



EFFICACY OF NAGARKSHEERA NASYA IN THE MANAGEMENT OF MIGRAINE: AN ANALYTICAL REVIEW

^{1*}Sapna Vishwas, ²K. K. Sharma, ³Alok Kumar Srivastava and ⁴Anshul

^{1,4}M.D. Scholar and ^{2,3}Professor

Dept. of Panchakarma, Uttarakhand Ayurved University, Haridwar.

***Corresponding Author: Sapna Vishwas**

M.D. Scholar, Dept. of Panchakarma, Uttarakhand Ayurved University, Haridwar.

Article Received on 24/02/2018

Article Revised on 17/03/2018

Article Accepted on 07/04/2018

ABSTRACT

Headache is among the most common reasons patients seek medical attention, on a global basis being responsible for more disability than any other neurologic problem. Migraine is the 2nd most common with most common disabling, primary headache. The word migraine is French in origin and comes from the Greek word “Hemicrania”, means ‘half of the head’. Migraine constitutes 16% of the primary headache and affects approximately 10-20% of general population (about 15% of women and 6% of men are the sufferers of migraine). Migraine is characterized by recurrent episodes of headache that are moderate to severe, pulsatile in nature and lasting for 2-72 hours. Associated symptoms of migraine may include nausea, vomiting and sensitivity to light, sound, or smell. Migraine is not a lethal disorder but it can be disturbed patient’s life very widely, so its treatment requires more attention and care. Unfortunately, there is no preventive medication for migraine has been stabilized so for only symptomatic medication are available, which medications have a lot of adverse effects and make dependence. Very elaborate treatment has been given in *Ayurvedic Samhitas* like *murdhatailam*, *nasya*, *Shirodhara*, *shiravedha*. *Nasya* is a complete treatment for *Shirogatavyadhi*. *Nasa* has been considered as the gateway of *shirah*. Thus, the medicine administered through *Nasyakarma* can affect the vitiated *Doshas* in head. So systemically performed *Nasyakarma* cures almost all the diseases of *Urdhavajatrugatarogas*.

KEYWORDS: Migraine, Hemicrania, *Ardhambhedaka*, *Nasya*, *Urdhavajatrugata rogas*.

INTRODUCTION

Migraine is now recognized as a chronic illness, typically present with self-limited recurrent severe headache associated with autonomic symptoms, which usually begin in childhood, adolescence or early adult life and recur in diminishing number and intensity during advancing years. In migraine, pulsatile dilatation of certain large cranial vessels is the immediate cause of pain. The clinical burden of migraine has historically been well recognized; however, migraine is often misdiagnosed and mismanaged.

Migraine is an extraordinarily prevalent neurological disease, affecting 39 million men, women and children in the U.S. and 1 billion worldwide. About 90% of migraine sufferers have a family history of migraine. The women and men affecting ratio is 3:1, WHO ranks migraine among the world’s most disabled medical illness. Migraine is frequent with a prevalence of 20-30% in the population. Highly prevalent in India and associated with substantial disability, especially among women and rural populations. 1-year prevalence is 25.2% and prevalence peaked between 35-45 years in both genders. It is most often starts at puberty and worse

during middle age. As migraine affects slightly more boys than girls before puberty and 2-3 times more women than men. In 2016 migraine was recognized as most common cause of disability.^[1] The prevalence of migraine is rising and is likely attributed to several factors including increased incidence of comorbidities, lifestyle factors and a mixture of environmental and genetic factors. Migraine genes identified by studying families with familial hemiplegic migraine reveal involvement of ion channels, suggesting that alterations in membrane excitability can predispose to migraine.^[4] Changing hormone level may also play a role. Patient education is an important aspect of migraine management. Migraine can be modified and controlled by lifestyle adjustments and medications.

Factors responsible for emergence: The current increase in the prevalence of migraine could be related to stress, depression and the development of metabolic syndrome and change in our diet with high intake of fast foods, seafood, fructose sweetened beverages and alcohol, and also the increase in life expectancy. However, the migraine is caused by a genetic abnormality that makes the neurovascular system hyper

excitable. Thus, headache can be initiated or amplified by various triggers.

Pathology^[5]: The pathogenic mechanisms are not well understood. The vascular theory holds that initial vasoconstriction or shunting of blood through carotid arteriovenous anastomoses produces cerebral ischemia and starts the attack. The Neurogenic theory considers it to be a spreading depression of cortical electrical activity followed by vascular phenomena. Some triggering event appears to produce Neurogenic inflammation of the affected blood vessel wall which is amplified by retrograde transmission in the afferent nerves and release of mediators like 5-HT, neurokinin, substance P, Calcitonin gene related peptide (CGRP), nitric oxide etc.

Symptoms and diagnosis: About 15-30% of people in migraine experience migraine with aura and few patients also have episodes of migraine with an aura and without aura. Migraines are associated with major depression bipolar disorder, anxiety disorder and OCDs (Obsessive Compulsive disorders). These psychiatric disorders are approximately 2-5 times more common in people without aura and 3-10 times more common in people with aura. Diagnosis of migraine usually made by symptoms during attack and during latent period. The diagnosis of migraine without aura, according to International Headache Society, can be made by criteria given by it. Once a diagnosis of migraine has been established, it is important to assess the extent of a patient's disease and disability. The Migraine Disability Assessment Score (MIDAS) is a well – validated, easy-to-use tool.^[4] There are 4-possible phases of migraine although not all the phases are necessarily happened.

- (i) Prodrome phase, which occurs hours a day before headache.
- (ii) The aura phase, which immediately proceed the headache
- (iii) The pain phase, also known as headache phase
- (iv) Postdrome phase, the effects experienced flowing the end of migraine attack.

While most sufferers experience attacks once or twice a month, more than 4 million people have chronic daily migraine, with at least 15 migraine days per month. Beyond the burden of a migraine attack itself, having migraine increases the risk for other physical and psychiatric conditions.

Present treatment and its side effect in modern: Drug therapy of migraine has to be individualized. Mild migraine should be treated with simple analgesics/NSAIDs or their combinations and antiemetic. In moderate migraine NSAIDs combinations/a triptan/ergot alkaloids and antiemetics, prophylactic therapy is advised only when attacks are more frequent than 2-3 per month. Severe migraine attack need specific drugs have to prescribed along with antiemetics, like a triptan/ergot alkaloid plus prophylaxis, propranolol/other beta blockers, amitriptyline/other tricyclic

antidepressants, flunarizine/other calcium channel blockers, valproate/topiramate. Prophylactic regimens lasting 6 months or more are recommended.^[5] The modern drugs have their side effects like drug dependence and drug withdrawal syndrome, relapse of headache within hours and chances of getting chronic headache.

The symptoms of migraine can be symptomatically correlated with *Ardhavybhedaka* which has been mentioned under *Shiroroga* by our *Aacharyas*. *Ardhavybhedaka* has severe complications even it can destroy the sense organs and it can produce complication like deafness, blindness.^[2] In this review, we discuss the epidemiology and risk factors for migraine and evaluate diagnostic strategies and therapeutic regimens for the management of migraine i.e. *Nasya* through *Nagarksheera*.

DISCUSSION

Ayurveda emphasizes preventative and healing therapies along with various methods of purification and rejuvenations. *Ayurveda* is more than a mere healing system; it is a science and art of appropriate living which helps to achieve longevity. It can also guide every individual in the prevention of disease and long-term maintenance of health. To achieve this balanced state of body, mind and consciousness *Ayurveda* prescribes *Panchkarma* therapy for the cleansing of body toxins. *Acharya Susruta* has considered *Ardhavybhedaka* as *Tridoshajavyadhi* and *Acharya Charaka* and *Acharya Vagbhatt* have considered it *Vata pradhaan vyadhi*. *Nasya* helps to eliminate vitiated *Dosha* that accumulate in the body. A detailed description on *Nasya* is available in *Ayurveda*. *Nasya* therapy is a process where in the drug (herbalised oils and liquid medicines) is administered through the nostrils. If it is performed systematically the therapy cleanses and opens the channels of the body, because – “*Nasaahisirsodwaram*”^[10], thereby improving the process of oxygenation (*prana*), which has a direct influence on the function of the brain. Thus, *Nasya* therapy is considered as one of the most promising treatment for all the *Urdhavajatrugata vikaras*.

MODE OF ACTION OF NAGARKSHEERA NASYA

The *Nagar* (*shunthi*, ginger) in *Nagarksheera*; has *katurasa*, *laghu* – *snigdha guna*, *ushna virya*, *madhura vipaka* and *kapha-vatashamaka*^[3,10], as given in this table.

Latin name	Rasa	Guna	Virya	Vipaka	Dosha-Karma
<i>Zingiberofficinale</i>	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Kapha-Vatashamak</i>

It is believed that ginger may block prostaglandins, which stimulate some muscle contractions, control inflammation and impact some hormone. And the *Ksheera* (cow milk) increases *ojas* having the same properties due to similarity. Hence cow milk has been said as the best one among vitalizers and as *Rasayana*. So, the *Nagarksheera* nasya may prevent and stopped the migraine by stifling the action of prostaglandins and nourishes the neurovascular system and eliminated the vitiated *Doshas*. As according to Acharya Charaka, 'nose is the doorway to the brain & consciousness'. An excess of bodily humors accumulated in the sinus, throat, nose or head areas is eliminated by means of the nearest possible opening, the nose. In our day to day life due to medicines, tobacco, alcohol, irregular food habits, sleeping disturbance, pain killers, antibiotics, oral-contraceptives, steroids, suppression of urges, mental stresses, depression, night awaking and day sleeping mankind get *Shirogata rogas* and suffered from many painful diseases. About 60% of people are suffering from *shirogata rogas* and having other complications. So, it is the demand of to know about *Nasyakarma* in *Panchakarma* and its importance by which a common man gets healthy life without having any disease.

Hence *Nagarksheera* nasya has been selected from *Chakradutta's Shiroroga Chikitsa prakarana*. *Nagarksheera Nasya* is capable of breaking the *Samprapti* of *Ardhavybedaka* with its action of *katu rasa* (*shunthi*), *laghu-snigdha guna* (*shunthi*) which helps in removing *kapha avarodha* and leads to *Vata shaman* and relieves pain, and the *Ksheera* nourishes nerves, gives mental and physical strength.

“नागरकल्कविमिश्रं क्षीरं नस्येन योजितं पुंसाम्।
नानादोषोद्धूतां शिरोरुजां हन्ति तीव्रतराम्॥”
(चक्र.शिरोरोग चिकित्सा प्रकरण /22)

In *Nasya Karma* the medicine is put into nostril moves in the channels up to the *Shringataka* spreads to whole of the interior of the head and to the junction place where all the channels related to eyes, ears, throat situated together thus shows influence on *Shiras* by removing out the accumulated *Doshas* localized in *Shiras* i.e. from all sinuses in the skull the action known as *Shirovirechan*. The olfactory nerves entering olfactory mucosa of nose carry the sheaths Dura, arachnoids and pia with them. They directly enter into the brain. Olfactory strait are extensively connected to the limbic system Stimulation can nourishment of nerve ending through *Nasya* alters the pathology of migraine. Thus, it can be said that this formulation lowers headache and all the associated symptoms of migraine.

CONCLUSION

Ardhavybedaka is *Vatakapha pradhaan Shiroroga*, the symptoms complex of which very well correlate to that of migraine. Most of the *Nidans* which includes *aharaja*, *viharaja* and *manasika* factors etc. are mentioned in our classics go in similarly with migraine triggers, which has active part in diagnosis and in planning first line of treatment i.e., “*Nidanparivarjan*”. This study is done for the analysis of the efficacy of *Nagarksheera Nasya* in the management of Migraine (*Ardhavybedaka*).

REFERENCES

1. <http://www.migraines.org/migraine/article/html> and <http://www.nym.org/healthinfo/docs/062/doc62medicat.html>; 2013 .
2. Agnivesha: Charak Samhita revised by Charak and Dridhabala with Ayurveda Dipika commentary by Chakrapani Datta; Edited by Vaidya Jadavaji Trikamji Acharya; Published by Chaukhambha Prakashan; Varanasi; edition 2011 Siddhi Sthan, 1067-1068.
3. Bhavmishra – Bhavprakash Nighantu specification by Vishvanath Dwiwedi Shastri published by Motilal Banarasilal publisher Pvt. Ltd Edition, 2015; 12-13.
4. Braunwald, Fauci, Kasper, Hauser, Longo, Jameson, Harrison's principles of internal medicine, 19th ed, 2586-2593.
5. K.D. Tripathi, Essentials of medical pharmacology. Sec.1, general pharmacological principal 6th ed. Jaypee brother's medical publishers, 2009; 176-178.
6. Sushruta samhita with Nibandha Sangrah commentary of Acharya dalhana, edited by Vaidya Jadvji Trikamji Acharya and Narayan Ram Acharya Kavyatirtha; Published by Chaukhambha Sanskrit Sansthan, Varanasi; Edition 2009; Uttar Tantra, 166-167.
7. http://www.who.int/mediacentre/factsheets/fs_277/en and Cephalgia, an international journal of headache disorders, black well publishers, Vol 24, supplement second edition, 2004.
8. Davidson's principle of medicine, Neurological disease, Christopher Haslett, Edwin R. Chilvers, 19th ed., Churchill Livingstone, 2002.
9. Chakrapani, Chakradatta, commentary by Dr. Indradev Tripathi shirorogachikitsa Prakarana, edited by, Acharya Ramanathdwiwedi, 3rd ed. Chowkhambha Sanskrit samsthan, Varanasi, 1997; 372.
10. Prof.P.V.Sharma. Sharma. Sharma, Dravyagunavignana, vol-2, Chaukhambha Bharti academy. Varanasi, 13th ed, 1992; 332-335.
11. Vagbhat Ashtanga Hridaya, Sarvangsundari commentary, sutrasthana 20th chap, edited by Dr. Lalchandra Vaidya, published by Motilal Banarsidas, Newdelhi, 2005.