

AYURVEDIC REVIEW OF ARDHAVABHEDAKA

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ABSTRACT

Ardhavabhedaka is a type of Shiroroga with the cardinal feature of unilateral headache, which if left untreated leads to complications like blindness and hearing loss. This disease can be correlated to Migraine headache based on the clinical manifestations. The life style of the people of modern era has changed due to rapid urbanization. Due to changed work expectations for better life style, stress is causing increased incidence of acute and chronic disorders. Migraine is one of the chronic illnesses, which is widespread in the population with varying severity. It is a chronic neurological disorder characterized by recurrent moderate to severe headaches often in association with a number of autonomic nervous system symptoms affecting the daily life routine. In Ayurvedic texts there are several types of Shiro Rogas (head disorders) described by Acharyas. Amongst them the clinical features of Ardhavabhedaka are very much similar to Migraine. As in case of migraine mainly analgesics are prescribed which have side effects on the other organs. Current article focuses to gather all of types, diagnosis, aetiology, pathogenesis and treatment of Ardhavabhedaka.

KEYWORDS: Ardhavabhedaka, Migraine, Shiroroga, Headache.**INTRODUCTION**

Ardhavabhedaka is one of the shirorogas which exhibit severe pain in one half of the head and when not treated or poorly treated might lead to complications like destruction of eye and ears (Nayana and Sravana vinasha).

The causes of Ardhavabhedaka are excessive intake of ruksha ahara (Dry foods), Adhyashana (eating before previous meal gets digested), Purva vata sevana(exposure to cold wind), Atimaithuna (excessive sexual activity), Vegadharna (suppressing of natural urges), Athishrama (excessive exertion) causing pain in one half of the shiras, shanka (temples), Bru (eyebrows), Manya(nape of the neck), Akshi(around the eyes) and in Karna pradesha(ears). The attacks of Ardhavabhedaka will be once in three days, five days, ten days, fifteen days or once in a month or at any random time. It can be correlated to migraine based on the similarity in aetiology, pathology, and symptoms.

According to data from the World Health Organization, it is the third most prevalent medical condition in the world, affecting 14.7% of the population annually.⁶ It is the second most common cause of headache, it afflicts approximately 15% of women and 6% of men

worldwide. Its prevalence is the highest during young and middle adulthood and peaks between the age of 30 and 39, in this period 28.1 % of women and 9.0% of men will suffer from migraine. Migraine makes an individual socially handicapped. It is a common medical condition of the adult population having a significant loss in job productivity in the workplace and causes significant socio- economic impact. Typically the headache is unilateral (affecting one half of the head) varied in intensity, frequency and duration, lasting from 2 to 72 hours commonly accompanied by nausea and vomiting. Some are associated with sensory, motor and mood disturbances. According to modern science also migraine typically present with self- limited, recurrent severe headache associated with autonomic symptoms.

About 15-30% of people with migraine experience migraine with an aura and those who have migraine with aura also frequently have migraine without aura. The severity of the pain, duration of the headache, and frequency of attacks is variable. In modern medicinal text-books clearly state that there is no proper standardized treatment for migraine. The acute condition of migraine patient neglecting their treatment schedule and minimum percentages of patients of this category are able to consult a physician. But the chronic stage of

migraine is more prevalent and difficult to treat. In chronic stage migraine various treatment modules comprises of non- pharmacological treatment such as identification of triggers, meditation, relaxation, training, psychotherapy etc. and pharmacotherapy as abortive and preventive therapy. Aspirin, Paracetamol, Ibuprofen, and Diclofenac etc. are non-specific abortive therapy, whereas Ergot,5-HT1 receptor agonists are specific abortive therapy.

DISEASE REVIEW

ARDHAVABHEDAKA

The word Ardhavabhedaka has two parts Ardha and Avabhedaka.

- Ardha means one half or half side.
- Ava means from within
- Bhedaka means breaking, perforating or bursting type of pain. Thus, literal meaning of Ardhavabhedaka is bursting or perforating type of pain in one half of the head (Ardha Mastaka Vedana).

It is termed as severe interrupted half sided headache, occurring periodically once in three, five, ten, fifteen or thirty days due to vitiation of Vata or Vatakapha or Tridosha.

DEFINITION OF ARDHAVABHEDAKA

Pain in one half of head is considered as Ardhavabhedaka. If one half of the head experiences

severe tearing and pricking type of pain, giddiness and piercing pain suddenly after a fortnight or ten days, this can be diagnosed as Ardhavabhedaka.

SYNONYMS

- Ardha Sheersha Shoola
- Ardhabhedaka^[1]
- Shiroardhashoola
- Ardhavabhedaka

All these synonyms carry the same meaning i.e., shoola is present in half portion of head.

NIDANA OF ARDHAVABHEDAKA

Nidana plays an important role in manifestation of diseases. The knowledge of nidana is important to understand the Samprapti and Sadhya-asadhyata of diseases. Nidana Parivarjana, which acts as the first line of treatment, is very essential for prevention and cure of the disease.

SAMANYA NIDHANA FOR ARDHAVABHEDAKA

The samanya and vishesha nidanas of Ardhavabhedaka according to different Acharyas have been shown in the Table 1 and Table 2.

Table 1: Samanya nidanas for Ardhavabhedaka.

NIDANA	C.S	A.H	A.S	Y.R
Abhyanga dwesha(aversion to massage)	-	+	+	-
Ambu kreeda(exposure to water)	-	+	+	+
Adhyashana (taking food before previous meal is digested)	-	+	+	-
Asatmya gandha(undesirable smell)	+	+	+	+
Hima (exposure of snowfall)	+	-	-	-
Atapa sevana (exposure of sun and heat)	+	+	+	+
Atyamla sevana (excess intake of sour food)	+	-	-	-
Ati maithuna(excess sexual indulgence)	+	-	+	-
Ati sheethambu sevana (excess cold water intake)	+	+	+	+
Ati swapna (excessive sleep)	-	+	+	+
Avasyaya (exposure to mist)	+	+	+	+
Mrija dwesha(aversion to cleanliness)	-	+	+	-
Bashpa nigraha(suppression of tears)	+	+	+	+
Desa viparya(regimen contrary to desha)	+	-	-	-
Dhuma sevana(excess inhalation of smoke)	+	+	+	+
Divaswapna(day sleeping)	+	-	-	-
Dushta ama(vitiated ama)	+	+	+	+
Guru ahara(heavy food)	+	-	-	-
Haritam athi(raw spicy rhizomes)	+	-	-	-
Kala viparyaya (regimen opposite to season)	+	-	-	-
Krimi dosha (worm infestation)	-	+	+	+
Madya sevana (intake of excess alcohol)	+	+	+	+
Manasa santapa (mental stress)	+	-	-	-
Megha agama (advent of cloud)	+	-	-	-
Prathathekshana(continuously looking down)	-	+	+	+

Purovata sevana(exposure to easterly wind)	+	+	+	+
Raja sevana(exposure of dust)	+	-	-	-
Ratri jagarana(vigil during night)	+	+	+	+
Rodana (excessive crying)	+	+	+	+
Shiro abhighata(injury to head)	+	-	-	-
Uchairbhashana(talking loudly)	+	+	+	+
Upadhana(avoidance of pillow)	-	+	+	+
Utsweda(excess sudation)	-	+	+	-
Vegadharana(suppression of natural urges)	+	+	+	+

Table 2: Vishesa nidanas for Ardhavabhedaka.

NIDANA	C.S	M.N.	B.S	Y.R.
Adhyasana(taking food before previous digested)	+	+	-	+
Atyasana (intake of excess food)	+	+	-	-
Anasana(taking less quantity of food)	+	+	+	-
Avasyaya (exposure to mist)	+	+	-	+
Ayasa (excess exertion)	+	+	-	+
Atimaithuna(indulgence in excessive sex)	+	+	-	+
Purovata sevana(exposure to easterly wind)	+	+	-	+
Rukshath (dry regimen)	+	+	-	+
Vega sandharana(suppression of natural urges)	+	+	+	+
Vyayama (excessive exercise)	+	+	-	+
Abhighata (injury)	-	-	+	-
Chardi nigraha(suppression of vomiting)	-	-	+	-
Diwaswapna (day sleeping)	-	-	+	-
Kshavathu nigraha (suppression of sneezing)	-	-	+	-
Prathapa sevana(excessive heat exposure)	-	-	+	-
Sambhojana (excessive eating)	-	-	+	-

AHARAJA NIDANA**1. VATA PRAKOPAKA AHARAJA NIDANA**

- Atirukshaahara**- It will cause vataprakopa due to samanaguna.
- Anashana**- It can be understood as abhojana(not consuming food at all)/alpamatrabhojana(consuming food in very less quantity) which leads to vata prakopa
- Haritham ati** – “Haritham ardrakascha” which means intake of substances like ardrakam causes Shirashoola. These are katu rasa pradhana and teekshna guna substances which when taken in excess might vitiate vata due to its ruksha and laghu guna
- Atiseetambusevana** – Ati Sheeta guna causes vata vridhi

2. PITTAJA PRAKOPAKA AHARAJA NIDANA

- Atiamla sevana** -Amla rasa does pitta kopa, rakta dushana
- Haritham ati** - due to agni mahabhuta predominance, ushna teekshna guna, it vitiates pitta
- Anasana** -It can be taken as abhojana / alpamatrabhojana which leads to pitta prakopa, Upavasa leads to pitta prakopa
- Ati Madhya sevana** - It has tikshna usna guna and does raktaprakopa. All the pitta prakopaka nidhanas will cause raktaprakopa

3. KAPHA PRAKOPAKA AHARAJA NIDANA

- Ati amlasevana** – amla rasa does vilayana of kapha because of its ushna veerya.
 - Ati guru ahara**- does agnimandya and also kapha prakopa
 - Atiseetambu sevana** -Due to its sheetaguna does prakopa of both kapha and vata.
- 4. TRIDOSA PRAKOPAKA AHARAJA NIDANA**
- Atyasana** – excessive intake of food will vitiate all the three dosas.
 - Adhyasana** - When food is consumed even before the digestion of previous food, it leads to ama utpatti. This leads to vata, pitta and kapha prakopa. Any disturbance in agni will directly cause prakopa of the pitta dosha.

VIHARAJA NIDANA**1. VATA PRAKOPAKA NIDHANAS**

- Abhyangadwesa** – Not doing Abhyanga regularly increases the rooksha guna of the body which causes vata vridhi.
- Atimaithuna** - Excessive sexual indulgence provokes Vata dosha
- Bashpanigraha** – suppression of the tears causes vata vridhi
- Avasyaya** – (mentioned as “tushara” in Astanga Hridaya) means fog or mist, due to its samana sheetaguna it vitiates vata dosha.
- Rathri jagarana** - due to its rukshaguna it does

prakopa of vata

- f. **Uchairbashana** – speaking loudly will cause vata prakopa
- g. **Vegadharana** – will lead to vata prakopa
- h. **Ayasa** – any sort of exertion mental or physical leads to vatavridhi
- i. **Chardi nigraha** - leads to vataprakopa
- j. **Kshavathunigraha**—suppression of urge for sneezing leads to Ardhavabhedaka.

2. PITTA PRAKOPA VIHARAJA NIDANA

- a. **Utsweda** – excessive sweating
- b. **Atapasevana** – excessive exposure to sunlight increases pitta and rakta
- c. **Purovatasevana** – Exposure to wind from east causes pitta and rakta vridhi
- d. **Diwaswapna** – sleeping in day time leads to kapha and pitta vridhi.

3. KAPHA PRAKOPA VIHARAJA NIDANAM

- a. **Atiswapna** – excessive sleep causes kapha vridhi
- b. **Diwaswapna** – sleeping in day time leads to kapha vridhi

MANASIKA NIDANA

1. **Manasasantapa**
2. **Rodana**

AGANTUJA NIDANA

1. **Shiro Abhighata** – Any external injury to head leads to vata and rakta prakopa.

PURVA ROOPA

Lakshanas which emerge due to sthanasamshraya of doshas are known as purvaroopa and they are the indicators of bhavi vyadhi (disease which is yet to come). No poorvaroopas are explained for Ardhavabhedaka.

RUPA OF ARDHAVABHEDAKA

Rupa are the symptoms, which denote a disease that has now manifested. The knowledge of rupa is very essential for diagnosis, prognosis and for the proper management. The stage of the disease when symptoms are seen is termed as Vyakth avastha the diagnosis of the disease will be made on the basis of these symptoms.

PRATYATMALAKSANA IN ARDHAVABHEDAKA

Ardhavabhedaka is a condition where there will be Ardhamoordha ruja. This is the pratyatma lakshana of Ardhavabhedaka. Ardhavabhedaka is shoola pradhana shiroroga. Hence the shoola of Ardhavabhedaka can be explained under following headings

1. Site of the pain
2. Nature of the pain
3. Frequency of pain
4. Other associated symptoms

1. Site of the pain

The different sites where pain will be present are as

follows –

- a. Ardashira - Half of the head
- b. Manya- Either side of neck (nape of the neck)
- c. Bhru - Eyebrows.
- d. Shanka – half way between the eyebrow and ear⁴⁵ as per commentary by Arunadatta
- e. Akshi - Eyeball
- f. Lalata –Frontal area
- g. Karna- Ears
- h. Ghata- Above the shanka
- i. Kandhara -greeva
- j. Shankamoola- below the shankha

2. Nature of the pain

The quality of the pain in the sites mentioned above will be of the following nature:

- 1) Sastraaraninibham- Pain as if being cut by a sharp instrument
- 2) Arani nibham - Pain as if being struck by lightning
- 3) Bhedavath -Breaking type of pain
- 4) Todavath - Pricking type of pain
- 5) Niskarshana- Plucking out type of pain

3. Frequency of pain

- 1) Pakshath - once in fortnight
- 2) Dashahath- once in ten days
- 3) Masath- once in a month
- 4) Akasmath - no specific time interval

SAMPRAPTI OF ARDHAVABHEDAKA

Samprapti plays an important role for the proper knowledge of a disease. Samprapti begins at the time of consumption of nidana till it manifests as a disease. It is important because treatment procedure is mainly targeted on Samprapti Vigatana.

SAMANYA SHIROROGA SAMPRAPTI

Indulging in the nidanas mentioned for Shirorogas leads to vitiation of tridoshas, which further vitiates the rakta in the channels of Shiras and cause different types of Shirorogas as per the dominance of doshas and manifest the respective symptoms.

VISHISTA SAMPRAPTI FOR ARDHAVABHEDAKA

The Nidana factors vitiate either vata alone or associated with kapha, invade the half portion of the head and causes ardhvabhedaka.

SAMPRAPTI GHATAKA

DOSHA – Tridoshaja, Vata Kaphaja, Vataja
DUSHYA - Rakta.

Rakta is the main dushya in Shiroroga, as “Shiro-Ruk” in included under “Shonitaja Roga. Moreover, it has been clearly stated that the vitiated doshas after reaching Shiras, vitiates Rakta dhatu present there to produce Shiro Roga. Thus, Rakta can be considered as the main dushya in Ardhavabhedaka.

SROTAS – Raktavahasrotas.

In Ardhavabhedaka, the dushya is Rakta. Hence the srotas involved is siras (blood vessels) of head. On this basis, the involvement of Raktavahasrotas in Ardhavabhedaka can be inferred.

ADHISTHANA - Shiras (Head)

Shiras (head) and its appendages like Manya, Bhru, Shankha, Karna, Akshi, Lalata, Ghata and Hanu are considered as the adisthana in Ardhavabhedaka.

VYAVACHEDAKA NIDANAM

It is essential to rule out other possible diseases, which have similar manifestations. The main feature of Ardhavabhedaka i.e “Shirashula” is also seen in few other urdwajathru vikaras but there are other lakshanas which differentiate Ardhavabhedaka from those disorders. The diseases considered for vyavachedaka nidana are shown in table 3.

Table 3: Vyavachedakanidas for Ardhavabhedaka.

Sl.No.	Vyadhi	Lakshana
1	Vataja Shiroroga	Animitta ruja, toda in shiras, shoola in bhru, shankha, akshi, lalata and ghatapradesha, occurs in ratri, prakasha santrasa. It occurs bilaterally.
2	Kshayaja Shiroroga	Ugra ruja in bhru due to vasa and bala kshata
3	Suryavatha	Akshi bhru ruk which starts manda from suryodayam and reaches its peak in the afternoon and gradually subsides.
4	Anyathovata	Referred pain in akshi, shankha, manya
5	Ananthavata	Teevra ruja in akshi, bhru, shankha and ganda, parswa kampa which will be referred from manya or greeva parswa
6	Shankhaka	Shankhadesa teevra ruk and daha
7	Adhimantha	Aranimanthanavat shoola in netra, toda, bheda, avilatha of netra, vyatha in half portion of head
8	Vata viparyaya	Vedana sometimes in the Pakshma, sometimes in eye or sometimes in bhru

UPADRAVA

Just the knowledge of Nidana and Lakshana are not enough. Upadras should also be kept in mind while treating. In Ardhavabhedaka, two upadras have been listed which can occur independently or together

1. Nayana vinasha
2. Shrotra vinasha

SADHYA-ASADHYATA OF ARDHAVABHEDAKA

There is no clear mentioning of sadhyaasadhyata of Ardhavabhedaka either in Bhrihatrayee or in Laghutrayee. It is considered as **Sudustara**, meaning “Atidukhena taraneeyaha”. Hence it can be considered as **Kashtasadya**. Taking into account the two upadras then the disease is considered as krichrasadhya or asadhya.

CHIKITSA

The management of a disease is based mainly on the principle of Samprapti vighatana. Specific line of treatment for Ardhavabhedaka has been mentioned in our classics. Ardhavabhedaka if not treated leads to complications. Hence an early intervention is necessary. The treatment principle mainly lies on shamana, shodhana and nidanaparivarjana which cause samprapti vighatana. Commonly in all type of headache the following preventive measures should be taken.

Nidana Parivarjana

According to the treatment point of view, the causative factors producing headache should be avoided. Commonly rest, stress free lifestyle, avoiding suppression of natural urges and controlling the mind are very helpful.

Also, other Aharaja and Viharaja hetus should be avoided.

Samshodhana Chikitsa

Shirovirechana or Nasyakarma is advised as the important treatment modality in Shirorogas. Thus, use of Nasya with medicaments which are indicated for such conditions is to be put into practice in shirashoola. Samshamana Chikitsa Along with Nidanaparivarjana, the vitiated Dosas should be brought to their normal state with the help of drugs, according to predominance of the manifesting Dosh.

Vishista Chikitsa for Ardhavabhedaka

The treatment principles mentioned for Ardhavabhedaka can be grouped under the following headings:

ACCORDING TO ACHARYA SUSHRUTA

- Nasya Karma
- Diet of Jangala mamsa and preparations of Ksheera, anna, ghrita
- Avapedana nasya with, Sirisamulaka and phala, Vamsamula and karpoora, Vacha and Magadhika(Pippali), Yastimadhu and Madhu, Manahshila alone or with chandana and madhu. At the end of avapedana, nasya to be done with murva and ghrita
- Lepa with sariva, utpala, kusta, madhukam, amlapeshita mixed with ghrita and thaila

ACCORDING TO ACHARYA CHARAKA

- Chatur-sneha(ghrita+taila+vasa+majja) in uttama matra
- Shirovirechana

- Kaya virechana
- Nadi sweda
- Niruha anuvasana basti
- Upanaha
- Shirobasti
- Dahana (Agnikarma)

ACCORDING TO ASTANGA HRIDAYA

- Nasya Karma with Sirisabeeja, apamarga, bidalavana, Saliparni swarasa
- Lepa with prapunnata bija kalka and amra
- Vatajashirashoola line of chikitsa

ACCORDING TO ASTANGA SANGRAHA

- Nasya with nirgundi patra swarasa, Saindhava, ghrita
- Nasya with sirisamula and phala
- Lepa with sariva, utpala, kusta, vacha, madhuka, pippali mixed with taila

ACCORDING TO BHAIJAYA RATNAVALI

- Virechana with Yavakshara + ghrutha + virechaka aushadhi
- Nasya Karma with:
 - a) Vacha + Magadhi (Avapeedana)
 - b) Dugdhotha Ghrutha
 - c) Ghrutha of kruthamala pallava + apamarga beeja churna
 - d) Dashamula + ghrutha + saindava
 - e) Shireeshabeeja and mula avapeeda nasya
 - f) Mahamayura ghruta
 - g) Shigru maricha teekshna nasya
 - h) Brungaraja swarasa avapeedana
 - i) Sharkara jala
 - j) Sharkaramishrita narikelajala
 - k) Sheeta jala
 - l) Vidanga + Krishna tila
 - m) Burnt mud + Maricha
- Upanaha with Jangalamamsa + vatahara dravya
- Lepas with following drugs
 - Sarivadi lepa
 - Madana + vasa
 - Saindava + tila taila (ushna lepa)
 - Krishna tila + jatamamsi churna + saindava + madhu

ACCORDING TO BHELA SAMHITA

- Nasya karma
- Karpasa bija, masha, godhuma, sarsapa, yava with ksheera for Nasya.
- Dwipanchamoola with ksheera for Nasya.
- Nadi sweda
- Ushna Upanaha with ksheera siddha aushadhi
- Uttama matra of Ghrita, taila or vasa should be given based on yukti

ACCORDING TO HARITA SAMHITA

- Kumkumadi ghrita nasya – Kumkuma, Yasti, Kusta, Sharkara, Navaneeta

ACCORDING TO BHAVAPRAKASHA

- Snehana, swedana, kaya virechana, dhoopana
- Snigdha usna bhojana
- Internally ksheera+ sarkara, narikelajala
- Sheetajala paneeya
- Ghrita internally
- Nasya karma

ACCORDING TO SARANGADHARA SAMHITA

- Kumkuma Nasya

ACCORDING TO CHAKRADATTA

- Kumkuma lepa
- Nasya with dashamoola kwatha

PATHYA-APATHYA

No specific pathya and apathya have been mentioned for Ardhavabhedaka. As it is one among the shirorogas, the pathya- apathya mentioned for shiroroga in general can be considered. Pathya-apathya for shiroroga is mentioned only in Bhaisajya Rathnavali – Shirorogadhikara. The pathya for headache is shown in table 4, and the apathya are shown in table 5.

Table 4: Pathya in Ardhavabhedaka.

Chikitsa Upakrama	Swedana (Heating), Nasya, Dhumpna Virechana (Purgative), Lepa, Vamana (Vomiting), Langhana (Fasting), Shirobasti, Raktamokshana, cauterly on the frontal and supra orbital region, Upanaha.
Diet	Consuming old Ghrita, Shali, Shashtikshali, Yusha (soup) Milk, Dhanvamansa,
Vegetables	Patolam, Shigru, Vastuka, Karvellaka
Fruits	Mango, Aamlaki, Dadima, Matulunga, Lemon, Grapes, Coconut
Liquid diet	Milk, Oil, Coconut water, Kanji, Takra (Churned curd).
Medicines	Pathya, Kushta, Bhiringaraj, Kumari, Musta, Ushira, Karpura, Gandhasar

Table 5: Apathya in Ardhavabhedaka.

Vegadharanam (Holding of the urges)	Sneezing, Yawning, Micturition, Sleep, Lacrimation, Stool excretion.
Unwholesome diet	Consuming cooked and uncooked food, impure water, curd, lassi, cold drinks, water of the rivers of Sahyadri, Vindhyas, Kapha producing diet.
Apathya Vihara (Unwholesome recreation)	Teeth-brushing (Dantadhavanam), day sleeping

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