

Journal of **Ayurveda and Integrated Medical Sciences**

www.jaims.in



An International Journal for Researches in Ayurveda and Allied Sciences



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Journal of

Ayurveda and Integrated Medical Sciences

ORIGINAL ARTICLE

September 2023

A comparative evaluation on efficacy of Brihat Dashmoola Taila Snehapana and Brihat Dashmoola Taila Nasya management of Ardhavabhedaka (Migraine)

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ABSTRACT

Migraine is a genetically influenced complex disorder characterized by episodes of moderate-to-severe headache, most often unilateral and generally associated with nausea and light and sound sensitivity. Around 15% of women and 6% of men experience migraines, the second most prevalent type of cerebral pain. The majority of those affected by the disease are in their prime age, or between the second and fifth decade, which has an impact on their professional and social lives and deteriorates their health. Ardhavabhedaka is technically comparable to migraine due to its paroxysmal nature and distinctive characteristic of a "half-sided headache". Material and Methods: In this study, eligible 64 patients were selected and randomly divided in two groups through computer generated randomization. Brihat Dashmoola Taila Snehapana was given in trial group and Brihat Dashmoola Taila Nasya was given in control group for 2 settings of 7 days with 7 days gap. The primary outcomes measured were percentage changes in chief complaints and associate complaint of Ardhavabhedaka in comparison to both groups. Result: Regarding effect of therapy on Chief complaints in trial group, 22.6% relief was found in severity of headache, 34.0% in duration of headache and 43.2% in frequency of headache. In control group, 32.8% relief was found in severity of headache, 32.8% in duration of headache and 45.4% in frequency of headache. Conclusion: The Nasya Karma is a better treatment option in the management of Ardhavbhedaka as compared to Snehapana. Although both the treatments are having statistically significant results.

Key words: Ardhavabhedaka, Brihat Dashamoola Taila, Migraine, Nasya, Snehapana.

INTRODUCTION

Migraine is a genetically influenced complex disorder characterized by episodes of moderate-to-severe headache, most often unilateral and generally associated with nausea and light and sound sensitivity. Around 15% of women and 6% of men experience migraines^[1], the second most prevalent type of

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Submission Date: 12/07/2023 Accepted Date: 24/08/2023



Website: www.jaims.in

DOI: 10.21760/jaims.8.9.3

cerebral pain. The majority of those affected by the disease are in their prime age, or between the second and fifth decade, which has an impact on their professional and social lives and deteriorates their health. Ardhavabhedaka is technically comparable to migraine due to its paroxysmal nature and distinctive characteristic of a half-sided headache or Ardha Mastaka Vedana.[2] The pathogenesis Ardhavabhedaka involves all three Doshas[3], with Vata^[4] or Vata-Kapha^[5] predominating according to Acharya Sushrut and Acharya Charaka respectively.

AIM AND OBJECTIVES

Aim

To evaluate the efficacy of Brihat Dashmoola Taila Snehapana and Brihat Dashmoola Taila Nasya in the management of Ardhavabhedaka.

Objectives

1. To evaluate the efficacy of Brihat Dashmoola Taila Snehapana in the management of Ardhavabhedaka.

- 2. To evaluate the efficacy of *Brihat Dashmoola Taila Nasya* in the management of *Ardhavabhedaka*.
- 3. To compare the efficacy of both the group in the management of *Ardhavabhedaka*

MATERIALS AND METHODS

This study was approved by Institutional Ethical Committee (IEC) of Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, Najafgarh, New Delhi vide IEC code IEC- CBP-IEC/2020/PK-04/MD/19 on 29/01/2022 CTRI registration was also (CTRI/2022/03/041061 on 14/03/2022). Patients were selected from the OPD and IPD of Panchakarma dept. of Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, Najafgarh, New Delhi. Patients written informed consent was taken before starting the treatment. Patients were selected using, Simple random sampling method. The study was conducted on 64 subjects. The drug, Brihat Dashmoola Taila [6] was procured from the GMP certified pharmacy.

Criteria for inclusion

- Age Control group between 20 to 50 years and having sign and symptom of *Ardhavabhedaka* (Migraine) According to Ayurvedic Classics.
- 2. Having recurrent attack of headache.
- 3. With or without nausea, vomiting, aura
- 4. The diagnosis of the disease was done on the basis of clinical manifestations like recurrent attacks of headache, mostly unilateral in site, variable in intensity, frequency and duration with or without nausea, vomiting, aura and other associated symptoms.

Criteria for exclusion

- 1. Age group less than 20 and more than 50 yrs.
- 2. Patient suffering from any other types of Headaches.
- 3. Patient unfit for *Nasya Karma* as mentioned in *Ayurvedic reference books*.
- 4. Patient having history of Head Trauma.
- 5. Pregnant women and Lactating mothers.

Sample Size: 64

Grouping

Group A - Trial group

Brihat Dashmoola Taila Snehapana: Snehapana was given in the dose of 2 Karsha^[7] (24ml) Morning on empty stomach when patient feels hungry with lukewarm water for two settings of 7 days with 7 days gap.

Group B - Control group

Brihat Dashmoola Taila Nasya: Nasya was done in the dose of 8 *Bindu*^[8] in each nostril for 2 sittings of seven days with the interval of 7 days after each sitting.

Follow up - 28 days

Scoring pattern^[9]

Subjective symptoms based on the reduction of disease signs and symptoms, the patient's improvement was evaluated. Following are specifics of the score used for the study's primary indications and symptoms based on the reduction of disease signs and symptoms, the patients' improvement was evaluated. Following are specifics of the score used for the study's primary indications and symptoms:

Severity of Pain	No Pain	0
	Pain Tolerable	1
	Do not disturb the routine work	2
	Disturb the routine work	3
	Intolerable pain	4
Frequency of Pain	No attack	0
	Once in 21-30 days	1
	Once in 11-20 days	2
	Once in 1-10 days	3
	Continues/ daily	4
Duration of	No pain	0

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Headache	1-3 hours/day	1
	3-6 hours/day	2
	6-12 hours/day	3
	More than 12 hours/day	4
Aura	Nil	0
	Lasts for 5 min	1
	Lasts for 15 min	2
	Lasts for 30 min	3
	Lasts for 60 min	4
Nausea	Nil	0
	occasionally	1
	moderate but does not disturb routine work	2
	severe, disturbing routine work	3
	severe enough, small amount fluid regurgitating from mouth	4
Vomiting	Nil	0
	Only if headache does not subside	1
	Vomiting 1-2 times	2
	Vomiting 2-3 times	3
	Forced to take medicine to stop vomiting	4
Vertigo	Nil	0
	Felling of giddiness	1
	Pt. feels as if everything is revolving	2
	Revolving signs +black outs	3
	unconscious	4

Gradation for associated Symptoms	No symptoms	0
	Mild (can do his/her work)	1
	Moderate (forced to stop work)	2
	Severe (forced to take rest)	3
	Excruciating (force to take medicine)	4

Overall assessment

The improvement was assessed on the basis of subjective symptoms.

Statistical estimation of results

The obtained data were analyzed statistically. The data were analyzed by ANOVA Test and independent T-test.

P > 0.05 = Insignificant

P < 0.05 and 0.01 = Significant

P < 0.001 = Highly significant

OBSERVATIONS AND RESULTS

In this clinical trial of *Ardhavabhedaka*, there are total 70 patients registered, and were randomly distributed into two groups i.e., Group A and Group B. Among them 32 patients were registered in Group A and 32 patients in Group B. 04 patients were drop out in Group A and 02 patients were drop out in Group B.

Observation

In the present study, one patient dropped out due to migration to other state. In present clinical trial, maximum number of patients, i.e., 47% patients belonged to age group of 21–30. 83% of patients were female, 50% were homemakers, 80% were Hindu, 73% were married, 37% of patients had education till graduation, 34% of patients were from middle class, 40% of patients were having moderate appetite, 66.67% patients were having regular defecation, 73% of patients having *Vata-Pitta Sharirika Prakriti* (physical constitution) and 53% of patients were having *Tamasika Manasa Prakriti* (psychological status).

In the current study, it was discovered that the majority of patients (57%) engaged in *Vishamashana*, which is the practise of eating regardless of hunger or time, while 38% practised *Adhyashana*, which is the practise of eating before the previous meal has been digested, and 18% had a predominance of *Lavana Rasa* (salty) in their regular diet.

It was observed that intolerable pain was present at 0 day in 31.3% of the patients in *Snehapana* group and in the *Nasya* group 46.9% of the patients were having intolerable pain at day 0. Nearly 46.9% of the patients at 0 day in *Snehpana* group complained of daily pain episodes and In *Nasya* group daily episode of pain was present in 53.1% of the patients at 0 day. In the *Snehpana* group, 87.5% of the patients at day 0 were having pain for more than 12 hrs/day and pain for more than 12 hrs/day was observed in 6.3% of the patients at 0 day in *Nasya* group.

Both groups had significant outcomes when it came to the therapy's impact on the chief complaints. The trial group Group A saw a statistically highly significant (<0.001) improvement in headache severity (22.6%), duration (34.0%), and frequency (43.2%), while Group B saw a statistically highly significant (<0.001) improvement in headache severity (32.8%), duration (32.8%), and frequency (45.4%). It was observed that complaint of nausea changed significantly in both the groups as revealed by within group analysis (p-value <0.001). Mean score for nausea in Snehpana group was 1.63 at day 0 which reduced to 0.41 at day 28th (% change = 74.8%). While, in Nasya group at day 0 mean score was 1.72, which decreased to 0.59 at day 28th (% change = 65.6%). It was observed that in both the groups, within group analysis showed statistically significant difference in Vomiting score at day 28th as compared to day 0 (p-value <0.001). Mean score for vomiting at day 0 in Snehpana group was 1.63 which decreased to 0.34 at day 28th (% change = 79.1%). In Nasya group mean score at day 0 was 1.72 which reduced to 0.44 at day 28th (% change = 74.4%). At day 21st, between group analysis revealed significant difference between both groups (p-value = 0.039). Between group analysis revealed significant difference between both the groups at day 21st in vertigo score (p-value =0.002). Mean change in *Snehpana* group from day 0 to day 28th was (1.22, % change = 88.4%) as compared to 1.46 in *Nasya* group (% change = 91.8%). It was observed that both the groups differ significantly at day 21st in grading of associated symptoms score (p-value = 0.019). Mean change in *Snehpana* group was 1.44 (% change = 56.9%) as compared to 1.47 in *Nasya* group (% change = 59.5%).

Assessment of effect of *Brihat Dashmoola Taila*Snehapana in Group-A

SN	Lakshana	Mean		% S.D.	p-value (within	p-value (between	
		В.Т	A.T			group)	group)
1.	Severity of pain	3.31	2.56	22.6	0.504	<0.001(*)	0.074
2.	Frequency of pain	3.47	1.97	43.2	0.595	<0.001(*)	0.659
3.	Duration of headache	3.88	2.56	34.0	0.504	<0.001(*)	1.000
4.	Aura	0.84	0.72	-	0.457	0.065	0.055
5.	Nausea	1.63	0.41	74.8	0.499	<0.001(*)	0.138
6.	Vomiting	1.63	.34	79.1	0.483	<0.001(*)	0.450
7.	Vertigo	1.38	.16	88.4	0.369	<0.001(*)	0.724
8.	Gradation for associated symptoms	2.53	1.09	56.9	0.641	<0.001(*)	0.608

Assessment of effect of *Brihat Dashmoola Taila Nasya* in Group-B

SN	Lakshana	Mean		% S.D.	S.D.	p-value (within	p-value
		В.Т	A.T			group)	(between group)
1.	Severity of pain	3.44	2.31	32.8	0.592	<0.001(*)	0.074
2.	Frequency of pain	3.50	1.91	45.4	0.530	<0.001(*)	0.659

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3.	Duration of headache	3.81	2.56	32.8	0.716	<0.001(*)	1.000
4.	Aura	1.00	0.44	-	0.669	<0.001(*)	0.055
5.	Nausea	1.72	0.59	65.6	0.499	<0.001(*)	0.138
6.	Vomiting	1.72	0.44	74.4	0.504	<0.001(*)	0.450
7.	Vertigo	1.59	0.13	91.8	0.336	<0.001(*)	0.724
8.	Gradation for associated symptoms	2.47	1.0	59.5	0.803	<0.001(*)	0.608

DISCUSSION

ISSN: 2456-3110

Following Vatika Shirahshoola, Ardhavabhedaka is discovered to be the most prevalent complaint in Shiroroga. Paroxysmal, unilateral headache that can be rather severe is a defining feature of the illness Ardhavabhedaka. The pathogenesis Ardhavabhedaka involves all three Doshas, with Vata or Vata-Kapha predominating coupled with Rakta Dushya. Even while the illness might not be fatal, improper management could result in vision or hearing loss.[10] Due to its paroxysmal character and distinctive trait of a half-sided headache, which commentator Chakrapani also refers to as a Ardha Mastaka Vedana. Ardhavabhedaka can be scientifically linked to migraine. Additionally, there are signs of Pitta Dosha involvement, such as giddiness, nausea, and vomiting, which can be described as follows. When Pitta and Prana Vata combine, sensations such as nausea and burning are experienced.[11] Murcha, Daha, Bhrama, and Klama are the outcomes of Udana Vayu and Pitta.[12] Bhrama is a sign of Rajoguna and Pitta-Vata Dosha involvement^[13], according to the condition Ardhavabhedaka can be identified as a Vatika or Vata-Kaphaja disorder after researching its aetiology and symptoms. The first Doshas for Ardhavabhedaka may be preliminary Vata alone or in combination with Kapha, but given the nature of the illness, it may quickly take on the appearance of Sannipatika.

In this clinical trial Administration of *Snehapana* as well as *Nasya* showed significant results in the management of *Ardhavbhedaka* (Migraine) independently but when both the groups are compared, the results were statistically significant only in three parameters i.e., Vomiting, vertigo and Associated symptoms.

Group A was found better than Group B in reducing Vomiting, Vertigo and other associated Symptoms parameter on the 21th day.

Both the groups were shown significant relief in reducing nausea parameter.

In Group A Aura was found insignificant (p value-0.065) when compared with Group B (p value-0.001*).

Average relief in Parameters of *Ardhavbhedaka* (Migraine) found more in *Nasya karma* (58.5%) than *Snehapana* (51.85%).

Probable mode of action of Brihat Dashamoola Taila

There are various modalities for the alleviation of Shirahshoola. Acharya Charaka mentioned "चतुःस्नेहोत्तमा मात्रा शिरःकायविरेचनम्" [14] as treatment modality of Ardhavabhedaka. Brihat Dashmoola Taila mentioned in Bhaishjya Ratnavali as Abhyanga, Pana and Nasya in Shirorogadhikara chapter with special indication to Ardhavabhedaka. In the present study Brihat Dashmoola Taila used as Snehapana and Nasya for treatment of Ardhavabhedaka.

Among the 10 Dravyas of Dashmoola 5 Dravyas (50%) have Vata-Kapha Shamak property, 4 Dravyas (40%) have Tridosaghna property and 1 Dravya (10%) has Vata-Pitta Shamak property. It means, in Dashmoola all Dravyas (100%) have Vata Shamak property and 9 Dravyas (90%) have Vata- Kapha Shamak property. Therefore, it will be a potent Vata Dosha Shamak, Vata-Kapha Shamak and Tridoshaghna compound. Thus, over all it pacifies Vata, Vata-kapha Dosha or Tridosha and Ardhavbhedaka being a Vata Pradhana Vyadhi (Vata- kapha-Ch. or Tridoshaja Su.), there is every possibility of Samprapti Vighatana of Ardhavbhedaka Roga.

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Ushna Virya, Katu Rasa and Tikta Rasa have Deepana-Pachana Karma, which causes Amapachana and thus provides proper metabolism and ultimately balances the Agni.

Ushna Virya has Deepana - Pachana, Virechana, Vilayana property, which softens and liquefies the morbid doshas which are ultimately expelled out due to Virechaka Karma. Laghu Guna and Tikshna Guna have Sroto-Shodhaka property, which helps in expelling the morbid doshas. These Guna also have the property of Urdhavabhaga-doshaharatva, which breaks the Samprapti at Prasaravastha, where Vata alone or Kapha along with Vata causes Urdhavaga Pravriti of vitiated Doshas.

Also in a clinical study, the effect of *Dashamoola* in the management of sensory and motor disorders pertaining to sympathetic and parasympathetic outflow amongst the patients presenting with primary neurological disorders.

CONCLUSION

The *Nasya Karma* is a better treatment option in the management of *Ardhavbhedaka* as compared to *Snehapana*. Although both the treatments are having statistically significant results.

REFERENCES

- Peter J. Goadsby, Neil H. Raskin- Headache, Harrison's Principles of Internal Medicine 18th edition Volume 1, Mc Graw Hill, page no.114
- 2. Ibid Chakrapani, Charak Samhita Sutrasthana 7/16. P.49.
- 3. Shastri KA. Shirorogavigyaniyaadhyaya 25/15. In: Sushruta Samhita of Maharshi Sushruta. Varanasi: Chaukhambha Sanskrit Sansthan; 2012. p. 166.
- Tripathi B. 23/7-8. In: Ashtanga Hridyayam of Srimadavaghbhata. Varanasi: Chaukhambha Sanskrit Pratishtana; 2003. p. 726.

 Shastri SN. Trimarmiyasiddhi 9/75-76. In: Charak Samhita of Agnivesha. Varanasi: Chaukhambha Bharti Academy; 2018. p. 1067

- Kaushik K. P. Shirorogaadhikar 729. In: Bhaishjya Ratnavali; p. 1024.
- Murthy KRS. Snehpana Vidhi 1/7. In: Sharangdar Samhita by Sharangadhara. Varanasi: Chaukhambha Orientalia; 2102. p.188.
- Murthy KRS. Nasyaa Vidhi 8/25 In: Sharangdar Samhita by Sharangadhara. Varanasi: Chaukhambha Orientalia; 2102. p.225.
- Shweta Mata, Vaghela D.B., Shivshankar Rajput et.al. "Comparative clinical study of ayurvedic treatment and conventional standard treatment in the management of Ardhavabhedaka (migraine)-a randomized controlled trial" World Journal of Pharmaceutical Research, 2020.
- Shastri SN. Trimarmiyasiddhi 9/75. In: Charak Samhita of Agnivesha. Varanasi: Chaukhambha Bharti Academy; 2018. p. 1067.
- Shastri KA. Vatavyadhi Nidana 01/34. In: Sushruta Samhita of Maharshi Sushruta. Varanasi: Chaukhambha Sanskrit Sansthan; 2018. p. 299.
- Shastri KA. Vatavyadhi Nidana 01/35. In: Sushruta Samhita of Maharshi Sushruta. Varanasi: Chaukhambha Sanskrit Sansthan; 2018. p. 299.
- 13. Shastri KA. Garbhavyakarna Sharir 04/55. In: Sushruta Samhita of Maharshi Sushruta. Varanasi: Chaukhambha Sanskrit Sansthan; 2018. p. 48
- Shastri SN. Trimarmiyasiddhi 9/77. In: Charak Samhita of Agnivesha. Varanasi: Chaukhambha Bharti Academy; 2018. p. 1067.

How to cite this article: Swati, Arun Gupta. A comparative evaluation on efficacy of Brihat Dashmoola Taila Snehapana and Brihat Dashmoola Taila Nasya in the management of Ardhavabhedaka (Migraine). J Ayurveda Integr Med Sci 2023;09:16-21. http://dx.doi.org/10.21760/jaims.8.9.3

Source of Support: Nil, **Conflict of Interest:** None declared.

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