

Role of Some *Ayurvedic* Modalities in the Management of *Ardhavabhedaka* W.S.R to Migraine: A Single Case Study

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Abstract

The Ancient Medical Science Ayurveda has dealt with several systemic/organic diseases where sira roga is one of the important problems among them. The sira roga is such a condition where the disorder/discomfort are experienced over the head and specific sign & Symptoms of this problem are mostly due to structural and functional abnormalities of neural, vascular muscular and skeletal dysfunction of the head. Ardhavabhedaka is such an ailment described by our Ayurvedic Acharyas where bursting/breaking type of pain in one half of head occurs. Though the vitiation of dosas (humours) vata and Kapha are mostly liable for causation of Ardhavabhedaka, yet Maharshi Sushruta has opined all the three dosas (humour) Vata, Pitta and Kapha are actually responsible for the genesis of the said ailment. Though Ardhavabhedaka is literally similar to the sense of Hemicrania of modern science yet practically, the sign & symptoms of Ardhavabhedaka are closely similar to the features of Migraine of modern sciences. As in Present Scenario Global migraine prevalence is about 14 to 15% and among those population affected female are 15% and male around 6% so naturally it is a great personal as well as social problem to our human civilization and where to face the challenge to protect the suffering humanity. The actual remedy of migraine is not found so much satisfactory in modern science and the frequent use of anti-inflammatory analgesics drugs become liable for causation of several adverse effects over the Patients. Therefore, a Safe and effective treatment protocol is very much needed for maintenance of quality of life of the sufferers. Ayurveda has contributed a lot of therapeutic measures to treat such type of sira roga. In present study, A 40 years old female patient, who was was declared as a patient of migraine by the Bangur Institute of Neurosciences and she was treated for a long time with Allopathic medicines, lastly after being frustrated she attended our hospital I.P.G.A.E & R at S.V.S.P for the solution from Avurveda. The patient was treated with laghu sutshekhar rasa 250 mg twice daily orally before meal along with the administration of Dasamoola kwath per nasally for 2 months and showed satisfactory relieving effect without having recurrent attack and adverse effect also. So here the case report is being submitted with diligence to inform and encourage the same to the the Scholars and practitioners of Ayurveda.

Keywords: Ardhavabhedaka, sira roga, migraine, hemicrania

Introduction

Ardhavabhedaka is one of the ailments among sira roga mentioned in various Ayurvedic classics. Acharva Charaka (1000BC) describe five types of sira roga viz. vataja, pittaja, kaphaja, sannipataja, krimija in Sutra sthana [1] and four additional types of siraroga was also explained i.e Shankhaka, Ardhavabhedaka, Suryavarta and Anantavata, which are mentioned in Siddhisthana of Caraka Samhita^[2]. Acharva Sushruta While (500 BC) explained Ardhavabhedaka among 11 types of sira roga but as per Vaghhatta (4th century AD) it comes under vataja Sira shula. The word Ardhavabhedaka has three components viz. Ardha means half side, Ava suggests bad prognosis and bhedaka denotes breaking through or perforating type of pain. The actual meaning of Ardhavabhedaka is breaking or bursting type of pain in one half of the head which is also explained by the commentator Chakrapani as "Ardha Mastak Vedana." [3]

This disease occur due to various faulty life styles ie *Adhyashana* (Intake of food before digestion of prior meals), *Atyashana* (consumption of food in excessive quantity), *Ruksha bhojana* (Consumption of food having Ruksha guna), Ayasa (fatigue), *Purva vata & Avashyaya* (exposure to easterly wind as well as fog), *Vegasandharan* (suppression of natural urges), *Vyayama* (excessive exercise) ^[4]. *Acharya Charaka* opined vata and kapha after being vitiated either alone or in combination reside in half side of the head and produces acute pain in the region of *Manya* (side of neck), *Bhru* (eyebrow), *Sankha* (temporal region of head), *Karna* (ear), *Akshi* (eye) and *Lalata* (frontal part of the head). The pain is piercing in nature or cutting by a sharp object like *Shastra* (weapons) and *Arani* (heated instruments)^[4].

According to Acharya Sushruta Ardhavabhedaka is tridoshaja vyadhi characterized by severe splitting, pricking or churning type of pain in half of the head associated with

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Bhrama (vertigo) and appears in the interval of either fifteen days, ten days or can appear suddenly any time ^[5]. Acharya vagbhatta beleives that Ardhavabhedaka occurs due to vitiated vata dosha and his Statement regarding Ardhavabhedaka as "Ardhe tumoordhanah Sa ardhavabhedaka" means pain limited to half Portion of the head. Acharya Vagbhatta also emphasized on its paraoxymal nature of pain which recurs either every *Paksha* (fortnightly) or Masa (month). The headache subsides by its own accord^[6]. Ardhavabhedaka can be clinically corelate with migraine due to its cardinal feature "half sided headache". Migraine is a usually episodic headache disorder that is typically unilateral moderate to severe, associated with nausea and vomiting and accompanied by Photophobia (sensitivity to light) or Phonophobia (sensitivity to sound or movement). The headache occus any time and persist from 4 to 72 hours^[7]. Migraine, affects mainly between the ages of 25 and 55 years. It can often be recognized by various activators or triggers including stress, hunger, mental strain, fatigue or excess physical exertion, temperature changes or weather changes, frequent travel, hormonal fluctuation during menses, lack of or excess sleep or other chemical stimulation ^[8].

According to W.H.O the exact cause of migraine is unknown, but migraine is believed to be neurovascular disorder with evidence supporting its mechanism starting within the brain and then spreading to the blood vessel. Prolonged tension or emotion causes Vasospasm of cerebral artery which produces ischemia of portions of brain which interns responsible for prodromal symptoms ^[9].

Material and Method

Material: The details of the drug along with doses are shown in the following table

Table 1: Treatment protocol followed in the patient

S. No.	Drugs	Doses	Time of administration	Route of administration
1.	Laghu Sutashekhara Rasa ^[10]	500 mg BD A.C	Before meals with Luke warm water	Orally
2.	Dashamoola Kwath Nasya ^[11]	6 drops daily in each nostril for seven days in a manner of every alternate week into four such	At morning	Per nasal

Sanskrit Name	anskrit Name Latin/English Name Rasa		Guna	Virya	Vipak	Dosha Karma
1. Gairik	Oxide of iron (Fe ₂ O ₃)	Madhura Kasaya	Snigdha Vishada	Shita	Madhura	Pitta-kapha hara
2. Sunthi Zingiber officinale Roxb. Katu		Laghu Snigdha	Ushna	Madhura	Kapha-vata hara	
3. Nagvalli	Piper betle Linn.	Katu, tikta, kasaya	Laghu, Tikshna, Vishada	Ushna	Katu	Vata-kapha hara

Table 3: Ingredients of Dasahamoola^[13]

Sr. No Sanskrita Name		Latin Name		
1.	Bilva	Aegle marmelos		
2.	Shyonaka	Oroxylum indicum		
3.	Gambhari	Gmelina arborea		
4.	Agnimantha	Clerodendrum phlomidis		
5.	Patala	Sterospermum suaveolens		
6.	Brihati	Solanum indicum		
7.	Kantakari	Solanum xanthocarpum		
8.	Gokshura	Tribulus terrestris		
9.	Shalaparni	Desmodium gangeticum		
10.	Prishniparni	Uraria picta		

Table 4: Action of Dasamoola [13]

Rasa	Guna	Virya	Vipaka	Dosha karma
Kasaya, Madhura	Guru, Ruksha	Ushna	Katu	Vata kapha Shamaka

Method

Centre of Study: *Kayachikitsa* O.P.D of Institute of Post Graduate Ayurvedic Education and Research at S.V.S.P **Type of Study:** Simple random single case study

Case Report: A female patient of 40-year age visited I.P.G.A.E&R at S.V.S.P hospital on 30/04/2022 OPD no-32795 with chief complaints of unilateral episodic headache for 5 years mostly in temporal side with the interval of 15 days to 1 month which becomes severe at night. Associated complaints were nausea, vomiting, vertigo and burning sensation in upper abdomen. Once the pain starts, she feels irritation and stressed out.

H/O Present Illness: The patient had the history of suffering for more than five years and pain get aggravated by tension, hunger, exposure to sunlight, noisy surrounding and crowd. She was under allopathic treatment (T. vasograin-twice a day after food along with other supportive drugs) but within few months the efficacy of those medicines has decreased then she has attend our OPD.

Past History: No relevant past history of any other disease. **Family History:** No positive family history was found.

Personal History:

Appetite: Moderate Bowel: Regular

Clinical Examination

Pulse: 76/min Blood Pressure: 124/82 mm of Hg Respiration Rate: 24/min Body Weight: 65 kgs **Investigation:** Routine hematological investigation within normal limit.

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CT scan brain: Normal study

Diagnosis: It was already diagnosed case of Migraine from Bangur Institute of Neurosciences and on the basis of sign and symptoms it was correlated with Ardhavabhedaka.

Plan of Treatment:

- i). *Laghu Sutashekhara rasa* was given in the dose of 250 mg twice a day before meal with luke warm water for 60 days.
- ii). *Dashamoola Kwatha* was given per nasally in the dose of 6 drops in each nostril for seven consecutive days in a manner of every alternate week for four such in a duration of 8 weeks (2 month).

Table 5: Observation and Result:

Chief complaints	0 day	15 days	30 days	45 days	60 days
	1. Sira s	sula (headache)			
i. frequency of headache	+++	++	+	nil	nil
ii. Intensity of headache	+++	+	+	nil	nil
2.Bhrama (Vertigo)	++	nil	nil	nil	nil
3. Chhardi (Vometting)	+	+	nil	nil	nil
4. Hrillasa (Nausea)	+++	++	+	nil	nil

Notes: (Constant or continuing; ++++), (very frequent; +++), (frequent; ++), (less frequent; +), (absent; nil)

Discussion

It has been stated earlier i.e discomfort and difficulties over head is known as Sira roga which originated through structural, neural, vascular, muscular and skeletal dysfunction of the upper most part of the body i.e head. Ardhavabhedaka is a type of Sira roga mentioned by all the Brihatrayis and almost all the Acharyas of the Ayurveda. Literally, though Ardhavabhedaka is found similar to the sense of half sided headache which is called as hemicrania of modern science, yet after gone through the vivid review of modern literatures, the disease where is a usual episodic headache associated with nausea and vometting, occur in the half side of the head is known as migraine. So naturally for that reason migrain has been taken as the modern correlation of Avurvedic ailment i.e Ardhavabhedaka. It has also been found through the Ayurvedic literature review that the tridosas will be involved in genesis of this disease, Yet Charaka has clearly emphasized on the Vitation of Vata and Kapha. Vata gets obstructed in its flowing through the Srotas (Channels) at inside and outside of the head. When become obstructed by the accumulated Kapha in the Vatavaha Srotas than the normalcy/state of equilibrium of doshas in the head become dearranged and then naturaly neural, mascular vascular flow and reflexes become altered which leads to occurrence of locally inflammation (pradeha). These Phenomenon are become liable for producing several discomforts like headache, vometting and vertigo etc. It is clear that the specific side of the head which is more prone to makes stagnated with kapha dosha by a way of Sanga that side of head become painful. In Present Study, the female Subject of 40 years old has been diagnosed as a patient of Migraine by Bangur Institute of Neurosciences and become frustated due to her non relieving problem through modern medicine and attended our institute for getting Ayurvedic Mangement. The Ayurvedic medicines like laghu Sutashekhar rasa which is composed of Gairik, Sunthi, and Nagvalli has been given her in a dose of 250 mg twice daily before meal with luke warm water for 2 months. Besides that, A pernasal use of Dashamoola Kwatha in a dose of 6 drops daily at morning for

7 consecutive days in a manner of every alternate week for 4 Such week or 2 months. It is very much interesting to note here that the patient fully gets relief and expressed her wellness in a thankful manner to us. These curing results definetly proves the sroto sodhoka effect of Dosamoola kwath nasya. Nasa is considered as "Nasa Hi Shirsovardama" means nose is the gateway of head. When the Dashamoola kwatha is administered through nasya karma, it pacifies vitiated kapha and Vata in head due to its vata-kaphahara action. Dashamoola has another soroto sodhaka action by which sanga (Stagnation/obstruction caused by dosas) in Sroto become clear up. The Oral use of laghu sutashekhara rasa was also key factor towards pacification of Vata, Pitta and *kapha* as it has been mentioned by the ancestors it action is Tridosha hara. In Stagnation of kapha in the way of vayu inflammations/Pradeha appears at the site of srota marga which leads to pain and spasm so the pitta samaka effect of Laghu sutashekhara rasa became able to pacify pitta also. The presence of Sunthi in Laghu Sutashekhara rasa become able to absorb the excess and vitiated kapha by tikshna usna and grahi guna of its own. Nagvalli as a compostion of said medicine has also played a great role to make the channel clear by it laghu, vishada and usna guna. Gairik is a known pitta kapha-hara substance so it has also played a very good role towards Pradeha nasak (inflammatory effect) on the srotas of the head and shows the Vata anulomana action in Annavaha as well as Pranavaha srotas both. So, after gone through the literature as well as practical observation it could be stated that serious health hazard like migraine of modern medicine could be treated safely with Ayurvedic medicines migraine is similar to Ayurvedic and ailment Ardhavabhedaka. Nothing adverse effect over this patient has been found throughout the treatment period.

Conclusion

It can be concluded that oral use of *Laghu sutashekhara rasa* in a dose of 250 mg twice daily with luke warm water for 2 months along with nasal application of *Dashamoola kwath nasya* in a dose of 6 drops daily at morning for seven

consecutive days in a manner of every alternate week for 8 weeks or 2 months are very much effective as a curative remedy of *Ardhavabhedaka* (migraine) which have possible no adverse effect.

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