

AYURVEDIC UNDERSTANDING AND MANAGEMENT OF ARDHAVABHEDAKA (MIGRAINE) IN CHILDREN - A CASE REPORT

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ABSTRACT

Shiras is considered as the *Uttamanga* and it is the seat of *Prana* and all the *Indriyas*. *Shirashoola* is one of the commonest complaints in children, especially in the adolescence due to the change in lifestyle, food habits and many other reasons. *Ardhavabhedaka* is one among the various types of *Shirashoola*, in which there will be headache pertaining to half part of the *Shiras*. It is as a severe, interrupted headache which troubles once in three to five, ten to fifteen or thirty days. The main clinical features include *Atheeva Sambheda toda*, *Bhrama*, *Shula* in *Uttamanga ardham*. It manifests once in *Pakshaat* or *Dashaahaat*. Migraine is associated with periodic headache, which is unilateral, often along with some visual disturbances and even vomiting. Occurrence of these attacks varies from few days to several months. A 10 year old male patient was brought to the Out Patient Department of Kaumarabhritya, SDM College of Ayurveda and Hospital, Hassan by his parents with complaints of recurrent attacks of head ache, once in ten to fifteen days or a month which is pertaining to one side of the head. This is a severe, pricking type of pain and is affecting his studies and even sleep. This condition can be understood as *Ardhavabhedaka*. After a thorough interrogation with the parents and proper evaluation regarding the present condition of the child, started with *Mukhabhyanga*, *Nadi sweda*, *Marsha Nasya*, *Lepana* and suitable internal medications. Significant improvement was noticed in the condition of the child after a course of treatment for 7 days. Later, he was discharged with suitable medicines to be continued in home and the *Pathya apanya* to be followed for a period of 15 days. The condition of the child was much better than previous when assessed during two follow up visits within a month.

Keywords: *Ardhavabhedaka*, *Shirashoola*, Migraine, *Marsha Nasya*

INTRODUCTION

Shiras (head) is known as the *Uttamanga* (foremost among the vital organs) in our body, which is the seat of *Prana* and all the *Indriyas* (Sense organs)¹. When

one indulges in *Vegasandharana* (suppression of natural urges), *Diwaswapna* (sleeping during day time), *Ratrijagarana* (awake during night hours), *Uchair-*

bhashya (speaking in loud voice), *Avashyaya* (exposure to frost), *Praagvata* (exposure to wind), *Asatmyagandha* (inhalation of undesirable smell), *Rajo dhuma himaatapat* (exposure to excess dust, smoke, snow and sun light), *Guru amla ahara atisevana* (intake of excess of heavy and sour food items), *Ati sheetambu sevana* (excessive intake of cold water) and due to *Shirobhighata* (due to some injury in the head), *Dushtaama* (vitiation of *Aama*), *Rodanaat bashpa nigrahat* (suppression of tears), *Manasthaapa* (anxiety), *Deshakala viparyat* (following regimen opposite to those suitable for the region and climate), *Vatadayaha prakupyanti* (*Vataadi tridoshas* gets aggravated), resulting in vitiation of *Raktadhatu* in head causing diseases of *Shiras* with various features². We can come across mentioning of different types of *Shirashoola* in our classics. *Ardhavabhedaka* is one among them, with features like *Atheeva Sambheda toda* (severe tearing and pricking pain), *Bhrama* (giddiness), *Shula* (pain) in *Uttamanga ardhama* (one half of head). It manifests once in *Pakshaat* (fortnight) or *Dashaahaat* (ten days)³. When it is *Ativridhastu* (excessively aggravated), *Vinashayet Nayanam Sraavanam* (destroys either eyes or ears)⁴.

Migraine is a common condition that affects about 20% of females and 6% of males at some point of their life. Usually it occurs before the age of forty and it is estimated that 90% of sufferers of migraine experience their first attack by this time⁵. In migraine, there will be periodic headache, which is unilateral and often associated with some visual disturbance and vomiting. Usually the attacks happen at intervals which may vary from around few days to several months⁶. It occurs as a result of the disturbance in carotid or vertebra basilar vascular tree due to sudden contraction and dilatation of the vessels. The initial vasoconstriction causes ischaemic manifestations, then followed by a vasodilatation which exerts pressure in the nerve endings of vessels of intra or extra cranial arteries results in occurrence of throbbing type of pain in the head⁷. In majority of the cases of migraine, a positive family history can be noted. It may even get increased during menstruation, stress and strain, anxiety, consumption of chocolates, oily food

items. Usual presentation is with a Paraesthesia or weakness of one half of the body, severe throbbing type of pain in the head, with vomiting, sweating and photophobia. This may last starting from few hours to even several days. Migraine is a vascular syndrome resulting in recurrent episodes of headaches with symptom-free intervals. Basilar artery migraine manifests with occipital headache, disturbances in vision, diplopia and even severe vertigo which can last for five to sixty minutes⁸. Usually migraine presents with a symptom triad which includes paroxysmal headache, nausea and/or vomiting and an aura of focal neurological events⁹. A thorough understanding of the causative factors and the precipitants followed by its avoidance gives better results.

Case History:

A 10-year-old male patient was brought to the Out Patient Department of Kaumarabhritya, SDM College of Ayurveda and Hospital, Hassan by his parents with complaints of recurrent attacks of head ache, once in ten to fifteen days which is pertaining to one side of the head for 6 months. This is a pricking type of pain and due to which he is not able to focus properly in his studies and sometimes because of the pain, he gets irritated with even slight noise. Many a times he was unable to sleep properly. There was a positive family history too. His mother was also suffering from complaints of migraine.

History of Present Illness:

This child was born by full term normal vaginal delivery. Baby cried immediately after birth. Birth weight was 2850gms. No history of NICU stay and no obvious congenital anomalies were noted during birth. All the developmental milestones were attained appropriate for age and is regularly immunized till date. He likes to have chocolates, oily food items like snacks and some dairy products right from his childhood. But, for the past 1 year, the amount of such eatables which he consumes has increased markedly. This child was apparently well 6 months back. Then he slowly developed with on and off headaches occasionally, which stays for few days. Usually when he gets exposed to cold climate, intake of snacks and

chocolates, he starts getting headaches in the successive days. Then gradually he developed with complaints of one-sided headache in the head, which lasts for few days. Once he gets headache, he behaves little more tensed than usual, cannot tolerate even slight noise also and cannot concentrate much on his studies. Due to all these, they have decided to take the child to a Physician in a nearby hospital. There, they diagnosed it as Migraine and gave him some medicines. Parents has started those medicines for him, and the complaints reduced, but it was unable to prevent the recurrence. Whenever he gets headache, those medicines were bringing the pain down. Repeated episodes has affected his general health and even his studies. As a result of which, he was unable to concentrate on his studies and skipped many classes too. Getting irritated, anxious and tensed during these times and unable to tolerate sounds was persisting in him. Gradually, the parents felt like the child needs better care and solutions for these complaints. Then, they have decided to bring the child for a better evaluation and management in SDM College of Ayurveda and Hospital, Hassan.

Examination of Head:

Table 3: On Examination

Size and Shape of head	Normal size and shape
Scalp examination	Normal
Examination of hair	Thicker with normal pigmentation
Headache	With slight heaviness of head (occasionally), eye strain
Headache-features	Partial (half-sided), fixed, when starts it is continuous and regular pain.
Severity of headache	Moderate
Nature of pain	Pricking pain (usually), occasional tearing type of pain
Duration of pain	For minutes
Duration of recurrence	10 to 15 days
Duration of remission	Moderate
Aggravating factors	Stress, strain, reading, night arousal, hot exposure, cold wind exposure, dust and smoke exposure, intake of chocolates.
Relieving factors	Naturally, by rest, medicines etc.
Central Nervous System	Oriented, Conscious
Higher mental functions	Intact
Cranial Nerves Examination	No abnormality detected

After a thorough interrogation with the parents regarding the life style, diet and habits of the child and the history of present illness and after a proper evaluation regarding the present condition of the child, he was admitted to the inpatient department of our hospital and planned for *Mukhabhyanga*, *Nadisweda*, *Marsha Nasya*, *Lepana* and suitable internal medications.

Examination:

Table 1: Assessment of general condition of the child:

Bowel	Regular
Appetite	Good
Micturition	Regular
Sleep	Slightly disturbed in between

Table 2: Ashtasthana Pariksha

<i>Nadi</i>	<i>Vatapitta</i>
<i>Mutra</i>	<i>Anupalipta</i>
<i>Mala</i>	<i>Prakruta</i>
<i>Jihva</i>	<i>Prakruta</i>
<i>Shabda</i>	<i>Prakruta</i>
<i>Sparsha</i>	<i>Prakruta</i>
<i>Drik</i>	<i>Prakruta</i>
<i>Akruti</i>	<i>Prakruta</i>

Table 4: Chief Complaints:

SL No.	Complaints	Duration
1	<i>Shula in Uttamanga ardhama</i> (Pain in one half of head)	6 months
2	<i>Atheeva Sambheda toda</i> (Severe tearing and pricking pain)	6 months
3	<i>Bhrama</i> (Giddiness)	6 months
4	<i>Pakshaat or Dashaahaat</i> (Pain occurs once in fortnight or 10 days)	6 months

Treatments Given

A single course of treatment which comprises of *Mukhabhyanga*, *Nadisweda*, *Marsha Nasya*, *Lepana* and suitable internal medications were given along with strict diet advise.

Table 5: (a) *Chikitsa* during Admission:

SL No.	Treatment	Duration
1	<i>Mukhabhyanga</i> with <i>Asanabilwadi thaila</i> (Morning hours)	7 days
2	<i>Nadisweda</i> (Morning hours)	7 days
3	<i>Marsha Nasya</i> with <i>Anuthaila</i> 10 drops/10 drops (Morning)	7 days
4	<i>Lepana</i> with <i>Rasna churna + Jambeera (Citrus aurantifolia) swarasa</i> over forehead BD (Morning and Evening)	7 days
5	<i>Varanadi Kashaya</i> 10ml with 30ml luke warm water BD B/F	7 days
6	Tab. <i>Shirashoola Vajra Rasa</i> 1 BD A/F	7 days
7	Tab. <i>Cephagraine</i> 1BD A/F	7 days

Table 6: Advice at the time of discharge:

This child was discharged with medications to be continued in home for a period of 15 days and strict diet advises to be followed by him.

SI No.	Treatment
1	<i>Prathimarsha Nasya</i> with <i>Anu thaila</i> 2 drops/2 drops (Morning)
2	<i>Varanadi Kashaya</i> 10ml with 30ml luke-warm water BD B/F
3	<i>Lepana</i> with <i>Rasna churna + Jambeera swarasa</i> over forehead during evening hours
4	Tab. <i>Shirashoola Vajra Rasa</i> 1 BD A/F
5	Tab. <i>Cephagraine</i> 1BD A/F
6	Avoid the excess intake of chocolates, oily food items especially oily snacks, dairy products, heavy food items.
7	Avoid excess exposure to extreme cold, sunlight, dust and fumes.

Outcome of the Treatments:**Patient and Care Taker's Feedback:**

- As per the father's statement, this child likes to have chocolates, oily food items like snacks and some dairy products right from his childhood. The amount of such eatables which he consumes has increased since last 1 year.
- This child was apparently well 6 months back. Then he slowly developed with on and off headaches occasionally, which stays for few days.
- Usually when he gets exposed to cold climate, intake of food items like snacks and chocolates, he gets headaches in the successive days. It is a one-sided headache, which lasts for few days. Behaving little more tensed than usual, unable to tolerate even slight noise and difficulty in concentrating on studies was noticed.
- Even though, there was slight reduction in the headache after starting medications from the nearby hospital, immediate reoccurrence was noticed, which he was not able to tolerate.

5. Here, after starting Panchakarma treatments and internal medication, slight heaviness of head started reducing, he was better and better each successive day.
6. We have noticed that he started focusing on his studies properly, he was able to read continuously without any interruption as a result of his ill health.
7. As per the diet advised, chocolates, oily food items, snacks were totally stopped, and we have taken suitable measures to protect him from extreme change in climate and dust etc.
8. After completion of 7 days of course here, he is feeling good and happy. As per recommended, medicines were continued in home for a period of 15 days and brought him for an evaluation, he has not got headaches for almost more than 3 weeks.
9. Overall, with diet and activities restrictions in one hand, the treatments and medications has given him a better solution to his complaints which was disturbing him since many days.

Clinician Assessed Outcomes:

1. In the present case, excessive consumption of food items like chocolates, oily snacks, some dairy products and excessive exposure to the extreme climatic variations and dust, smoke etc were the main reasons behind his headaches.
2. Medications can give him satisfactory relief from the sudden initiation of headaches is evident from the reduction in complaints he got from nearby hospital, but what is mainly needed is a protection from its continuous recurrence. That is why instead of only internal medications, he was admitted for suitable Panchakarma therapies.
3. It was understood from parent's words that he is a very studious student, but his difficulties with such complaints is not allowing him to concentrate much on studies. They were unaware of the dietic, climatic and other reasons behind the same.
4. Both child and parents has obeyed to our advises and they have totally avoided such things from their daily routine. When treatment was started only, he was looking more happier and better than before.
5. After completion of 7 days course, he was feeling lightness of head and whole body, healthier and more energetic.
6. He was discharged by giving internal medicines and *Pratimarsha Nasya* and *Lepana* to be done at home for a period of 15 days. He came back after that and was better and did not even get any episodes of headache.
7. They were advised to continue the medications for one more course and keep on avoiding the diet and activities which was already told.

DISCUSSION

In the present case, the patient presented with the complaints like unilateral pain with tearing and pricking nature, giddiness which manifests once in 15 days. The case was diagnosed as *Ardhavabhedaka* as the *Pratyatma lakshana* of *Ardhvabhedaka* i.e. pain in one half of the head was present in the patient. The other *Lakshanas* of *Ardhvabhedaka* like *Bhrama* and the typical *Paksha Vega Swabhava* were also present. *Dosha vikalpana* was done based on nature of *Hetu Sthana* and *Lakshana*. On daily analysing the *Hetu*, it was found that the child was resorted to *Kapha* and *Pitta Vardhaka Aaharas* like oily foods, chocolates and spicy food items. *Utthamanga* being the *Sthana* of *Prana vata* and *Tarpaka kapha* was given prime importance in treatment. Further on analysing the *Lakshanas*, the involvement of *Vata* and *Pitta Dosha* was clear from the presence of *Toda* and *Bhrama*. Hence there was an involvement of all the three *Doshas* in the patient. In the pathogenesis of migraine, hyperexcitability of afferent trigeminal nerve endings and vasodilation of intracranial blood vessels resulting in extravasation of plasma proteins play a major role. Hyperexcitability can be understood as *Teekshna Guna Vruddhi* and *Chala Guna Vruddhi* of *Vata*. Vasodilation of intracranial blood vessels can be understood as *Sookshma Guna Vruddhi* of *Prana vata*. as *Sookshma Guna* helps in *Vivarana Karma*. Vasodilation further leads to accumulation of plasma proteins which can be understood as a type of *Sanga* or *Srotorodha*. Hence the present case was approached with

Vatapittahara and Srotoshodhana type of management.

Since the case was having 6 months duration with regular recurrence, Shodhana was planned as the first line of management. Since the nearest route for the elimination of Dosha was Nasa and Ardhavabhedaka being a Shiro roga, Nasya was preferred as the mode of Shodhana. Mukabhyanga and Nadi swedana was done as the Purva karma. For Mukha Abhyanga, Asanabilwadi taila was preferred. It is Vatakapaha hara in nature. Nadi swedana also helped in the Sanchita dosha vilayanam. After considering the Bahu doshatvam, Marsha nasya was started with Anu tailam. It is a type of Shamana nasya dravya which helped in pacifying the Vata and Pitta dosha. These medicaments used for Nasya enters brain through the nasal route and gives a greater impact on higher centres of brain which controls various endocrinal, neurological and circulatory functions in the area¹⁰. Lepa was done to provide Sthanika ama pachana. Sroto rodha and Sanga of Doshas outside Siras of Utthamanga was present in the form of accumulated and extravasated proteins. For Ama pachana and Sroto shodhana, Rasna Jambheera lepa was administered which helped in Vata shamana also. As there is an importance for the Sthaanika doshas like Vata and Kapha, Varunadi Kashaya was administered internally to pacify both the Doshas. Along with that, Cephagraine tablet and Shirashoola vajra rasa was also administered. In migraine there is vasodilation and extravasation of plasma proteins outside the blood vessels. This can be understood as Sanga in Shiras. The ingredients of cephagraine like Sarjika kshara, Pippali moola, Trivrut and Sithopaladi churna helped in reducing this Sanga. Sithopaladi churna being Pitta Shamana helped in reducing the hyperexcitability of trigeminal neurons which is the basic cause for the initiation of migraine. Shirashoola vajra rasa contains Parada, Gandhaka, Loha bhasma and Tamra Bhasma which helped in Kapha Pitta Shamana. The same medicines were given after discharge for a period of 15 days. There was significant reduction in all the complaints after treatment and 15 days follow up.

CONCLUSION

Migraine can be understood as Ardhavabhedaka in Ayurveda. It is a Tridoshaja Shirashoola which is having Vega Swabhava (occurring at regular intervals). Chala, Sukshma Guna of Vata and Teekshna Guna of Pitta plays a key role in the Samprapti of

Ardhavabhedaka. Chala guna of Vata and Teekshna guna of Pitta results in hyperexcitability of trigeminal afferent nerve endings. Sookshma guna of Vata plays a role in vasodilation of intracranial blood vessels leading to extravasation of plasma proteins resulting in Srotorodha in the form of Sanga. Vatapitta shamana and Sroto shodhana line of management should be followed in Ardhavabhedaka. Hence Marsha nasya with Vatapittahara dravya like Anu tailam was found to be significantly effective in the present case.

REFERENCES

1. R. K Sharma, Bhagwan Dash. Caraka Samhita, English translation, Chowkhamba Sanskrit Series Office Varanasi, reprint edition: 2009. Volume I.p.312
2. R. K Sharma, Bhagwan Dash. Caraka Samhita, English translation, Chowkhamba Sanskrit Series Office Varanasi, reprint edition: 2009. Volume I.p.311
3. P.V Sharma, Susruta Samhita, English translation, Chaukambha Visvabharati Varanasi, reprint edition:2010. Volume III.p.267
4. Prof. K. R. Srikantha Murthy. Vagbhata's Ashtanga Hridayam-English Translation, Chowkamba Krishnadas Academy, Varanasi, Reprint Edition: 2009. Volume 3.p.219
5. Nicki. R. Colledge, Brian. R. Walker, Stuart. H. Ralston. Davidson's Principles and practice of Medicine, Elsevier, Twenty first edition.2010. p.1169
6. Dr. Dingari Lakshmana Chary. The Shalaky Tantra-Diseases of Eye, Head & E.N.T, Chaukamba Sanskrit Pratishtan Delhi, reprint edition:2011.p.34
7. Dr. Dingari Lakshmana Chary. The Shalaky Tantra-Diseases of Eye, Head & E.N.T, Chaukamba Sanskrit Pratishtan Delhi, reprint edition:2011.p.35
8. PL Dhingra, Shruti Dhingra. Diseases of Ear, Nose & Throat, Elsevier, Fifth reprint edition.2012. p.52
9. Nicki. R. Colledge, Brian. R. Walker, Stuart. H. Ralston. Davidson's Principles and practice of Medicine, Elsevier, Twenty first edition.2010. p.1169
10. Vipin Kumar, A conceptual study on mode of action of Nasya, IJAPR, July 2017, Vol 5, Issue 7.

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