

**A COMPARATIVE STUDY ON THE EFFICACY OF KUMKUMA NASYA AND GO-  
GHRITA NASYA IN THE MANAGEMENT OF ARDHAVABHEDAKA WITH SPECIAL  
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**ABSTRACT**

*Ardhavabhedaka* have predominance of *vata* and *vatakapahaja*, *Tridoshaja*, *vataja* according to *Acharya Charaka*,<sup>[1]</sup> *Acharya Sushruta*,<sup>[2]</sup> and *Acharya Vagbhata*<sup>[3]</sup> respectively. The causes of *ardhavabhedaka* are excessive intake of *rooksha padartha*, *Adhyashana*, *Purva-vata-sevana*, *Atimaitihuna*, *Vegadharana*, *Ativyayama*. Due to *nidana-sevana vata-dosha* get aggravated and pain is appreciable in *Manya*, *Bhru*, *Shankha*, *Karna*, *Akshi* and half of the *Shirah*.<sup>[4]</sup> The attacks of *ardhavabhedaka* repeat every 10days, 15days, 30days or suddenly as per classical texts.<sup>[5]</sup> As per modern view migraine is episodic headache. So, *ardhavabhedaka* can be correlated with migraine. *Nasya* is described as the best procedure in all *Urdhwajatrugata rogas*. In *Chakradatta*,<sup>[6]</sup> *Bhaishajyaratnavali*<sup>[7]</sup> had mentioned *Go-ghrita nasya* in the management of *ardhavabhedaka*. Also, in *Yogaratanakar*<sup>[8]</sup>, *Chakradatta*<sup>[9]</sup>, *Gadanigraha*<sup>[10]</sup> had described *Kumkuma ghrita nasya* in the management of *ardhavabhedaka*. 30 cases of migraine diagnosed based on International Headache Society Criteria were 15 patients were treated with *kumkuma nasya* and 15 patients were treated with *go-ghrita nasya*. The outcomes were assessed by standard scoring methods according to the symptoms of disease.

**KEYWORDS:** *Ardhavabhedaka*, Migraine, *Kumkuma Nasya*, *Go-ghrita Nasya*.**INTRODUCTION**

Almost all *acharyas* have mentioned *Ardhavabhedaka* in *Shiroroga*. *Ardhavabhedaka* term derived from its specific nature of pain. Literally the word *ardhavabhedaka* means severe tearing, pricking, churning types of pain get precipitated in half of the head. According to *Acharya Sushruta* if episode is repeated every 10days, 15days or sometimes suddenly so it should be diagnosed as *ardhavabhedaka*. It has influence of all three *doshas*. According to modern, migraine is episodic unilateral headache. So, *ardhavabhedaka* can be correlated with migraine. Predominance of *dosha* in *ardhavabhedaka*:

*Acharya Charaka - Kevala vataja & Vatakapahaja**Acharya Sushruta – Tridoshaja**Ashtanga Hridaya - Vataja*

“Migraine” refers as a syndrome of vascular spasms of the cranial blood vessels with the symptoms of Nausea, Vomiting, Vertigo, Photophobia, Phonophobia, Tinnitus and intense pain predominating on one side of the head.<sup>[11]</sup>

*Acharya* have mentioned prime importance to *nasya karma* in the management of *shiroroga* as an ideal therapy. In *Chakradatta* and *Yogaratanakara* have described *Kumkuma nasya* in the management of *ardhavabhedaka*, where as in *Bhaishajyaratnavali nasya* with *Go-ghrita* in the management of *ardhavabhedaka* is mentioned.

**AIM AND OBJECTIVES**

- **Aim:** To compare the efficacy of *kumkuma nasya* and *go-ghrita nasya* in the management of *ardhavabhedaka*.
- **Objectives:**
  1. To study the efficacy of *kumkuma nasya* in the management of *ardhavabhedaka*.
  2. To study the efficacy of *go-ghrita nasya* in the management of *ardhavabhedaka*.
  3. To compare the efficacy of *kumkuma nasya* and *go-ghrita nasya* in the management of *ardhavabhedaka*.
  4. To assess the disease according to etiological factors as pre *Ayurvedic* and modern literature.

## MATERIAL AND METHODS

### ➤ Sample source

1. Patient with *lakshanas* of *ardhavabhedaka* (migraine) was selected irrespective of their gender and religions.
2. Patient was selected randomly from OPD and IPD of Parul Ayurved hospital, Parul sevashram hospital, Limda, Waghodia, Vadodara, Gujarat.
3. Patient was selected in medical camps organized by college and hospital authorities.

### ➤ Drug source

1. *Kumkuma ghrita* was prepared as per need during procedure as mentioned in *Chakradatta*.<sup>[12]</sup>

For *Kumkuma ghrita* drug proportion

*Kumkuma-2rati* (250mg)

*Sharkara-2rati* (250mg)

*Go-ghrita-1/2 tola* (6gm)

2. Authenticated and standardize *go-ghrita* was collected from the market and use for the *nasya*.

### ➤ Preparation of Kumkuma Nasya

250mg of *Kumkuma ghrita* + 250mg of *Khanda sharkara* made into a fine powder



6gm of lukewarm *ghrita* is slowly poured in to powder



Well triturate until it gets mixed well



***Kumkuma ghrita***

### ➤ Method of collection of data

1. **Study design:** Comparative clinical study
  2. **Sample size:** 30 patients irrespective of their gender fulfilling the inclusion criteria was randomly selected and divided into 2 groups.
  3. **Grouping:**
    - **Group-A:** In these group 15 patients was treated with *kumkuma nasya*.
- Drug: *Kumkuma Nasya*  
Dose: 8 drop each nostril.  
Time: Morning
- **Group-B:** In these group 15 patients was treated with *go-ghrita nasya*.

Drug: *Go-ghrita Nasya*

Dose: 8 drop each nostril.

Time: Morning

### 4. Study duration: 27days

- Group-A: 3 Sitting *Nasya* for 7days with the gap of 3days.
- Group-B: 3 Sitting *Nasya* for 7days with the gap of 3days.
- Follow up: 2 follow ups with the gap of 7days.

### 5. Inclusion criteria

- Patients with "*Lakshanas*" of *ardhavabhedaka*.
- Patients between the age group of 16-60yrs of age.
- Patients who are fit for "*nasya karma*".

### 6. Exclusion criteria

- Patient less than 16yrs and those above 60yrs.
- Patients of *ardhavabhedaka* who are under other treatment modalities.
- Patients suffering from COPD, Hypertension, or other systemic disease.
- Patients suffering from other secondary types of headache like in brain tumors, meningitis, cervical-spondylitis, encephalitis, referred pain, refractive errors and glaucoma.
- Patients who are contraindicated for "*nasya karma*".

### Criteria for Assessment

Assessment of the patients was done on the basis of subjective parameters. For this purpose, the standard scoring methods was adopted according to the symptoms of disease. The details of scoring are as follows:

### Subjective Parameters:<sup>[13]</sup>

- "*Ardhe tu Murdha*" (Unilateral headache)
- *Prakasha-asahishnuta* (Photophobia)
- *Bhrama* (Vertigo)
- *Sabda-asahishnuta* (Phonophobia)
- *Hrillasa* (Nausea)
- *Chardi* (Vomiting)
- Tinnitus

### Assessment Criteria for Severity, Frequency, Duration and Associated Symptoms of Migraine Headache:

Sr.No.	Symptoms	Grading
<b>SEVERITY OF HEADACHE</b>		
1	Intolerable pain	4
2	Disturbing the routine work	3
3	Not disturbing the routine work	2
4	Tolerable Pain	1
5	No pain	0
<b>FREQUENCY OF HEADACHE</b>		
1	Continuous / daily	4
2	Once in 1-10 days	3
3	Once in 11-20 days	2
4	Once in 21-30 days	1
5	No attack	0

DURATION OF HEADACHE		
1	Over 24 hours or continuous	4
2	13 – 24 hours	3
3	4 – 12 hours	2
4	1min.- 3 hours	1
5	No pain	0
ASSOCIATED SYMPTOMS		
1	Nausea	Absent/Present
2	Vomiting	Absent/Present
3	Photophobia	Absent/Present
4	Vertigo	Absent/Present
5	Tinnitus	Absent/Present
6	Phonophobia	Absent/Present
7	Confusional state	Absent/Present
8	Aura	Absent/Present

## OBSERVATION AND RESULTS

### Effect of Kumkuma Nasya in the management of *Ardhavabhedaka*.

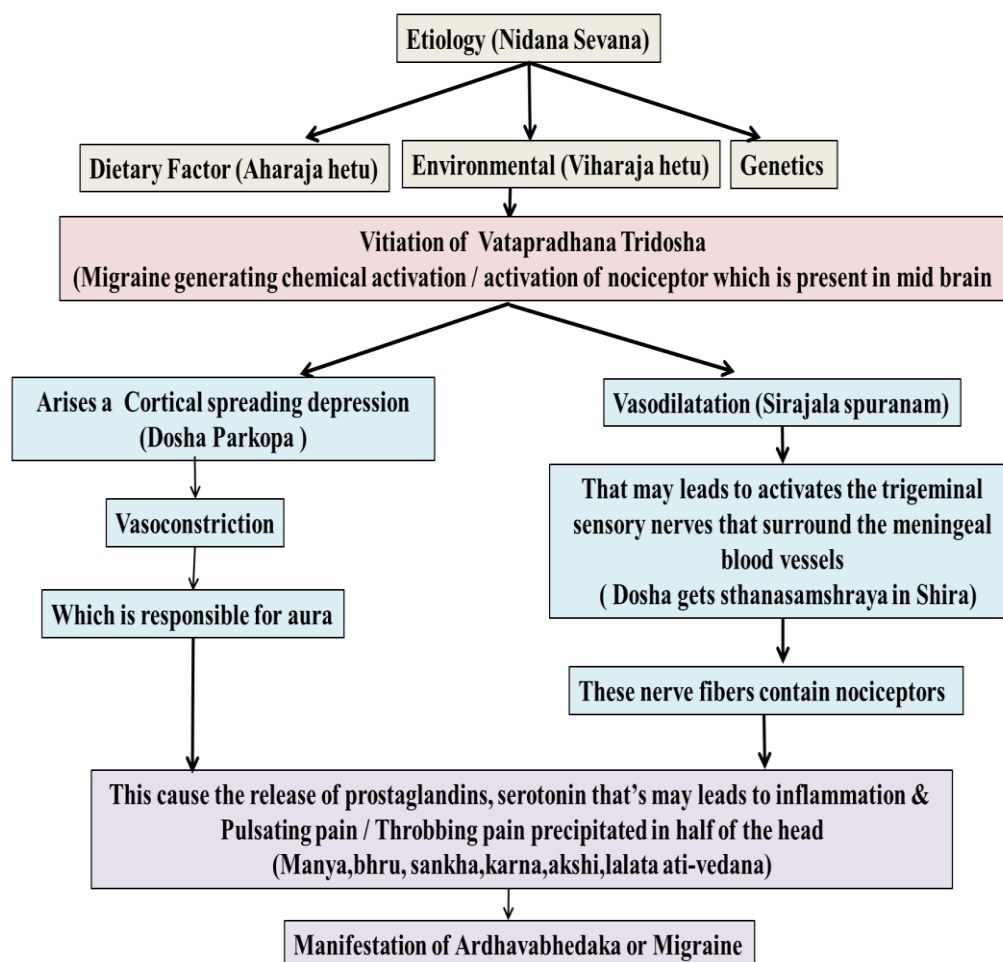
Symptoms	Mean Rank		(d)	% of difference	SD	SE	't' value	P value	Remarks
	BT	AT							
Duration of Headache	2.47	0.93	1.53	61.94%	0.915	0.236	6.487	<0.001	HS
Frequency of Headache	2.53	0.87	1.67	66.00%	0.488	0.126	13.22	<0.001	HS
Severity of Headache	3.07	1.07	2.00	65.14%	0.756	0.195	10.24	<0.001	HS
Nausea	1.00	0.47	0.53	53%	0.516	0.133	4.000	<0.01	S
Vomiting	0.53	0.07	0.47	88.67%	0.516	0.133	3.500	<0.01	S
Photophobia	1.00	0.47	0.53	53%	0.516	0.133	4.000	<0.01	S
Vertigo	0.60	0.00	0.60	100%	0.507	0.131	4.583	<0.001	HS
Tinnitus	0.27	0.13	0.13	48.14%	0.352	0.091	1.468	>0.05	NS
Phonophobia	0.67	0.20	0.47	70.14%	0.516	0.133	3.500	<0.01	S
Confusional State	0.27	0.07	0.20	74.07%	0.414	0.107	1.871	>0.05	NS

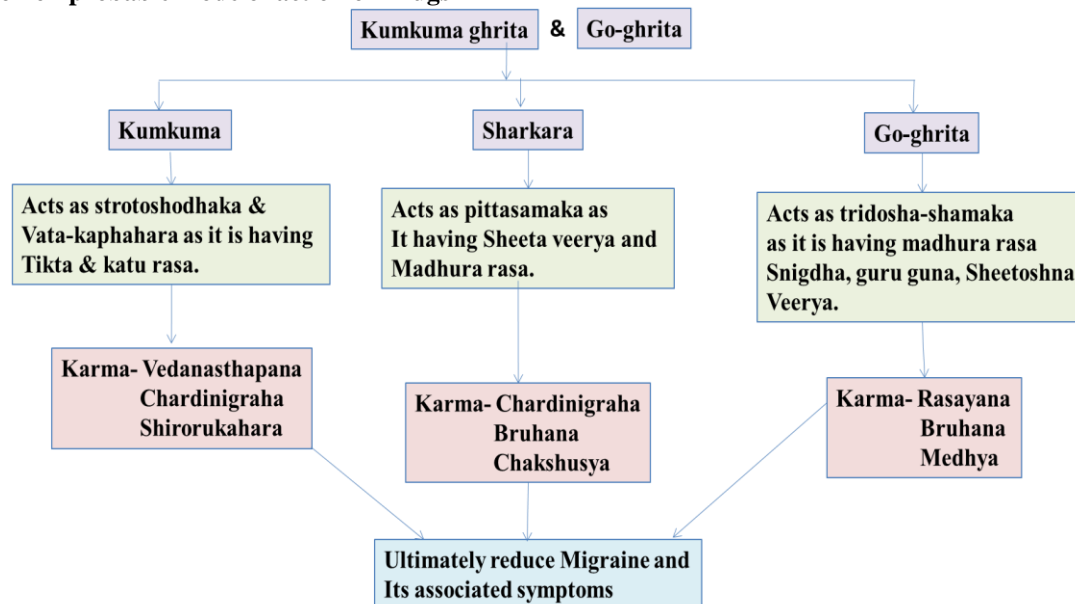
### Effect of Go-ghrita Nasya in the management of *Ardhavabhedaka*.

Symptoms	Mean Rank		(d)	% of difference	SD	SE	't' value	P value	Remarks
	BT	AT							
Duration of Headache	2.47	1.87	0.60	24.29%	0.737	0.190	3.154	<0.01	S
Frequency of Headache	2.47	1.67	0.80	32.38%	0.676	0.175	4.583	<0.001	HS
Severity of Headache	3.20	1.87	1.33	41.56%	0.816	0.211	6.325	<0.001	HS
Nausea	1.00	0.80	0.20	20%	0.414	0.107	1.871	>0.05	NS
Vomiting	0.40	0.20	0.20	50%	0.414	0.107	1.871	>0.05	NS
Photophobia	1.00	0.60	0.40	40%	0.507	0.131	3.055	<0.01	S
Vertigo	0.47	0.27	0.20	42.55%	0.414	0.107	2.256	<0.05	S
Tinnitus	0.20	0.13	0.07	35%	0.258	0.067	1.000	>0.05	NS
Phonophobia	0.87	0.53	0.33	37.93%	0.488	0.126	2.646	<0.05	S
Confusional State	0.13	0.07	0.07	53.84%	0.258	0.067	1.000	>0.05	NS

**Comparison between *Kumkuma Nasya* (Group-A) and *Go-ghrita Nasya* (Group-B).**

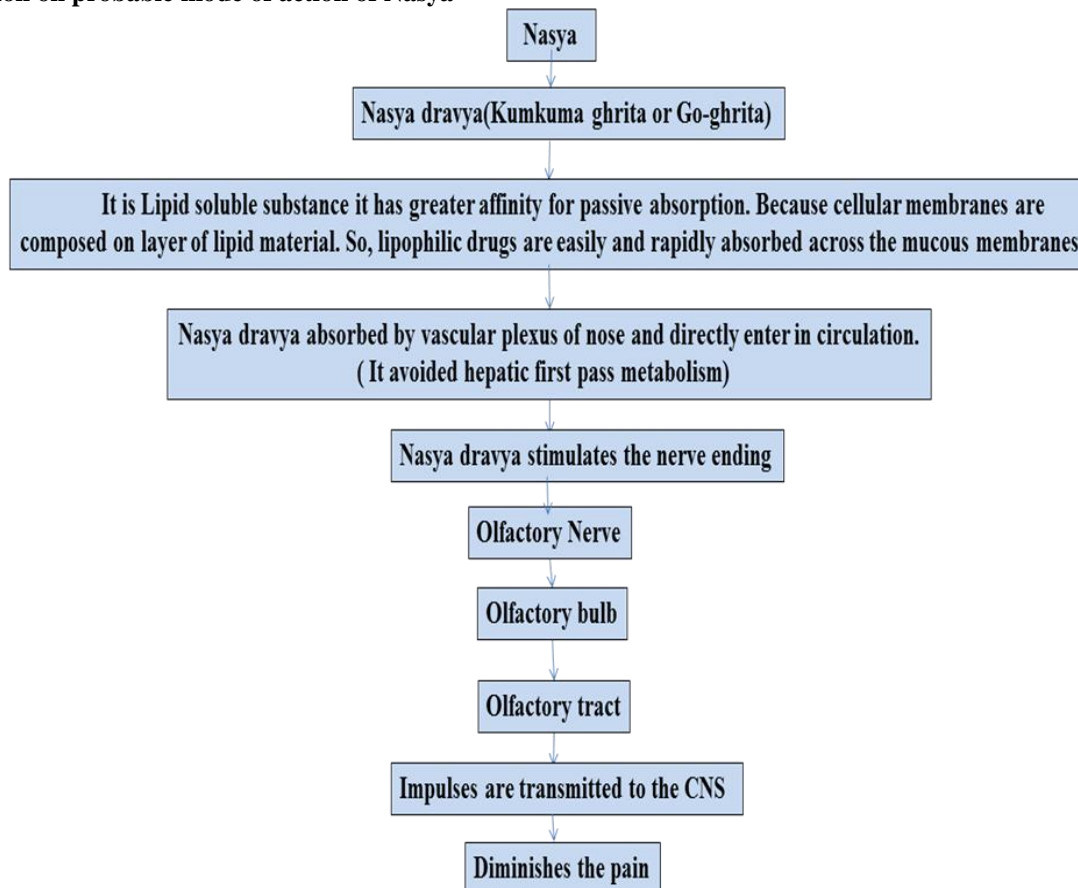
Symptoms	Group	Mean	%	Mean df	SE	T-value	P-value	Remarks
Duration of Headache	Group-A	1.53	61.94%	0.933	0.303	3.076	<0.05	S
	Group-B	0.60	24.29%					
Frequency of Headache	Group-A	1.67	66.00%	0.867	0.215	4.026	<0.001	HS
	Group-B	0.80	32.38%					
Severity of Headache	Group-A	2.00	65.14%	0.667	0.287	2.320	<0.05	S
	Group-B	1.33	41.56%					
Nausea	Group-A	0.53	53%	0.333	0.171	1.950	<0.05	S
	Group-B	0.20	20%					
Vomiting	Group-A	0.47	88.67%	0.267	0.171	1.560	>0.05	NS
	Group-B	0.20	50%					
Photophobia	Group-A	0.53	53%	0.133	0.187	0.714	>0.05	NS
	Group-B	0.40	40%					
Vertigo	Group-A	0.60	100%	0.400	0.169	2.366	<0.05	S
	Group-B	0.20	42.55%					
Tinnitus	Group-A	0.13	48.14%	0.067	0.133	0.592	>0.05	NS
	Group-B	0.07	35%					
Phonophobia	Group-A	0.47	70.14%	0.133	0.183	0.727	>0.05	NS
	Group-B	0.33	37.93%					
Confusional state	Group-A	0.20	74.07%	0.133	0.126	1.058	>0.05	NS
	Group-B	0.07	53.84%					

**DISCUSSION****Discussion on Samprapti of Ardhavabhedaka and Etiopathogenesis of Migraine**

**Discussion on probable mode of action of Drugs**

Kumkuma ghrithayoga nasya had best effect on ardhavbheadaka due to its tridoshanashaka property. Kumkuma ghrithayoga have property such as srotoshodhana which helps to remove the obstruction in channels which occur during the ardhavabhedaka. Kumkuma ghrithayoga also have property of vedana sthapana which helps to reduce the pain occur during the

episode of migraine. Kumkuma ghrithayoga had property of bhruhana which gives poshana to the dhatu. Kumkuma ghrithayoga had property of chardinigraha which helps to reduce the nausea, vomiting, abdominal discomfort. And it is having medhya and rasayana property which helps to reduce the confusional state, tinnitus, vertigo.

**Discussion on probable mode of action of Nasya**

**CONCLUSION**

- Etiological factors, Symptoms and etiopathogenesis are almost similar in *Ayurveda* and modern science.
- *Nidana parivarjana* is played an important role in the management of *Ardhavabhedaka*.
- Both the groups are showed good response for Duration of headache, Frequency of headache, Severity of headache, Photophobia, Vertigo and Phonophobia.
- Group- A showed good response for Nausea and Vomiting but Group-B showed poor response for Nausea and Vomiting.
- In both groups no result were observed in Tinnitus and Confusional state.
- According to statistical study, ALTERNATIVE HYPOTHESIS is accepted with percentage difference of 30.26% it can be concluded that the effect of *kumkuma nasya* is better than *go-ghrita nasya* in the management of *ardhavabhedaka*.

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