

COMPARATIVE CLINICAL EVALUATION OF ŚAMANA YOGA AND ṢHADBINDU TAILA NASYA IN THE MANAGEMENT OF ARDHĀVABHEDAKA WITH SPECIAL REFERENCE TO MIGRAINE

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ABSTRACT

The life style of the people of modern era has changed due to rapid urbanization. Man's ambitious nature, luxurious life etc., made him busy all time, which gave rise to stress, strain, mental disturbances, and gastro-intestinal tract distress, causing increased incidence of acute and chronic disorders. Migraine is one of the chronic illnesses, which is widespread in the population with varying severity. Migraine, the second most common cause of headache, afflicts approximately 15% of women and 6% of men. A family history of migraine is present in 90% of sufferers. In India, 15-20% of people suffer from Migraine. *Ardhāvabhedaka* is one among *Śiro-roga* in which *Śirah śūla* is the main symptom. *Nasya karma* is more effective in *Jatrūrdhwagata rogās*. Therefore, *Nasya* has been selected as a treatment modality for the present study. Hence, the present topic is a "Comparative clinical evaluation of *Śamana yoga* And *Ṣhadbindu Taila Nasya* in the

management of *Ardhāvabhedaka* with special reference to Migraine". **Methods:** In the present study, 60 patients of *Ardhāvabhedaka* were selected and placed randomly in 3 groups, A, B and C with 20 patients in each group. Group A was treated with *Śamana cikitsa* with-

Tab. *Śirahśūlādi vajra ras*, *Pathyādi Kādhā*, Group B was treated with *Nasya Karma* with *Śhadbindu Tailam*, and Group-C was treated with combined treatment of Group-A and Group-B. **Results:** All the 3 groups showed statistically significant results. However, the effect of Group C was better than Group A and Group B in all the parameters. **Conclusion:** The results conclude that *Śamana cikitsa* with-Tab. *Śirahśūlādi vajra ras*, *Pathyādi Kādhā*, and *Nasya Karma* with *Śhadbindu Tailam* (Group-C) is observed as best for *Ardhāvabhedaka*, without causing any Adverse Drug Reactions and may prove itself as a strong solution to *Ardhāvabhedaka*.

KEYWORDS: *Ardhāvabhedaka*, Migraine, *Śhadbindu Tailam*, *Nasya Karma*.

INTRODUCTION

Being an eternal science, *Āyurveda* the science of life deals with Physical, Psychological as well as Spiritual wellbeing of an individual. It covers all the spheres of human life. *Āyurveda* Stresses on the need to maintain Personal, Social and Civic hygiene for the orderly upkeep of positive health. The observance of systematized daily routine, *Dinacarya*, life in accordance with the seasons, *Rtucarya* and well-planned schedules of diet and exercise help one maintains this.

Our lifestyle is drastically changed, and our growing needs have no end. Speed and accuracy are the prime demands of modern era. To cope with this situation, everybody must face hectic, competitive and stress full life. 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 incidence of lifestyle disorders in present Era many diseases mainly having psychosomatic origin. It is said fact that “A healthy mind resides in a healthy body.” The Brain, which controls all the voluntary and involuntary function of the body. Thus brain can be considered as supreme, important and major organ of the body.^[1]

Ācārya Vāgbhata considered Head end as *Mūla* of the human body and thus the diseases pertaining to *Śiras* should be treated as early as possible.^[2] *Ācārya Caraka* has considered *Śiras* as the supreme structure of the body which is known as the *Uttamāṅga*. The term *Śiro-roga* stands for a group of diseases related to the *Śiras* which present with the cardinal feature pain.^[3]

Ardhāvabhedaka is one among *Śiro-roga*. It is a type of headache, and it gains its name from the specific nature of pain i.e. *Ardha* means half of the *Śiras*, *Manyā*, *Bṛu*, *Śankha*, *Karna*, *Akṣi* and *Lalāta*. 'Avabhedaka' means pain like pierced by sharp objects like *Śastra* & *arani*. "Ardhāvabhedaka" means piercing type or breaking type of pain in half part of the head.^[4]

The causes of *Ardhāvabhedaka* are excessive intake of *Rūkṣa padārthās*, *Adhyaśana*, *Pūrvavātasevana*, *Atimāithuna* (excessive coitus), *Vegadhārana* (suppressing of natural urges), *Adhika śrama* (excessive work)^[5] in which pain is appreciable in one half of the *Śiras*, *Śankha*, *Bṛu*, *Manyā*, *Akṣi*, *Lalāta* and *Karna Pradeśa*.^[6] The attacks of *Ardhāvabhedaka* will be once in ten days, once in fifteen days and once in a month as per classics.^[7] Though *Vāta* and *Kapha* are the main *Dōṣās*^[8] involved in the pathogenesis of *Ardhāvabhēdaka*, it is also associated with *Pitta dōṣa*.

In parlance with Modern medical science, *Ardhāvabhedaka* can be correlated with Migraine, as both the disease showcases unilateral headache (*Ardha mastaka Vedana*). Migraine is a triad of paroxysmal headache, vomiting and focal neurological events. Patients with all three are said to have classical migraine. Those with just paroxysmal headache with or without vomiting and no focal neurological features are said to have common migraine. If the disease will be left untreated it may lead to blindness and deafness.

Despite advancements in contemporary modern medicine, no effective and safe remedy is available for Migraine, Hence, there is need to explore alternative methods of treatment in the management of Migraine. *Āyurveda* emphasizes different modalities in treating *Śiro-rogās* which includes both *Śamana* and *Śodhana*. *Śamana cikitsa* consists of conservative procedures like drug administration. *Pañcakarma* is a unique approach of *Āyurveda* specially designed with five procedures of purification through the nearest possible route. That includes *Vamana*, *Virecana*, *Nirūha vasti*, *Anuvāsana Basti*, and *Nasya*. Among these *Nasya* plays a key role as it is more effective in *Jatrūrdhwagata rogās*.^[9]

Therefore, *Nasya* has been selected as a treatment modality for the present study. In *Bhaiṣajya Ratnāvali* 65th chapter, *Śiro-roga Adhikāra*, *Ṣhadbindu taila* has been mentioned for *Nasya karma* (*Bhai. Ra. 65/81-83*) and *Śirahśūlādi vajra ras* has been mentioned for *śamana cikitsa* (*Bhai. Ra.65/55-59*), In *Śārangadhara Samhita Madhyama khanda*, *Dvītīya Adhyāya*, *Pathyādi kādha* has been mentioned for *Ardhāvabhedaka chikitsa* (*Śā.Sam 2/143-145*).

AIMS AND OBJECTIVES

1. To assess the efficacy of *Śamana yoga* with *Śirah sūlādi vajra ras* and *Pathyādi kādha* in *Ardhāvabhedaka*.
2. To assess the efficacy of *Śhadbindu taila Nasya* in *Ardhāvabhedaka*.
3. To compare the efficacy of *Śamana yoga* with *Śirah sūlādi vajra ras*, *Pathyādi kādha* And *Śhadbindu taila Nasya* in the management of *Ardhāvabhedaka*.

MATERIALS AND METHODS

SOURCE OF SAMPLE: Selection of 60 cases from OPD/IPD of department of Panchakarma of S. V. Ayurvedic hospital irrespective of sex, caste, religion. The patients were divided into 3 groups, A, B and C having 20 patients in each group.

ETHICAL CLEARANCE: Reg. IEC/SVAYC/PK/21/18

CRITERIA FOR SELECTION OF PATIENTS

Inclusion Criteria

- ✓ Patients with age group of 20-60 years are selected.
- ✓ Patients having clinical features of *Ardhāvabhēdaka*
- ✓ Patients having clinical features of Migraine.

Exclusion Criteria

- Age below 20years and more than 60years
- Pregnant and Lactating women
- Diabetes Mellitus
- Severe metabolic disorder and Severe Hypertension.
- Epilepsy and Malignancy
- Psychiatric disorder
- Space occupying lesion of brain
- Headache secondary to meningitis, tumor, encephalitis, spondylitis or any intra-cranial lesions and refractive errors etc.

INTERVENTIONS

Group A: Consists of 20 patients, Subjected to *Śamana cikitsa* for 30 days with-

- 1)Tab. *Śirahsūlādi vajra ras*(125mg) 1tid with Honey, after food
- 2)*Pathyādi Kādha* 10ml with 20ml Luke warm water, bid after food

Group B: Consists of 20 patients, Subjected to *Nasya Karma* with-

- *Shadbindu Tailam*, with *Shadbindu pramānam* (3ml) for 7days continuously, by giving 2days gap, then repeating this cycle for another 2times. Thus completing the treatment in 25 days.

Group C: Consists of 20 patients, Subjected to combined treatment of Group-A and Group-B.

Criteria for Assessment: Assessment was done three times i.e. initially before undergoing medical intervention (0th day), immediately after the completion of treatment (on 31st day) and follow up after completion of treatment (on 60th day).

i. Subjective parameters

Classical Āyurvēdic evaluation criteria is specially developed for *Ardhāvabhedaka* by grading the classical symptoms of *Ardhāvabhedaka* based on their severity. Symptoms Score ranges from 0 to 4 for each parameter.

1. Ardha pārsva Śirahśūla
2. Śankha śūla
3. Manyā, Bṛū, Akṣi, Lalāta, śūla
4. Śastra Araṇi Nibham Vēdana
5. Bhrama

ii. Objective parameters

1. Severity of Pain
2. Duration of Pain
3. Frequency of Attack
4. IHS Criteria (International Headache Society)
5. MSQ Scale (Migraine Specific Quality of Life Questionnaire)

Investigations

- Routine blood examination
- Routine and Microscopic examination of urine
- Liver Function Test before and after treatment
- Renal Function Test before and after treatment
- X-Ray skull carried out before treatment to exclude other conditions.

OBSERVATIONS AND RESULTS

General Observations

Age: Among the 60 patients included in the study, 11(18.3%) patients are between 21-30yrs age, 19(31.6%) patients are between 31-40yrs age, 19(31.6%) patients are between 41-50 years, and 11(18.3%) patients are between 51-60yrs age.

Gender: In the present study 11 (18.3%) patients are males and 49 (81.6%) patients are females.

Occupation: Among 60 patients Desk work holders are 20(33%), belongs to field work with intellectual are 8(13%), field work with physical labor are 12(20%), Housewives are having this disease about 20(33%).

Emotional stress: In the present study, 48(80%) Patients are having emotional stress, whereas 12(20%) patients are not having the stress.

Sleep: In the present study, *Alpa nidrā nāśa* patients are 20(33.3%), *Adhika nidrā nāśa* patients are 32(53.3%), and patients having *Prākṛta Nidra* are 8(13.3%)

Bowel habit: In the present study 6(10%) patients are having regular bowel habit, 23(38.3%) patients are having constipated bowel habit, 31(51.6%) patients are having irregular bowel habit.

ANOVA RESULTS- Comparison between groups and within groups

Table No. 1: Effect on Subjective Parameters.

		Sum of Squares	df	Mean Square	F	Sig.
APSS (Aft. Trt)	Between Groups	16564.815	2	8282.407	4.343	.018
	Within Groups	108708.333	57	1907.164		
	Total	125273.148	59			
APSS (Fol. Up)	Between Groups	8821.759	2	4410.880	18.107	.000
	Within Groups	13885.417	57	243.604		
	Total	22707.176	59			
SS (Aft. Trt)	Between Groups	14223.055	2	7111.528	5.621	.006
	Within Groups	70845.212	56	1265.093		
	Total	85068.267	58			
SS (Fol. Up)	Between Groups	8398.148	2	4199.074	17.616	.000
	Within Groups	13586.806	57	238.365		
	Total	21984.954	59			
MBALS (Aft. Trt)	Between Groups	7564.815	2	3782.407	2.372	.102
	Within Groups	90902.778	57	1594.786		
	Total	98467.593	59			
MBALS (Fol. Up)	Between Groups	9631.944	2	4815.972	21.684	.000
	Within Groups	12659.722	57	222.100		
	Total	22291.667	59			
SANV (Aft. Trt)	Between Groups	6509.259	2	3254.630	3.275	.045
	Within Groups	56638.889	57	993.665		
	Total	63148.148	59			
SANV (Fol. Up)	Between Groups	8120.370	2	4060.185	22.671	.000
	Within Groups	10208.333	57	179.094		
	Total	18328.704	59			
Bhrama (Aft. Trt)	Between Groups	51321.759	2	25660.880	22.238	.000
	Within Groups	65774.306	57	1153.935		
	Total	117096.065	59			
Bhrama (Fol. Up)	Between Groups	14715.278	2	7357.639	38.937	.000
	Within Groups	10770.833	57	188.962		
	Total	25486.111	59			

Table No. 2: Effect on Objective Parameters.

		Sum of Squares	df	Mean Square	F	Sig.
SOP (Aft. Trt)	Between Groups	20571.759	2	10285.880	4.903	.011
	Within Groups	119579.861	57	2097.892		
	Total	140151.620	59			
SOP (Fol. Up)	Between Groups	13085.648	2	6542.824	28.183	.000
	Within Groups	13232.639	57	232.152		
	Total	26318.287	59			
DOP (Aft. Trt)	Between Groups	26120.370	2	13060.185	7.042	.002
	Within Groups	105708.333	57	1854.532		
	Total	131828.704	59			
DOP (Fol. Up)	Between Groups	22793.981	2	11396.991	24.238	.000
	Within Groups	26802.083	57	470.212		
	Total	49596.065	59			
FOA (Aft. Trt)	Between Groups	5731.481	2	2865.741	1.786	.177
	Within Groups	91472.222	57	1604.776		
	Total	97203.704	59			
FOA (Fol. Up)	Between Groups	6361.111	2	3180.556	10.010	.000
	Within Groups	18111.111	57	317.739		
	Total	24472.222	59			
IHS (Aft. Trt)	Between Groups	9631.944	2	4815.972	4.750	.012
	Within Groups	57788.194	57	1013.828		
	Total	67420.139	59			
IHS (Fol. Up)	Between Groups	9437.500	2	4718.750	23.945	.000
	Within Groups	11232.639	57	197.064		
	Total	20670.139	59			
MSQ (Aft. Trt)	Between Groups	6513.186	2	3256.593	44.347	.000
	Within Groups	4185.728	57	73.434		
	Total	10698.914	59			
MSQ (Fol. Up)	Between Groups	7479.057	2	3739.528	201.321	.000
	Within Groups	1058.770	57	18.575		
	Total	8537.827	59			

Table No. 3: Showing Effect of Śamana yoga and Śhadbindu taila Nasya karma on Subjective and Objective Parameters Before treatment and on 31st day After Treatment.

PARAMETER	Group	Mean ± S.D		S.E	M.D	t Value	P Value	%
		BT	AT					
Subjective parameters								
1.Ardhapārswa Śirahśūla	A	3.40 ± 0.50	2.15 ± 0.67	1.25	0.34	6.66	0.0001	40.32%
	B	3.50 ± 0.51	1.85 ± 0.49	1.65	0.15	10.40	0.0001	47.14%
	C	3.65 ± 0.49	1.20 ± 0.41	2.45	0.14	17.15	0.0001	67.12%
2.Śankha śūla	A	3.40 ± 0.50	2.25±0.97	1.15	0.244	4.7208	0.0001	33.8%
	B	3.45±0.51	2.65±0.59	0.80	0.174	4.5987	0.0001	23.1%
	C	3.55±0.51	1.25±0.44	2.30	0.151	15.20	0.0001	64.7%
3.Manyā, Brū, Akṣi, Lalāta, śūla	A	3.50±0.51	2.30±0.47	1.20	0.15	7.712	0.0001	34.2%
	B	3.40±0.50	2.40±0.94	1.00	0.23	4.19	0.0002	26.94%
	C	3.70±0.47	1.10±0.31	2.60	0.12	20.69	0.0001	70%
4.Śastra Araṇi Nibham Vēdana	A	3.50±0.51	2.25±0.55	1.25	0.16	1.43	0.0001	35.7%
	B	3.40±0.50	2.15±0.37	1.25	0.13	8.98	0.0001	36.7%
	C	3.70±0.47	1.05±0.22	2.65	0.11	22.76	0.0001	71.6%
5.Bhrama	A	3.40±0.50	2.05±0.83	1.35	0.21	6.24	0.0001	39.7%
	B	3.50±0.51	2.25±0.44	1.25	0.15	8.23	0.0001	35.7%
	C	3.50±0.51	1.25±0.44	2.25	0.15	14.82	0.0001	64.2%
Objective parameters								
1.Severity of Pain	A	3.20±0.41	2.55±0.76	0.65	0.19	3.36	0.0017	20.3%
	B	3.40±0.50	2.10±0.91	1.30	0.23	5.58	0.0001	38.2%
	C	3.50±0.51	1.40±0.60	2.10	0.17	11.91	0.0001	60%
2.Duration of Pain	A	2.10±2.05	0.31±0.76	0.05	0.18	0.27	0.0001	85.2%

	B	2.50±0.83	1.70±0.66	0.80	0.23	3.38	0.0017	32%
	C	2.60±0.75	1.15±0.37	1.45	0.18	7.73	0.0001	55.7%
	A	3.15±0.59	2.10±0.64	1.05	0.19	5.40	0.0001	33.3%
3.Frequency of Attack	B	3.30±0.73	1.90±0.55	1.40	0.20	6.82	0.0001	42.4%
	C	3.00±0.86	1.16±0.31	1.90	0.20	9.31	0.0001	61.3%
	A	3.50±0.51	2.55±0.76	0.95	0.20	4.63	0.0001	27.1%
4.IHS Criteria	B	3.45±0.51	2.05±0.51	1.40	0.16	8.67	0.0001	40.5%
	C	3.40±0.50	1.25±0.44	2.15	0.15	14.33	0.0001	63.2%
	A	69.90±4.00	47.60±2.14	22.30	1.01	21.99	0.0001	31.9%
5.MSQ Scale	B	70.85±3.15	37.05±2.14	33.80	0.85	39.69	0.0001	47.7%
	C	73.05±3.72	33.80±2.33	39.25	0.98	39.98	0.0001	53.7%

Table No. 4: Showing the Effect of *Śamana yoga* and *Shadbindu taila Nasya karma* on Subjective & Objective Parameters Before treatment and on 60th day Follow up.

PARAMETER	Group	Mean ± S.D		S.E	M.D	t Value	P Value	Remarks
		BT	On 60 th day Follow up					
Subjective parameters								
1.Ardha pārswa Śirahśūla	A	3.40 ± 0.50	1.30±0.647	2.10	0.15	13.64	0.0001	61.7%
	B	3.50 ± 0.51	1.05 ± 0.51	2.45	0.16	15.14	0.0001	70%
	C	3.65 ± 0.49	0.35 ± 0.49	3.30	0.15	21.32	0.0001	90.4%
2.Śankha śūla	A	3.40±0.50	1.30±0.47	2.10	0.154	13.645	0.0001	61.7%
	B	3.45±0.51	1.15±0.49	2.30	0.158	15.54	0.0001	66.6%
	C	3.55±0.51	0.51±0.51	3.10	0.161	19.20	0.0001	85.6%
3.Manyā, Brū, Akṣi,Lalāta,śūla	A	3.50±0.51	1.30±0.47	2.20	0.15	14.13	0.0001	62%
	B	3.40±0.50	1.35±0.49	2.05	0.15	13.06	0.0001	60.2%
	C	3.70±0.47	0.40±0.50	3.30	0.15	21.44	0.0001	89.1%
4.Śastra Araṇi NibhamVēdana	A	3.50±0.51	1.15±0.37	2.35	0.14	16.67	0.0001	67.1%
	B	3.40±0.50	1.05±0.39	2.35	0.14	16.45	0.0001	69.1%
	C	3.70±0.47	0.30±0.47	3.40	0.14	22.86	0.0001	91.8%
5.Bhrama	A	3.40±0.50	1.30±0.47	2.10	0.15	13.64	0.0001	61.7%
	B	3.50±0.51	0.75±0.55	2.75	0.16	16.35	0.0001	78.5%
	C	3.50±0.51	0.05±0.22	3.45	0.12	27.57	0.0001	98.5%
Objective parameters								
1.Severity of Pain	A	3.20±0.41	1.40±0.50	1.80	0.14	12.40	0.0001	56.2%
	B	3.40±0.50	1.15±0.49	2.25	0.15	14.34	0.0001	66.1%
	C	3.50±0.51	0.30±0.47	3.20	0.15	20.56	0.0001	91.4%
2.Duration of Pain	A	2.10±1.15	0.31±0.37	0.95	0.10	8.87	0.0001	85%
	B	2.50±0.83	1.10±0.45	1.40	0.210	6.65	0.0001	56%
	C	2.60±0.75	0.30±0.47	2.30	0.19	11.57	0.0001	88.4%
3.Frequency of Attack	A	3.15±0.59	1.20±0.41	1.95	0.16	12.17	0.0001	61.9%
	B	3.30±0.73	1.05±0.39	2.25	0.18	12.09	0.0001	68.1%
	C	3.00±0.86	0.45±0.51	2.55	0.22	11.41	0.0001	85%
4.IHS Criteria	A	3.50±0.51	1.30±0.47	2.20	0.15	14.13	0.0001	62.8%
	B	3.45±0.51	1.10±0.45	2.35	0.15	15.48	0.0001	68.1%
	C	3.40±0.50	0.30±0.47	3.10	0.15	20.14	0.0001	91.1%

5.MSQ Scale	A	69.90±4.00	39.30±3.81	30.60	1.23	24.76	0.0001	43.7%
	B	70.85±3.15	32.40±2.46	38.45	0.89	43.03	0.0001	54.2%
	C	73.05±3.72	21.35±1.50	51.70	0.89	57.66	0.0001	70.7%

DISCUSSION

Discussion on observations

Age: Among the 60 patients included in the study, 11(18%) patients are between 21-30yrs age, 19(32%) patients are between 31-40yrs age, 19(32%) patients are between 41-50 years, and 11(18%) patients are between 51-60yrs age. Migraine is more common in 2nd and 3rd decades i.e., between 21-30yrs and 31-40yrs is noticed in this study.

Gender: In the present study 11 (18%) patients are males and 49 (82%) patients are females. Present study reveals maximum number of patients belonging to female sex. The present study is also revealing the known fact that incidence of Migraine is more among females than males.

Marital status: In the present study Married patients are 52(87%), Unmarried are 8(13%), Majority of the patients married as this condition is more common in the middle age group, the presence of *Ardhāvabhedaka* is more in the married people.

Habitat: Among 60 patients 35(58%) patients are from Urban area, and 25(42%) patients belongs to Rural area. With continuous exposure to triggers of Migraine either in the form of diet or environmental factors in urban locality shows majority of sufferers.

Occupation: Among 60 patients Housewives are having this disease about 20(33.3%) and in Desk work holders are 20(33.3%), Next comes who are belongs to Field work with intellectual are 8(13%), later who are having field work with physical labor are 12(20%). Incidence of Migraine is more among females after marriage hormonal fluctuations are more.

Family history: In the present study only 12(20%) patients are having family history of *Ardhāvabhedaka* (migraine) remaining 48(80%) are not having family history. One of the most important aspects of the pathophysiology of migraine is the inherited abnormality.

Emotional stress: 48(80%) Patients are having emotional stress, whereas 12(20%) patients are not having the stress.

Sleep: Maximum number of patients are *Adhika nidrā nāśa* patients are 32(53.3%), *Alpa nidrā nāśa* patients are 20(33.3%), and patients having *Prākṛta Nidra* are 8(13.3%). A disturbance in sleep patterns is also one of the triggering factors as it increases the level of stress hormones.

DISCUSSION ON SELECTION OF THE DRUG

Śīrah śūlādi vajra ras: *Śīrah śūlādi vajra ras* is a herbo-mineral formulation which contains *Kajjali, Lohabhasma, niśoṭha, Guggulu, Triphala, Kuṣṭha, Yaṣṭimadhu, Pippali, Śunthi, Gokṣura, Vidanga* and *Daśamūla*. Almost every ingredient are tridoṣahara and strengthen the nervous tissue, helps calming down the stress of nerve cells, improves the production of RBC, reduces inflammation and improves oxygen saturation which enhances the nerve functioning and helps to reduce the pain.

Pathyādi Kādha: *Pathyādi Kādha* is a decoction of *Harītaki, Āmalaki, Vibhītaki, Haridra, Nimba* and *Gudūci* has been described for the treatment of various types of headache. Best *pittaśāmaka Dravya* and it balances associated *kaphadoṣa* in *Ardhāvabhedaka*. *Dīpana, pācana* karma that helps to improve metabolism by the property of *Āmapācana*. *Sroto śodhaka* and *kleda śoṣaka*; eliminates morbid *Doṣās* accumulated in the body.

Śhadbindu Taila: The most of the ingredients of *Śhadbindu Taila* i.e., *Eraṇḍa, Tagara, Śatāhva, Jīvanti, Rāsna, Bhṛingā, Vidanga, Yaṣṭi, Śunthi, Saindhava Lavana* etc. have *Katu, Tikta rasa, Uṣṇa vīrya, Rūkṣa, Tīkṣṇa laghu guna & Doṣaghñata* is *Vāta kaphahara*, which inturn helps in relieving the symptoms of *Ardhāvabhedaka*.

DISCUSSION ON RESULTS

Ardha Pārśva Śīrah śūla: The Effect of Group - A, Group - B and Group - C on *Ardha Pārśva Śīrah śūla* is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Śankha śūla: The Effect of Group - A, Group - B and Group - C on *Śankha śūla* is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Manyā, Brū, Akṣi, Lalāta, śūla: The Effect of Group - A, Group - B and Group - C on *Manyā, Brū, Akṣi, Lalāta, śūla* is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Śastra Araṇi Nibham Vēdana: The Effect of Group - A, Group - B and Group - C on Śastra Araṇi Nibham Vēdana is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Bhrama: The Effect of Group - A, Group - B and Group - C on Bhrama is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Severity of Pain: The Effect of Group - A, Group - B and Group - C on Severity of Pain is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Duration of Pain: The Effect of Group - A, Group - B and Group - C on Duration of Pain is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

Frequency of Attack: The Effect of Group - A, Group - B and Group - C on Frequency of Attack is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

IHS Criteria: The Effect of Group - A, Group - B and Group - C on IHS Criteria is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

MSQ Scale: The Effect of Group - A, Group - B and Group - C on MSQ Scale is extremely significant ($P < 0.0001$) immediately after treatment (31st day) and on 60th day (follow up of treatment).

ANOVA Results-Effect on Subjective & Objective Parameters

In comparisons between groups after treatment for Subjective parameters, *Ardha pārswa Śirah śūla* (APSS), *Śankha śūla* (SS), *Manyā, Bṛū, Akṣi, Lalāta śūla* (MBALS), *Śastra Araṇi Nibham Vedana* (SANV), and *Bhrama*, all the F values are statistically significant when compared to F values of before treatment and are statistically highly significant after follow up.

In comparisons between groups after treatment for Objective parameters, Severity of pain (SOP), Duration of pain (DOP), Frequency of Attack (FOA), IHS criteria and MSQ scale, all the F values are statistically significant when compared to F values of before treatment and statistically highly significant after follow up.

Discussion on *Nasya karma*

According to Ācārya Caraka, Nāsā is the portal (gateway) of Śīras.^[10] The drug administered through nose as *Nasya* reaches to the brain and eliminates only the morbid Doṣās responsible for producing the disease. Ācārya Caraka, while explaining the indication for *Nasya* in *Siddhi stāna*, has emphasized that the *Nasya* drug usually acts through absorption by the Śṛṅghātaka marma. After absorption of the drug, it acts on the diseases of *Skanda*, *Amsa*, and *Grīva* and the *Doṣās* are expelled from the Śīrah pradēśa. Ācārya Suśṛta opines that the Śṛṅghātaka Marma is a *Sirāmarma*, situated at the site of the union of the Śīras, supplying to the nose, ear, eye, and tongue.^[11]

The procedure of *Nasya* includes *Pūrva Karma*, *Pradhāna Karma* and *Paścāt Karma*. The pre-operative procedures of *Nasya Karma* play's a major role in the access of the drug into the body. *Mukhābhyanga* causes *Mṛduta* of accumulated *Doṣās*. *Svedana* increases *Dravata* (liquefaction) of *Doṣās*. Lowering of head plays a major role in retaining the instilled medicine in the nose and thus increasing the contact time with mucosa. In *Paścāt Karma* of *Nasya*, *Mukhābhyanga*, *Svedana*, *Dhūmapāna* and *Kavalagraha* is advised.

CONCLUSION

Ardhāvabhēdaka, is a psycho-somatic disorder where the psychological factors like stress, plays an important role along with *Hētus* like *Ātapa Sēvana*, *Anaśana*, *Asātmyagandha Sēvana* in causing the *Vyādhi*.

All the Three Groups, *Group-A*, *Group-B* and *Group-C* have extremely significant ($P < 0.0001$) improvement on Subjective and Objective parameters of *Ardhāvabhēdaka*. When compared to *Śamana Yoga* (*Group-A*), and *Śhadbindu taila Nasya karma* (*Group-B*), Combined treatment of *Śamana Yoga* with *Śhadbindu taila Nasya karma* (*Group-C*) is having extremely significant improvement in subjective and objective parameters immediately after treatment on 31st day and on 60th day follow up after completion of treatment.

At the end by observing all the above results and statistical analysis, it can be concluded that *Śhadbindu taila Nasya* along with Tab. *Śīrah śūlādi vajra ras* and *Pathyādi kādha* showed high significant effect in the management of *Ardhāvabhēdaka*. The present study clearly concludes that there is a satisfying scope of suggesting these *Āyurvedic* procedures are safe and effective for *Ardhāvabhēdaka*.

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