



## Management of Ardhavabhedaka (Migraine) through Ayurveda-A case report.

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### ABSTRACT

Migraine is one of the diseases where cause is exactly not known. It can be defined as benign, recurring syndrome of headache, nausea, vomiting and other symptoms of neurological dysfunctions in varying admixtures. In case of cerebral pain Migraine is the second most common reason afflicts around 15% of women and 6% of men. Majority of the people affecting in their prime age in 20-50yrs. It is affecting their personal and social life also hampering their health. Patients often self-diagnose and self-medicate resulting in inadequate treatment. Modern therapies such as Analgesics, Muscle relaxants, Steroids, physiotherapies are not fulfilling the patient's goal of healthy life. Ardhavabhedaka can be scientifically correlated with Migraine due to its cardinal feature "half sided headache" and also due to its paroxysmal nature. The present case study has been made to assess the effect of Shirashooladibajra Rasa, Pathyadi Kwatha, Vacha churna Pradhamanya Nasya and Shadbindu Taila Nasya in the management of Migraine.

**KEY WORDS** Ardhavabhedak, Nasya, Shiraroga

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### INTRODUCTION

In Ayurvedic text, almost all the Acharya have referenced Ardhavabhedaka in Shiro-roga, Acharya Sushruta has mentioned 11 types of Shiro-roga in Uttara tantra [1]. Among all one of them is Ardhavabhedaka in which paroxysmal unilateral headache associated with vertigo and pain related with vertigo [2]. This can be associated with Migraine. As indicated by Acharya Sushruta, it is a tridoshaja disease and according to Charak it is vataja or vata-kaphaja.

Ardhavabhedaka can be scientifically correlated with Migraine due to its cardinal feature "half sided headache" which is also explained by commentator Chakrapani as "Ardhamastaka Vedana" (Charak Su.7/16) and also due to its paroxysmal nature. All the three doshas are involved in the pathogenesis of the Ardhavabhedaka with the predominance of vata or vata-kaha. The disease may not be fatal but if not managed properly then it may damage eye sight or hearing.

The vascular theory of the brain suggests that pain appears to be related to the desensitization of peripheral perivascular nerve terminals and possibly a consequence of distended meningeal blood vessels leading to activation and sensitization of the central trigeminal system [3]. The prevalence of migraine cases recorded in India is approximately 16-20% of the population [4].

Migraine is recognized by the W.H.O as one of the diseases where cause is not exactly known. Migraine, the second most common reason for cerebral pain, afflicts around 15% of women and 6% of men with the disease afflicting the majority of the people in their prime age i.e., from second decade to fifth decade [5]. It is affecting their professional and social life, hampering their health. A useful definition of migraine is a benign and recurrent syndrome of headache, nausea, vomiting and other sign and symptoms of neurological dysfunctions in various admixtures. Migraine can often be recognized by its activators like

stress (psychological as well as physical), lack of sleep, worries, menses, Estrogen etc. and by its deactivators like sleep relaxation, meditation, pregnancy, exhilaration sumatriptan medication.

Coming to the management, other symptoms of medicine have lots and lots of limitations. The authentic text books of modern medicines clearly state that there is no proper standardized treatment for migraine. The acute condition of migraine, minimum percentages of patients of this category are able to consult a physician.

But chronic stage of migraine is more prevalent and difficult to treat. The various treatments such as identification of triggers, meditation, relaxation, training, psychotherapy etc. and pharmacotherapy as abortive and preventive therapy. Aspirin, Paracetamol, Ibuprofen, Diclofenac etc. are non-specific abortive therapy, where as Ergot, 5-HT receptor agonists are specific abortive therapy[6].

*Ayurveda* emphasizes various treatment modalities for *Ardhavabhedaka* which includes both *shaman* and *shodhana* chikitsa to be effective in the management of *Ardhavabhedaka*. To assess the efficacy of *Ayurvedic* formulations in the management of Migraine.

### CASE REPORT

A 23 years old female patient visited OPD of Parul Ayurveda Hospital, Parul University, Vadodra with a known case of 2 years history of Migraine. She presented with chief complaints of moderate to severe headache followed by nausea almost vomiting associated with photophobia, dizziness, Vertigo. The pain was often on the right side of head, frontal region occurring once every 15-20 days. She had no any past history of Diabetes mellitus, anemia, hypertension, thyrodism or any major illness or surgery. There is no significant family history of illness. She was treated with allopathic medications for migraine but had recurrence results. On general examinations her blood pressures was 110/70 mm of Hg. Pulse rate was 74/min and weight 58 kg.

### HISTORY OF PRESENT COMPLAINTS

Patient was asymptomatic before 2 years. Gradually patient found severe headache followed by nausea almost vomiting associated with photophobia, dizziness, vertigo. So she came to OPD of *Shalakyta tantra department*, Parul Ayurveda Hospital Limda, Vadodra for treatment of Migraine.

### HISTORY OF PAST ILLNESS

No history of anemia, HT, DM & Thyroidism.

### FAMILY HISTORY

No any family history found.

### GENERAL EXAMINATIONS

Temperature-	A febrile
Pulse Rate	- 74/min
Respiratory Rate-	18/min
Blood Pressure-	110/70 mm of Hg
Height-	157cm
Weight-	58 Kg

### CLINICAL EXAMINATIONS

EAR EXAMINATIONS	RIGHT EAR	LEFT EAR
EAC	NAD	NAD
TM	INTACT	INTACT

NOSE -NAD

PNS-Maxillary sinus tenderness

### EYE EXAMINATIONS

	R.E	L.E
Eye lids-	NAD	NAD
Cornea-	Clear	Clear
Conjunctiva-	NAD	NAD
Sclera -	NAD	NAD
Pupil-	RRR	RRR
Lens-	Transparent	Transparent
AC-	Deep	Deep

### EXAMINATIONS

1. Duration of headache- migraine since 2 years
2. Frequency of attacks- once 15-20 days
3. Severity of headache- moderate to severe
4. Duration of each attack- 6-12 hrs attack
5. Site- Right sided -Hemi cranial

6. Location- character - changing
7. Nature of pain- Severe
8. Associated symptoms- photophobia, phonophobia
9. Nausea/ vomiting/ dizziness/ vertigo
10. Autonomic( lacrimation)
11. Quality- pulsatile & heaviness
12. Rhythm of disease- continuous
13. Daily course of disease- morning
14. Seasonal course- annual
15. Onset of the disease- Acute
16. Aggravation by- Neck movement and sneezing
17. Treatment history- analgesic oral pills
18. Trigger factors- lifestyle factors- fatigue, unrefreshing, sleep, stress, physical exertion, environmental bright lights, noise, strong odours of Agarbatis.

#### INVESTIGATIONS

✚	HB	13.6 gm%
✚	TLC	7800 cumm
✚	DLC	58
	Lymphocytes	36
	Monocytes	03
	Basophil	00
	Eosinophil	03
✚	ESR	11 mm/hr
✚	RBS	108 mg/dl

#### INSTRUMENTATION

##### Severity of Headache

0 = No Headache.

1 = Mild Headache, patient is aware only if he/ she pays attention to it.

2 = Moderate Headache, can ignore at times.

3 = Severe Headache, can't ignore but hr/she can do his/her usual activities.

4 = Excruciating headache, can't do anything.

##### Frequency of headache (Assessed in term of frequency in days)

0 = Nil

1 =  $\geq 20$  days

2 = 15 days

3 = 10 days

4 =  $\leq 5$  days

##### Duration of headache (Assessed in term of hours/day)

0 = Nil

1 = 1-3 hours/day

2 = 3-6 hours/day

3 = 6-12 hours/day

4 = more than 12 hours/day

##### Nausea

0 = Nil

1 = Occasionally

2 = Moderate, however does not disturb the routine work

3 = Severe, disturbing routine work

4 = Severe enough, small amount of fluid regurgitating from mouth

##### Vomiting

0 = Nil

1 = Only if headache does not subside

2 = Vomiting 1-2 times

3 = Vomiting 2-3 times

4 = Forced to take medicine to stop vomiting

##### Vertigo

0 = Nil

1 = Feeling at giddiness

2 = Patient feels as if everything is revolving

3 = Revolving signs + Black outs

4 = Unconscious

#### Aura

0 = Nil

1 = Last for 5 minutes

2 = Last for 15 minutes

3 = Last for 30 minutes

4 = Last for 60 minutes

#### Gradation for Associated Symptoms

0 = No symptoms

1 = Mild (can do his/her work)

2 = Moderate (forced to stop work)

3 = Severe (forced to take rest)

4 = Excruciating (forced to take medicine)

#### TREATMENT SCHEDULE

FOLLOW UP DAYS	PRESCRIPTION
DAY-1	1) <i>Pradhamana nasya</i> with <i>Vacha churna</i> for 3 days 2) <i>Shadbindu taila nasya</i> -6 drops in both nostrils once in a morning for-7 days 3) <i>Shirashooladi Vajra rasa</i> -1 tab TDS with warm water(A/F) for 15days 4) <i>Pathyadi kwath</i> -20ml BD with guda (B/F) for 15 days
DAY-16	1) <i>Shirashooladi Vajra rasa</i> -1 tab TDS with warm water(A/F) for 15days 2) <i>Pathyadi kwath</i> -20ml BD with guda (B/F) for 15 days
DAY-31	1) <i>Nasya</i> with <i>Shadbindu taila</i> for 7 days
DAY-45	Follow up 1) <i>Shirashooladi Vajra rasa</i> -SOS

#### RESULTS

Before and after completion of 45 days treatment clinical assessments were made from the integrated and gradation of scoring pattern. There was a drastic change in the parameters as –

Sign and symptom	B.T	1 <sup>st</sup> week	2 <sup>nd</sup> week	3 <sup>rd</sup> week	4 <sup>th</sup> week	5 <sup>th</sup> week	6 <sup>th</sup> week
Severity of headache	3	3	2	2	1	1	1
Frequency of Headache	3	3	2	2	1	1	1
Duration of Headache	3	3	2	2	1	0	0
Vomiting	2	2	2	1	1	0	0
Nausea	3	3	3	2	2	1	1
Vertigo	3	3	2	2	1	1	1
Aura	3	3	2	2	1	0	0
Associated symptoms	2	1	1	1	1	0	0

#### DISCUSSION

Migraine may be clinically correlated with *Ardhavabhedaka* which is explained in *shiro roga* (disease of Head) in *Ayurveda*. The etiological factors like *ruksha ahara sevan*, swimming, awaking at night, excessive day sleeping, excessive alcohol consumption.

Maximum *nidanas* shows the predominance of *vata dosha*. *Vata* gets provoked by addiction to dry articles or excess to diet or eating on a loaded stomach. The quantity of food to be taken depends upon the power of digestion (*Ch.Su.-5/3*), even light food article, it taken in excessive quantity can produce *agnimandya* (*Ch.Su.-5/7*) resulting in *ama rasa* formation which obstructs the channels and aggravates all the three doshas.

#### PROBABLE MODE OF ACTION OF DRUG

***Shirashooladibajra Rasa*** [7] It is very good medicine for *headache*, severe *headache*, migrane, tension *headache*, vascular headache. Effect on *Tridosha* –balances *vata*, *pitta* and *kapha*.

***Pathyadi Kwath*** [8] It is a decoction of *Haritaki*, *Bibhitaki*, *Amalaki*, *Haridra*, *Neem* and *Guduchi* has been described for the various types of headache. *Triphala* corrects our digestion and assimilation process also normalizes the gut. *Haridra* and *Neem* both acts as an antibiotic and prevent unwanted production of inflammatory chemical mediators. *Guduchi* acts as an antioxidant and free radical scavengers.

***Vacha churna pradhamana nasya***[9]

*Vacha* has *vatakahar* property and help to clear the channel by extracting the accumulated kapha.

**Shadbindu taila nasya**[10]

*Sadbindu taila* was instilled into the nostrils and was expected to strengthen the vital functions of the sense organs by its unique mode of action through *sringataka marma*. *Sthaniya khabaigunya* (localization of diseases) the special *kriya kalpa* produce help to open the *vatahava srotas* and lightened the head.

## CONCLUSION

The present case study signifies the effective role of *Ayurvedic* medicine in the treatment of Migraine. *Ayurveda* believes *shodhana* (cleaning) and *samana* (pacifying) therapy to neutralize the *tridoshas* from the roots of the disease which brings healing the body and mind. In this case study of *Shirashooladi vajra Rasa*, *Pathyadi Kwatha* as given orally as *samana* therapy and *Shadindu taila* and *Vacha churna pradhamana* given as *Nasya* for *shodhana* purpose.

## REFERENCES

1. Acharya Yadavji Trikamji, N.M. Acharya, editor. (2014). *Susruta Samhita with Nibandhsangraha Commentary of Dalhana Acharya*, Uttarasthana. 3rd Edition, Ch 25, Verse 15, Varanasi; Chaukhambha Surbharati Prakashan; ChUtt 25/14 P 654.
2. Acharya Yadavji Trikamji, N.M. Acharya, editor. (2014). *Susruta Samhita with Nibandhsangraha Commentary of Dalhana Acharya*, Uttarasthana. 3rd Edition, Ch 25, Verse 15, Varanasi; Chaukhambha Surbharati Prakashan; ChUtt 25/15, P 655.
3. G. Kulkarni, G. Rao, G. Gururaj, DK Subbakrishna, T. Steiner and LJ Stovner.(2014). The prevalence and burden of migraine in India: Results of a Population-Based study in the Karnataka state, *J. Headache Pain*, v.15 (Suppl 1); 100-105
4. Mark W. Green, John C.M. (2008). *Burst, Current Diagnosis and Treatment, Neurology, Headache and Facial Pain*, International Edition, McGraw Hill Publications, Singapore, p.no. 65.
5. Stovner L et al. (2007). The global burden of headache: a documentation of headache prevalence and disability worldwide. *Cephalalgia*. 2007; 27: 193 – 210. [Link]
6. Puledda F, Shields K. Non-Pharmacological Approaches for Migraine. *Neurotherapeutics*. 2018 Apr;15(2):336-345. [Pubmed | Full Text | DOI].
7. *Shirashooladi vajra rasa-* Shri Govind Das,Bhaisajya ratnavali,2019 edition,Chaukhamba prakashak,2019-Shirorogadhikara-140-144
8. *Pathyadikwatha – Dr. Shrivastava S., Sharangadhar Samhita*, 3 rd edition 2003, ChaukhambhaOrientalia, Varanasi, MadhyamKhand, KwathKalpana.
9. *Vacha churna nasya-*By Kaviraj Ambikadutta shastri ,Shushruta Samhita,Chaukhamba sansthana,Varanasi,2016,Uttara tantra,chapter-26,sloka-32,page no179.
10. *Shadbindu Taila-* Shri Govind Das,Bhaisajya ratnavali,2019 edition,Chaukhamba prakashak,2019-Shirorogadhikara-49-51

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