Arani nibha vedana</i> .	The features of Migraine mentioned in modern medicine are pain usually on one side of your head, but often on both sides, pain that throbs or pulses, sensitivity to light, sound and sometimes smell and touch, nausea and vomiting. ⁷

The above table shows that symptoms of *Ardhavabhedaka* like *Manya vedana, Karnakshi vedana, Lalatardha vedana, Bhru-shankha vedana, Shastra-Arani nibha vedana* etc. is more related to symptoms of Migraine. So, Migraine can be correlated with Migraine mentioned in allopathic science. *Shadbindu Taila* and *Anu Taila* both have explained for the in general *Shiroroga*, so to know the efficacy of each drug in particularly in *Ardhavabhedaka*, the above drugs have been selected for the Research trial which has done. *Vata & Kapha* are the main *Dosha* involved in the disease.

Probable mode of Action

Shadbindu Taila: The most of the ingredients of *Shadbindu Taila* i.e., *Eranda (Ricinus communis L.), Tagara (Valeriana wallichii DC.), Shatahva (Anethum sowa Roxb.), Jivanti (Leptadenia reticulata [Retz.] Wight and Arn.), Rasna (Alpinia galanga (L.) Swartz), Bhringa (Eclipta alba (L.) Hassk.), Vidanga (Embelia ribes Burm.f.), Yashti (Glycyrrhiza glabra L.), Shunthi (Zingiber officinale Roscoe.), Saindhava Lavana (Rock salt) etc.* have *Katu, Tikta rasa, Ushna virya, Ruksha, Tikshna laghu guna & Doshaghnata* is *Vata kapha hara*, which inturn helps in relieving the symptoms of *Ardhavabhedaka*.

Eranda is having *Katu, Tikta rasa, Laghu, Ruksha, Tikshna guna, Ushna virya, Katu vipaka* all are antagonists with *Kapha dosha, Vata kapha* shaman property & Migraine is a *Vata kapha* dominant

Vyadhi. Tikta rasa & its Agni pradeepaka karma correct status of *Agni* so by that relieve *Agnimandya* and thus help in *Sampapti vighatana*. Drug *Shunthi* is *Krimirogahara*, so by this relives intestinal helminthiasis, as it is one of the causative factors for *Ardhavabhedaka*.

Shunthi is having volatile oil. These are rich in lipids & proteins that stimulate the brain & there relives headache & also having anti-inflammatory action.

Tagara having anti-inflammatory action.

Jivanti is having *Rasayana*, immuno-stimulant, nervine tonic action & effective in diseases of *Majjavaha srotas* as Migraine is a *Majjavaha sroto vyadhi*.

Shatahva is having anti-inflammatory, analgesic, immune regulatory action, anti-histaminic action thus helps in relieving the disease.

Saindhava is having *Vatahara* property, increases the secretions of mouth. It liquefies the mucous secretions by this eliminates *Dusta dosha*, clarifies the passage, and so by that relieves *Nasavarodha*.

Vidanga is having analgesic, antimicrobial & antifungal action. Thus, helps in reducing headache & prevents secondary infections.

Tila Taila -Sesame contains large quantities of the essential polyunsaturated fatty acid (PUFA), linoleic acid in the form of triglycerides. *Taila*

alleviates *Vata*, at the same time doesn't aggravate *Kapha*. It has *Ushna*, *Tikshna*, and *Vyavayi Gunas*. So, it has a good capacity to penetrate through small channels in the body so that it will open the obstructed path like sinus, ostia and facilitate the drainage of collected discharge. From the therapeutic point of view, another quality of *Taila* is when treated with other drugs, it also takes the property of those drugs. Judged from this angle, *Taila* is the best *Snehadravya* in the sense that it doesn't only assimilate the substance added to it but also it foregoes its properties. & it is anti-oxidant, also a source of Vit-E, which is an anti-oxidant & it is very much effective in the treatment of headaches & also has anti-bacterial effects.

Anu Taila

Vidanga is having analgesic, antimicrobial & antifungal action. Thus, helps in reducing headache & prevents secondary infections.

Yashtimadhu: The drug *Yashtimadhu* has *Madhurarasa* with *Guru* & *Snigdha guna*, *Karma* is *Tridosha Hara*, *Rasayana* which helps in building the immune system of the body because, in *Ardhavabhedaka*, the immune system re-joins with resistance against the allergens. & it is also antiviral, anti-inflammatory, anti-microbial effects, which in turn prevents secondary infections.

Devadaru: It is anti-oxidant, anti-inflammatory, *Kapha nissaraka*, *Lekhana*, *Rasayana* and *Shotha hara*.

Anu Taila is *Vataghna*, *Bruhana* and *Snehan*. It is *Sukshmasrtotogami*. Copious Discharges occur after administration of *Anutaila Nasya*. Chest, head, pallet and throat is attacked with *Kapha Dosha*. *Anutaila* firstly mobilises the *Kaphadidoshas* from these *Sthanas* and then it acts there as *Bruhana*. Oil reaches to tiny channels and eradicates all the *dosha*. The *Sneha* reaches in the *Srotasas*, Oleation and firming action takes place on tendons and ligaments of upper part of the Body. Thus, it is helpful in wray-neck, facial palsy, immobilisation of jawline, headache, rhinitis, migraine and shuddering of neck. It increases the efficiency of *Indriya* e.g. *Nasa*, *Karna*, *Netra*. It cures hair fall and prevent early grizzling of hair. Regular practice of *Anu Taila* helps to gain these benefits as well as clear acuity of sense organs and Clearness of voice and facial glow. Moreover, disease of the upper part of the body remains no more recurrent with the consistent use of *AnuTaila*. According to *Charakacharya* regular use of *Anu Taila* softens the *Dosha*, extract them from the site without destructing it and eventually improves effectiveness of *Indriya*. This is because of oleation action on *Sira*

and *Kandara* (tendons and ligaments) of shoulders, neck and chest. These parts become Strong.

Effect of therapy

Effect on *Manya-vedana*

Manya-vedana causes due to vitiated *Vata* & *Kaphadosha*. all most all drugs of *Shadbindu Taila* & *Anu Taila* are having *Ushina virya*, *Vata Kapha hara* property, so in the present study Almost equal relief was observed in group A (85%) & group B (80. %) in *Manya-vedana*. Both are statistically significant ($p < 0.001$).

Effect on *Karnakshi vedana*

Karnakshi vedana is caused because of vitiated *Vata dosha*, here both trial drugs are oil preparation & having *Ushna virya* that helps in *Vatashamana*. so, in the present study, *Karnakshi vedana* reduced 80% in Group-A ($p < 0.001$), 95% in Group-B ($p < 0.001$) both values are statistically significant.

Effect on *Lalatardha vedana*

It could be hypothesized that *Nasya* acts in both local as well as general levels, by the direct contact with nerve terminals or uptake of the drugs by the nasal mucosa. It is currently known in the literature that the trigeminal nerve through its trigeminal vascular system is deeply involved in the genesis and maintenance of pain in headache syndromes. (Jacob Ballinger, Pg.162). The nasal mucosa which comes into direct contact with drugs applied is supplied by both the ophthalmic and maxillary branches of Trigeminal nerve (Scott-Brown, pg. 174). Direct counter-irritation or stimulation of these nerve terminals could cause distal changes in the trigeminal ganglion itself. The result of these hypothetic changes in the firing of trigeminal neurons could lead to the alleviation of pain. So, in the present study *Lalatardha vedana* reduced 55% in Group-A ($p < 0.001$), 65% in Group-B ($p < 0.001$) both are statistically significant.

Effect on *Shastra-Arani nibha vedana*

Here *Shastra-Arani nibha vedana* is caused due *Sama-vata* which is because of *Agnimandya*, both drugs is having *Ushnavirya*, *Katu vipaka* which helps in *Ama pachana* & *Deepana*. So, in the present study equal relief was observed in group A (15%) & group B (15 %) in *Shastra-Arani nibha vedana*. Both are statistically significant with $p < 0.038$.

Effect on *Bhru-shankha vedana*

Bhru-shankha vedana is caused due to vitiated *Vata dosha*, because of increase of *Ruksha guna*, so here *Ushna virya* of both drugs & *Snigdha guna* of *Taila* helps for correction of *Ruksha guna* of *Vata dosha*. So, in the present study *Bhru-shankha vedana*

reduced 35% in Group-A is significant with $p=0.004$ & 20% improvement in Group-B is also significant with $p=0.0019$.

The overall effect of therapy of 40 patients

1. Out of 20 patients treated in Group-A with *Shadbindu Taila Nasya Karma*, 18 patients showed good response, 1 patient showed moderate response & 1 patient showed poor response.
2. Out of 20 patients treated in Group-B with *Anu Taila Nasya Karma*, 17 patients showed good response, 3 patients showed a moderate response.
3. No one patient was found without any change in both the groups.

There is no significant difference between the two groups results i.e. Group-A 57.5% & Group-B 56.8% showed a success rate. ($p<0.001$).

Recurrence: During the post-treatment period of 60 days 10 (25%) reoccurrence were found in the cases in both groups. Since the rate of reoccurrence is a little high, for future studies we recommend performing 2-3 sittings of *Nasya* in Migraine and followed by *Naimittika Rasayanas* to improve the general immunity of the body.

CONCLUSION

Patients of group A treated with *Shadbindu Taila Nasya Karma* have shown better results clinically compared to group B who were treated with *Anu Taila*. Statistically, there is no significant difference between two groups at a 1% level of significance i.e. for $p<0.001$. There were no complications observed during the treatment. Since the rate of reoccurrence is a little high, for future

studies we recommend performing 2-3 sittings of *Nasya* in Migraine and followed by *Naimittika Rasayanas* to improve the general immunity of the body.

REFERENCES

1. Vasant Patil, Principles and Practice of Panchakarma, 4th edition, Varanasi; Chaukhamba Sanskrit Sansthan; 2014.p.1.
2. Agnivesha, Charaka Samhita (Hindi Translation by Brahmananda Tripathi), Vol. I Vimanasthana 7/21, Varanasi; Chaukhamba Surabharati Series: 2013.
3. Vangasena. Samhita (edited by Nirmala Saxena) of Vangasena, edition 1st, Volume II, Varanasi; Chaukhamba Sanskrita samsthana: 2004, 17/102.
4. Sharangadar Samhita with Jeevanaprada (edited by Smt Shailaja Shreevatsava), 4th edition, Madhyama khanda 9/9, Varanasi; Chaukhamba Orientalia: 2005.p.14-16.
5. Gangasahaya Pande. Gadanigraha with Vidyotini Hindi commentary by Sri Indudeva Tripathi, edition 2nd Part-II (Kayachikitsa Khanda) Nasarogadhikara, Varanasi; Chaukhamba Sanskrit sansthana: 1991.p.191.
6. Agnivesha, Charaka Samhita (Hindi Translation by Brahmananda Tripathi), Vol.II Siddhithana Varanasi; Chaukhamba Surabharati Series: 2013. 9/74-76.
7. Mark W.Weatherall et al, the diagnosis and treatment of chronic migraine, Ther Adv Chronic Dis 2015, Vol. 6(3) 115-123.

Cite this article as:

Akhilanath Parida, Satyasmita Jena, Varun Sawant. Clinical Study to Compare the Efficacy of *Nasya Karma* with *Shadbindu Taila* and *Anu Taila* in Migraine Vis-O-Vis Ardhavabhedaka. AYUSHDHARA, 2019;6(6): 2415-2422.

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.