



Role of *Kumkumadi Ghrita* and *Pathyashadangam kashaya* in management of *Ardhavabhedaka* (Migraine) - A Case study

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ABSTRACT

Migraine can be defined as a paroxysmal affection having a sudden onset accompanied by usually unilateral severe headache. Migraine is the third most common disease in the world with an estimated global prevalence of 14.7% (around 1 in 7 people) – according WHO. It involves brain, eye and autonomous nervous system. Usually, it characterized by pain involving either half of the head, nausea, vomiting and other symptoms of neurological dysfunctions in varying. According to International headache society, Migraine constitutes 16% of the primary headache and affects about 10-20% of the general population. It is caused by the activation of a mechanism deep in the brain that leads to release of pain-producing inflammatory substances around the nerves and blood vessels of the head. In Ayurveda migraine is correlated with *Ardhavabhedak*. Most affects those aged between 25 to 45 years. It is more common in women, usually by a factor of about 2:1, because of hormonal influences. In the pathogenesis of the *Ardhavabhedaka* all the three doshas are involved with the predominance of *Vata* or *Vatakapha*. The disease may not be fatal but if not managed properly then it may damage eyesight or hearing. In Ayurveda various treatment modalities for *Ardhavabhedaka* which includes both *shamana*, *shodhana*. *Nasya*, *asthapana* and *anuvasanabasti*. . *Nasya Karma* is considered as the best therapeutic intervention in *Shiro Roga* by Acharya Charaka *Kumkumdi Ghrita* is mentioned by Acharya Vagbhata in context of *Shiroroga chikitsa*. *Pathyashadangam kashaya* is mentioned in *Sharangdher samhita* with special indication to *Ardhavabhedaka*. The present article is a case report of 32 years old female who visit with a known case of migraine since 3 years. The patient was treated with Ayurvedic managements: both *sodhana* and *shamana chikitsa*, The patient experienced no attack of migraine even within 2 months of interval. This helps to achieve complete curative and prophylactic management. By adopting the holistic approach with both internal and external treatment modalities an attempt is made to bring about satisfactory results

Keywords : Migraine, *Ardhavabhedak*, Hormonal, *Nasya*, *Shiroroga*.

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INTRODUCTION

Migraine is an illness of long duration. It can occur at all ages of people but commonly begins before the age of 30 in 60%. Its prevalence is highest from the ages of 30 to 55 years. Prevalence and incidence of Migraine increases until approximately age of 40 after which it decreases [1, 2].

The World Health Organization has identified migraine among the world's top 20 leading causes of disability [3]. In female migraine is estimated to account for 2.0% years of life lost due to disability. Migraine also sufferers have a higher chance of having depression, anxiety, sleep disorders, other pain conditions and fatigue [4]. It has a multi factorial background such as genetic, environmental, metabolic, hormonal and pharmacological. These factors trigger the attacks of migraine vary between patients [5].

It is highly prevalent headache disorder over the past decade having considerable impact on the individual and society. It can involve brain, eye and autonomous nervous system. Migraines are believed to be a neurovascular disorder with evidence supporting its mechanisms starting within the brain and then spreading to the blood vessels. The neurotransmitter serotonin (5-hydroxytryptamine) and hormone estrogen play vital role in pain sensitivity of Migraine [6]. Low levels of Serotonin selectively constrict cranial blood vessels and also induces a massive activation of peripheral nerve endings which play a key role in triggering migraine headache.

According to Acharya Charaka pathologically it is *Vataja* or *Vata kaphaja* [7] and according to Acharya Sushruta. It is a *Tridoshaja* disease [8]. If one half of head develops severe tearing and pricking pain,

giddiness and piercing suddenly after a fortnight or 10 days so should be diagnosed as *Ardhavabhedaka*. To evaluate the effect of Ayurvedic treatment in the management of Migraine.

CASE REPORT

A 37 year old female patient visited to hospital opd on 02/01/2023 of Parul institute of Ayurveda, with chief complaints of unilateral headache on and off once and sometimes twice in a month since 3 years. Headache was followed by nausea and sometimes vomiting, too. Headache was alternating means sometime in right side and sometime in left side. With this she has got recurrent mood swing, unsatisfactory awakening and disturbed sleep. The body weight was 58 kg. Occupationally, she was a software engineer. No significant family history and personal history identified. She consulted many allopathic physicians but got symptomatic relief only. For above said complaints he was admitted here on the same day for further management. There was no history of diabetes mellitus or hypertension. Her vitals were within normal limits. On general examination, there was no pallor, icterus, clubbing of nails, oedema or lymphadenopathy noted. No CNS abnormalities noted on through examination. General examination listed in Table 1.

Table 1- General Examination

B.P	P/R	R/R	Temp.	Built	Height	Weight	BMI
120/80mm of Hg	78/min	14/m	98.4 F	Obese	1.66m	58kg	28.44kg/m ²

Routine investigation were carried out before treatment. The values are listed in Table 2

Table 2- Investigation carried out

Investigations	Results
Hb	11.4gm%
TLC	7800Cumm
DLC	N-56,L-24,E-13,M-04,B-0(with in normal limits)
ESR	26mm/hr (wester green)
FBS	92mg/dl
Urine routine	No any deformity
CT brain	No Intracranial abnormality found

Method of administration of Nasya

Sthaniik Abhayanga (local massage) with Bala Taila and Ushna Sveda (fomentation) of scalp, forehead, face, and neck were performed [9]. After Purvakarma, the patient was made to lie down in supine position with head low and legs slightly raised [10]. Then Luke worm *Kumkumadi Ghrita* was instilled 8 drops. slowly in either of nostrils. At that time other nostril was pinched. Advised to patient to sniff instilled drug once, followed by slow breathing. With other nostril same procedure was repeated. After this procedure, the patient was advised to remain in supine position for a minute¹¹.

Table 3 - Treatment protocol followed in the patient

Drug	Dose	Duration	Time	Route	Form
Pathyashadangam Kashaya	40 ml	2 month	Empty stomach in morning and evening	Orally	Kwath

Table 4- (Observation and Result Chart)

Chief Complains	0 day	15 days	30 days	45 days	60 days
<i>Shirah Shoola</i> (Headache)	Persist for 5 times in a week	4 times in a week continuous	3 times in a week but not continuous	2 times in a week. It was intermittent	Not a single episode
<i>Hrillas</i> (Nausea)	Happen every time with episode	Happen 2 times with episode	Not happened	Not happened	Not happened
<i>Chhardi</i> (Vomiting)	Every time during episode	2 time with episode	Not occurred	Not occurred	Not occurred
<i>Bhrama</i> (Vertigo)	One time during episode	One time during episode	Not occurred	Not occurred	Not occurred
<i>Purvabhasa</i> (Aura-Visual/Auditory)	Every time before episode	Every time before episode	Sometime before episode	Not occurred	Not occurred

RESULT

After 7 days of *Kumkumadi Ghrita Nasya* and 15 days of *Pathyashadangam Kashya* improvement was observed in almost all clinical features, which are summarized in above Table 4. Intensity of headache was reduced and duration and frequency of pain was also decreased considerably. There were also improvement in other associate symptoms.

Table 5 – Ingredient of drug

No.	Sanskrit Name	Latin/ English name	Part used	Ratio	Rasa	Guna	Veerya	Vipaka
1	Haritki	<i>Terminalia chebula Retz.</i>	Fruit pericarps	1 part	Kashaya	Ruksha	Ushna	Madhur
2	Vibhitki	<i>Terminalia bellirica Roxb.</i>	Fruit pericarps	1 part	Kashaya	Ruksha	Ushna	Madhur
3	Amalki	<i>Emblica officinalis Gaertn.</i>	Fruit pericarps	1 part	Amala	Ruksha	Sheeta	Amala
4	Haridra	<i>Curcuma longa Linn.</i>	Rhizome	1 part	Tikta	Ruksha	Ushna	Katu
5	Bhunimba	<i>Andrographis paniculata.</i>	Aerial part	1 part	Tikta	Ruksha	Ushna	Katu
6	Nimba	<i>Azadirachata indica A.Juss.</i>	Stem bark	1 part	Tikta	Laghu	Sheeta	Katu
7	Guduchi	<i>Tinospora cardifolia</i>	Stem	1 part	Tikta	Guru	Ushna	Madhur

Table 6 – Ingredient of Kumkumadi Ghrita

1	Kumkum	<i>Crocus sativa Linn.</i>	Stigma	1 part	Katu	Snigdha	Ushna	Katu
2	Ghrita			100 part				
3	Sharkara			10 part				

DISCUSSION

Nasa is considered as therapeutic gate way of head . So when medicated ghrita administered through *Nasya karma* can pacify the *Tridosha* mainly *Vata dosha* in diseases of head. By using medicated ghrita *Vata dosha* is Soothe by its *snehana* guna & *pitta* by its sheeta veerya . In *Kumkumadi ghrita* ,*Kumkum* is chief ingredient acts as *srotoshodhaka* , as it is having katu rasa and Ushna guna [12]. Tikta rasa having properties like *kledan- shoshana* & *shleshma- prashamana* which helps in out the morbid Dosha [13]. Ghrita & sharkara are other ingredients which are having sheeta veerya so pacifying pitta Dosha which is responsible for vomiting , nausea & photophobia .

In Ayurveda samhita Acharya also have mentioned that medicated ghee has tridosha shamana property [14]. Nasa being the doorway to Shira , the drug administered through the nostrils reaches *Sringaataka* , a Sira marma by Nasa Srota and spreads in the Murdha (brain), taking routes of Netra(eyes), Shrotra(ears), Kantha(throat) Sira and Mukha, gathering the morbid Dosha in *Urdwajatru* and then extracting from the *Uttamanga*¹⁵ .Thus Systemically performed *kumkumadi ghrita Nasya karma* provide relief in *Ardhavabhedaka* due to its *Tridosha shamaka* property because nasa is nearest root to alleviate the disease of head ¹⁶.

According to *Sharangdhar Samhita Pathyashadangam Kashya* is used for

पथ्याक्षधात्री भूनिम्बैर्निशानिम्बामृतायुतैः ॥
 कृतः क्वाथः षडङ्गोऽयं सगुडः शीर्षशूलहृत् ।
 भूशङ्खकर्णशूलानि तथार्धशिरसो रुजम् ॥
 सूर्यावर्तं शङ्खकं च दन्तपातं च तद्रुजम् ।
 नक्तान्ध्यं पटलं शुक्रं चक्षुःपीडां व्यपोहति ॥

Sh.Sa 2/143-145\

Pathyashadangam Kashya has *Pathya* and other 6 ingredients. All these drugs have taken equal quantity (show Table no 5). Haritki, Vibhitki and Amalki help in Kapha and pitta balancing and also in Vatanulomna . So Generally Triphala advised for almost all diseases of head and eyes.

Etanolic extract of (Bhunimb) *Andrographis paniculata* seems to act through mechanism that may be related to direct or indirect inhibition of pro-inflammatory responses in specific brain areas involved in Migraine pain transmission [17]. In some studies pretreatment with curcumin decreased the nociception in rats [18]. So, it shows curcumin as prophylaxis.

Amalki and Guduchi have Dipan property so they will normalize Ama. As well as Ama get decreased, it may subside Ajirna (Indigestion). Like Nimba, Bhunimb and Guduchi decrease aggravated Pitta. Very useful in Migraine with gastric symptoms. As Haridra, Guduchi and Nimba possessing *Raktaprasadaka* (blood purifier) property that may normalize vitiated *Rakta Dhātu* (oxygen carrying capacity of blood). It is reported that most of the drugs of *Pathyashadangam Kashya* also possess Analgesic, Anti-inflammatory and a nervine tonic property which might have helped to reduce pain.

CONCLUSION

It is concluded that Kumkumadi Ghrita Nasya and Pathyashadangam Kashya both are effective in alleviating symptoms of Ardhavabhedaka (Migraine) by virtue of its Tridosha Shamaka Guna. thus, systemically performed Nasya Karma cures almost diseases of Urdhvajatrugata Rogas [19]. A classic Ayurvedic poly herbal formulation Pathyashadangma Kashaya is used for treatment of Cluster headache, Earache, Migraine, Night blindness and Upper respiratory diseases. This Kashaya has ingredients having Vata shamaka and Ushna veerya property which can be beneficial in Ardhavabhedaka as it has dominancy of vitiation of Vata Kapha dosha. Tikta rasa and Ushna veerya of ingredients subside Kapha dosha. Like Madhur vipaka and Ushna veerya pacify Vata dosha. Clinically study show that Kumkumadi Ghrita Nasya and Pathyashadangam Kashaya are effective in the management of Ardhavabhedaka (Migraine). Further research work as pain management should be done on large sample size.

REFERENCES

1. Abu-Arefeh I, Russell G. (1994). Prevalence of headache and migraine in schoolchildren. *BMJ*; 309(6957):765- 9
2. Bigal ME, Liberman JN, Lipton R B, et al. (2006). Age dependent prevalence and clinical features of migraine. *Neurology*; 67(2):246-51.
3. Leonardi M, Steiner TJ, Scher AT, Lipton R B.(2005). The global burden of migraine: measuring disability in headache disorders with WHO's Classification of Functioning, Disability and Health (ICF). *J Headache Pain.* ;6(6):429-40. Epub 2005 Dec 15.
4. <http://migraineresearchfoundation.org/aboutmigraine/migraine-facts>.
5. WHO. (2011). Atlas of headache disorders and resources in the world 2011.
6. Bartleson JD, Cutrer FM (2010). "Migraine update. Diagnosis and treatment". *Minn Med.* 93 (5): 36- 41. PMID 20572569
7. Acharya Yadavji Trikamaji, ed. Charak Samhita of Agnivesha with Ayurveda Dipika commentary of Chakrapanidatta, Siddhithana. Ch. 9, Ver.75, Reprint edition. Varanasi:Chaukhambha Prakashan;2011.
8. Acharya Jadavaji Trikamaji, N M Acharya, editor. Sushruta Samhita of Sushruta with Nibandhsangraha Commentry of Dalhana Acharya, Uttartantra. 3rd ed., Ch.25, Ver.15-16. Varanasi: Chaukhambha Surbharati Prakashan; 2014.
9. Acharya Yadavji Trikamaji, N M Acharya, editor. Sushruta Samhita of Sushruta with Nibandhsangraha Commentary of Dalhana Acharya, Chikitsa Sthana. 3rded., Ch.40, Ver.25 Varanasi: Chaukhambha SurbharatiPrakashan; 2014. p-555
10. Acharya Yadavji Trikamaji, editor. Charak Samhita of Agnivesha with Ayurveda Dipika commentary of Chakrapanidatta, Siddhi Sthana. Ch. 09, Ver.99, Reprint edition. Varanasi: Chaukhambha Prakashan;2011. pp.723
11. Paradkar HS, editor. Astanga Hridaya of Vagbhatta with Sarvangasundra commentary of Arunadatta & Ayurvedarasayana of Hemadri, Sutrasthana. Ch.20, Ver.22, 6th
12. G S Pandey, editor. Bhavaprakash Nighantu of Sri. Bhavmishra, 2nd ed.,Ch.2, Ver.78. Varanasi: chaukhambha Bharati Academy, 2010.pp.222.
13. Acharya Yadavji Trikamaji, editor. Charak Samhita of Agnivesha with Ayurveda Dipika commentary of Chakrapanidatta
14. Acharya Yadavji Trikamaji, editor. Charak Samhita of Agnivesha with Ayurveda Dipika commentary of Chakrapanidatta, Nidana Sthana. Ch. 01, Ver.39, Reprint edition. Varanasi: Chaukhambha Prakashan; 2011. p.203
15. Paradkar HS, editor. Astanga Hridaya of Vagbhatta with Sarvangasundra commentary of Arunadatta & Ayurvedarasayana of Hemadri, Sutrasthana. Ch.13, Ver.30, 6th ed., Varansi: Chaukhambha Surbharati Prakashan; 2014. p.217.
16. Greco, Rosaria, et al. (2016). "Andrographis Paniculata shows anti-nociceptive effects in an animal model of sensory hypersensitivity associated with migraine." *Functional neurology* 31(1), 53.
17. Bulboacă, Adriana E., et al. (2017). "Preemptive analgesic and antioxidative effect of curcumin for experimental migraine." *BioMed research international* 2017.
18. Paradkar HS, editor. Astanga Hridaya of Vagbhatta with Sarvangasundra commentary of Arunadatta & Ayurvedarasayana of Hemadri, Sutrasthana. Ch.20, Ver.1, 6thed., Varansi: Chaukhambha SurbharatiPrakashan; 2014. pp.287.

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