

AN AYURVEDIC MANAGEMENT OF TRIGEMINAL NEURALGIA

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ABSTRACT

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Trigeminal neuralgia is defined as pain in the distribution of one or more branches of the trigeminal nerve. Out of the 12 pairs of cranial nerve it is the 5th cranial nerve and comprises of both sensory and motor fibres. In *Ayurveda* out of the 11 *Shirorogas* mentioned the symptoms of trigeminal neuralgia can be nearly co-related to *Anantavata*, *Ardhavabhedakam* and *Vataja Shirashoolam*. It is a disease occurring in the *Madhyama rogamarga*. *Shiras* is a *Marma* and is also considered as the *Moola*(root) of the body. Hence diseases affecting the *Shiras* should be treated quickly so that the function of the *jnanendriyas*(sensory organs), *karmendriyas* (motor organs) are not altered and also the mind and body are kept in healthy state. This study is carried out to understand Trigeminal Neuralgia from *Ayurvedic* perspective and also to manage it with necessary *Shodhana* and *Shamana* therapy.

KEYWORDS: Trigeminal Neuralgia, *Anantavata*, *Ardhavabhedaka*, *Vataja Shirashoolam*, *Shodhana* and *Shamana* therapy.

INTRODUCTION

Shiras(head) is one amongst the *trimarmas*(vital organs) in our body. It is of great importance because it is the seat of *Prana Vayu* and also all the *Jnanendriyas*(sense organs). The *masthishka*(head) in the upper part is known as the root of the body. The various sensory nerves entering the brain and the motor nerves coming out of the brain and supplying various organs of our body are known as the *shakha*(branches).^[1] The *Prana Vayu* gives *prerana*(stimulus) to the *manas*(mind) and the *manas* enables the *jnanendriyas*(sense organs) to perceive their respective objects and the *Karmendriyas*(motor organs) to perform their respective functions.^[2] Trigeminal neuralgia is also one such disease affecting the head which gives rise to different kinds of pain of varying intensity in 1, 2 or all the three branches of the trigeminal nerve. The symptoms of Trigeminal Neuralgia show similarities with diseases like *Anantavata*, *Ardhavabhedhaka* and *Vataja Shirashoolam* mentioned amongst the *Shirorogas* in *Ayurveda*. Out of the *tridoshas* there is predominance of *Vata dosha* in Trigeminal Neuralgia due to the presentation of various kinds of excruciating pain. The pain has significant effect on the daily activities of a person. People live in fear of when they would get the next attack of pain and what would be its severity. It can lead to sleep disturbances, severe depression and anxiety.

MATERIALS AND METHODS

The content of this study is based on the review of the various *Ayurvedic* literature, modern books and journals. The materials thus obtained about Trigeminal Neuralgia, *Anantavata*, *Ardhava bhedakam*, *Vataja Shirashoolam* and its management were collected, compiled, analyzed and discussed in this study.

1. Trigeminal Neuralgia

It is also called Tic Douloureux, is a chronic pain condition that affects the Trigeminal nerve, one of the most widely distributed nerves in the head.

Causes

- Compression from a blood vessel as the nerve exits the brain stem.
- Multiple Sclerosis.
- Stroke.
- Trauma.
- Tumor
- Arteriovenous malformation.

Pathogenesis

The above mentioned etiological factors leads to loss of Myelin around Trigeminal Nerve and produces various kinds of pain which is expressed by the patient as stabbing, electric shocks, burning, sharp, pressing, crushing, exploding or shooting pain in areas supplied by one, two or all the branches of the Trigeminal nerve. The patient also complaints of difficulty in chewing.

Branches of Trigeminal Nerve and its supply

- Ophthalmic branch controls sensation in a person's eye, upper eyelid and forehead.
- Maxillary branch controls the sensation in lower eye lid, cheek, nostril, upper lip and upper gum.
- Mandibular branch controls sensations in the jaw, lower lip, lower gum and some of the muscles used for chewing.^[3]

Types of Trigeminal Nerve

- Typical Trigeminal neuralgia.
- Atypical Trigeminal Neuralgia.

Symptoms of Typical Trigeminal Neuralgia

- Episodes of severe, sudden, shock like pain in one side of face. It lasts for seconds to few minutes.
- Group of these episodes can occur over a few hours.

Symptoms of Atypical Trigeminal Neuralgia

- It is a more prolonged pain of lower intensity that can be present for over 50% of the time.
- It is described more as burning or pricking rather than a shock.
- Some sufferers have a constant migraine like headache.

Treatment

- Internal medication.
- Surgery.

Internal Medication

Anticonvulsant drugs or combination of anticonvulsant and antidepressant drugs are used in the management of Trigeminal Neuralgia.

- Carbamazepine
- Oxcarbazepine.
- Lamotrigine.
- Gabapentin.
- Pimozide.
- Baclofen.

Surgery

- Micro vascular decompression.
- Balloon compression.
- Glycerol injection.
- Radiofrequency thermo coagulation rhizotomy.
- Stereotactic radiosurgery.

2. Ayurvedic understanding of Trigeminal Neuralgia.

Table No. 1: Nidana(Etiological factors) of Trigeminal Neuralgia.

<i>Anantavata</i>	<i>Ardhavabhedaka</i>	<i>Samanya shiroroga</i>
Fasting	Consuming excessive dry food	Exposure to excessive fumes, sunlight, snow.
Excessive grief	Consuming food before the digestion of previous meals	Excessive sleep
Excessive dry	Exposure more to the easterly winds	Being awake at night
Excessive cold	Excessive sexual intercourse	Excessive sweating in the head region
Consuming extremely less food. ^[4]	Doing excessive work than one's own body capacity	Psychological factors like excessive grief, stress etc
	Withholding the natural urges like defecation, sneezing, tears, sleep.	Exposure to easterly winds
	Excessive exercise. ^[5]	Excessive crying
		Withholding tears
		Excessive drinking of water
		Excessive drinking of alcohol
		Worm infestations

		Withholding the natural urges
		Avoiding application of oil on the head,taking bath.
		Seeing down or continuously straining your eyes.
		Exposure to bad smell.
		Excessive amadosha in the body.
		Indulgence in excessive speech. ^[6]

Samprapti Ghatakas of Trigeminal Neuralgia according to Ayurveda

Doshas – Prana Vayu, Vyana Vayu, Tarpaka Kapha.

Dushyas – Rasa dhatu, Rakta dhatu, Mamsa dhatu, Majja Dhatu.

Jnanendriya(sense organ) affected – Netra(eyes).

Sthanasamshraya – Shiras(head) and the Nadivaha samsthana(nerves) carrying sensory impulses to the brain and motor impulses to the area supplied by the Trigeminal nerve known as the fifth cranial nerve.

Agni – Jatharagnimandya and dhatwagnimandya.

The above mentioned etiological factors vitiate the *doshas* which in turn vitiates the *dushyas* and takes *sthanasamshraya* in the *Shiras(head)* and the branches of the 5th cranial nerve. Later on produces various kinds of unbearable pain in the areas supplied by the branches of this nerve and also difficulty in chewing. Thus giving rise to Trigeminal neuralgia.

Table No. 2: *Lakshanas(symptoms) of Trigeminal Neuralgia seen in Shirorogas mentioned in Ayurveda.*

<i>Anantavata</i>	<i>Ardhavabhedaka</i>	<i>Vataja shirashoola</i>
Excessive pain in the Manya(Sira marma located in the neck region)	Pain in the half part of head	Pricking pain in the temporal region of head
Excessive pain in the back of the neck	Pain in the manya(sira marma located in the neck region)	Tearing pain in the back of the neck
Pain in the eyes, eyebrows and temporal region of the head.	Pain in the eyebrows, temporal region of head.	Pain in between the eye brows
Tremor on the cheeks	Pain in the eyes, ears,forehead.	Exploding pain in the forehead
Eye diseases	Tearing pain, stabbing pain sharp, shooting or exploding pain.	Excessive pain and tinnitus in the ears

Lock jaw. ^[7]	Excessive pain can also lead to diminution in vision and hearing furtheron. ^[8]	Pain in the eyes as if being pulled from the socket
		Giddiness and emptiness in the head
		Pulsations in the Siras
		Stiffness in the shoulder and lock jaw Unable to bear the rays of light
		Watering from the nose
		Episode of pain starts all of a sudden then subsides after few minutes later on again reappears. ^[9]

Table No. 3: Chikitsa of Trigeminal Neuralgia seen in Shirorogas mentioned in Ayurveda.

<i>Anantavata</i>	<i>Ardhavabhedaka</i>	<i>Vataja shirashoola</i>
<i>Snehanam</i>	<i>Snehanam with chatu sneha in uttama matra.</i>	<i>Shiro Abhyanga</i>
<i>Swedanam</i>	<i>Shirovirechna</i>	Pinda sweda or Upanaha sweda with mamsa or dhanya
<i>Vatahara Karma</i>	<i>Kayavirechana</i>	<i>Sechanam with ksheera processed by vatahara drugs</i>
<i>Nasyam</i>	<i>Nadisweda</i>	<i>Snigdha nasya</i>
<i>Tarpanam</i>	<i>Purana ghritham</i>	<i>Snigdha dhooma</i>
<i>Siramokshan.</i> ^[10]	<i>Vasti karma</i>	<i>Shiro tarpana</i>
	<i>Upanaha</i>	<i>Karna tarpana.</i> ^[12]
	<i>Shirovasti</i>	
	<i>Dahana karma.</i> ^[11]	

3. Shodhana Karmas that can be done in Trigeminal Neuralgia.

➤ Vasti(Enema Therapy)

i. Vata nashak vasti

- Bilva, Agnimantha, Shyonaka, Kashmarya, Patali.
- Shalaparni, Prishniparni, Brihati, Kanthakari, Eranda moola.
- Yava, Kulatha, Kola, Sthira. These drugs are utilized to prepare kwatha and mixed with ghritham, tailam, vasa, majja, mamsarasa and used to give vasti.^[13]

ii. Yapana vasti

- Mustadi yapana vasti can be used.^[14]

iii. Madhutailika vasti.

iv. Kshiravasti processed with Vatahara dravyas can be used.

➤ **Virechana(purgation therapy)**

- i. *Nimbamrithadi erandam.*
- ii. *Gandharvahasta erandam.*

These formulations can be used for *virechana*.

➤ **Nasyam(nasal therapy)**

- i. *Ksheerabala.*
- ii. *Mahamayur ghritham.*
- iii. *Kakolyadi ghritham.*
- iv. *Rasnadi tailam*
- v. *Baladi tailam*
- vi. *Traivrut tailam.*

➤ **Rakta Mokshana(bloodletting therapy)**

Other Therapies

➤ **Snehapana(intake of sneha)**

- i. *Varanadi ghritham.*
- ii. *Vidaryadi Ghritham*
- iii. *Mayur ghritham.*
- iv. *Purana ghritham.*
- v. *Guggulutiktaka ghritham.*
- vi. *Bala tailam.*

➤ **Swedana Therapy(sudation)**

- i. *Nadi Sweda* with *vatahara dravyas* or *Ksheera dhoomam*(milk processed with *vatahara* drugs) can be used.
- ii. *Pinda sweda* and *upanaha sweda* with meat of fish or *krushara*(*yavagu* prepared with *til*, *tandula*,*masha*).

➤ **Murdha Tailam**

- i. *Shiro Abhyanga.*
- ii. *Shiro Seka.*
- iii. *Shiro pichu.*
- iv. *Shirovasti.*

These are the 4 *Murdha Tailam* described in *Ayurveda*.^[15]

Some of the medicines that can be used in these procedures are as follows:

- i. *Ksheerabala tailam*
- ii. *Triphaladi tailam*.
- iii. *Balahatadi tailam*.
- iv. *Baladhatryadi tailam*.
- v. *Tungadrumadi tailam*
- vi. *Narayana tailam*.
- vii. *Prasarani tailam*.
- viii. *Shatavari tailam*.

➤ ***Shiro Lepas***

- i. *Chandana, Utpala and Kushta* are made into fine powder and made into paste and applied on the forehead.
- ii. *Sariva, Nilotpala, Kushta, Madhuka* are made into fine powder, macerated with *kanji*, mixed with *ghritham* or *tailam* and applied to the forehead.
- iii. *Shatavari, Nilotpala, Durva, Tila, Krishna, Punnarnava* are macerated with suitable fluids and applied on the forehead.
- iv. *Sariva, Kushta, Madhuka, Vacha, Krishna, Utpala* are macerated with *kanji*, mixed with *ghritham* or *tailam* and applied on forehead.
- v. *Kushta* or flowers of *Muchukundha* are macerated in *kanji*, mixed with *eranda tailam* and applied on forehead.
- vi. *Devadaru, Natam, Kushtam, Naladam, Vishvabheshajam* are macerated with *kanji*, mixed with *eranda tailam* and applied on forehead.^[16]

➤ ***Netra Tarpana***

- i. *Jivanthyadi ghritham*.
- ii. *Patoladi ghritham*.

➤ ***Karnapoorana***

- i. *Kshara tailam*.
- ii. *Bilva tailam*.

- *Snaihika dhoomapana*(Inhaling smoke)
- *Snaihika Gandusha*(withholding medication in the mouth).

- i. *Tila tailam*
- ii. Milk processed with *vatahara* drugs.
- iii. *Mamsarasa*.

4. *Shamana Aushadas* that can be used in Trigeminal Neuralgia

- i. *Drakshadi kashayam*.
- ii. *Vidaryadi kashayam*.
- iii. *Maharasnadi kashayam*.
- iv. *Rasnaerandadi kashayam*.
- v. *Prasaranyadi kashayam*.
- vi. *Mahamanjisthadi kashayam*.
- vii. *Varanadi kashayam*.
- viii. *Dashamoolakatutrayam kashayam*.

These decoctions can be used in the management of Trigeminal Neuralgia.

5. *Rasayanas* that can be used in Trigeminal Neuralgia.

- i. *Mandukaparni swarasa*.
- ii. *Yashtimadhu choornam* with milk.
- iii. *Guduchi swarasa*.
- iv. *Shankapushpi kalkam*(alongwith moolam and pushpam).
- v. *Naladadi ghritham*
- vi. *Pancharavinda Rasayanam*.
- vii. *Chatuskuvalaya Rasayanam*.
- viii. *Brahmi Rasayanam*.^[17]
- ix. *Vidaryadi Rasayanam*.
- x. *Narasimha Rasayanam*.
- xi. *Chyavanaprasam*.

6. *Aahara*(diet) that can be used in Trigeminal Neuralgia

- Include *ghee* in the diet.
- Black gram, green gram and horse gram are cooked in *ghee* and consumed in the dinner and following which hot milk is taken.

- Milk consumed along with *Tila tailam* or with *Tila kalakam*.
- Meat soup of chicken or mutton is consumed.
- Consume *snigdha dravyas* and drink milk processed with *Vatahara* drugs.
- *Anna*(rice) processed with milk, added with sugar, *ghee* and *sugandha dravyas* like *elaichi* can be given.
- *Vatapitta dravyas* should be used as *Aahara*.^[18]
- *Madhumastaka*(malpuva).
- *Samyava*(halwa).
- *Ghrutapura*(lapsi cooked with ghritham and sugandhi dravyas).

DISCUSSION

1. According to *Ayurveda*, depending upon the causes and symptoms Trigeminal Neuralgia can be nearly related to *Anantavata*, *Ardhavabhedaka* and *Vataja Shirashoolam*.
2. Amongst the *Tridoshas* there is predominance of *Vata* followed by *Pitta* and then *Kapha*.
3. Since there is predominance of *Vata Dosha*, *Vasti*(enema therapy) is the best *Shodhana* therapy in the management of Trigeminal Neuralgia.
4. In the association of *Vata Pitta dosha*, *Virechana*(purgation therapy) can be used to eliminate *doshas* from the body.
5. For *Nasya* during predominance of *VataPitta* dosha medicated *ghritham* is used, in the predominance of *Vata dosha* *tailam* is used and in the predominance of *VataKapha dosha* firstly *Avapidaka nasyam* used followed by *nasyam* with medicated *ghritham*.
6. One of the causes of Trigeminal Neuralgia is compression from blood vessel as the nerve exits the brain stem. In this condition *Siramokshana*(blood letting therapy) is found to be effective.
7. The causes of Trigeminal Neuralgia leads to loss of Myelin around the Trigeminal nerve and Myelin according to *Ayurveda* can be considered under *Slaishmika varga*.
8. *Snigdha sweda* is advised to prevent aggravation of *Vata Dosha* and also excessive *ruksha swedam* is hazardous to the brain and sense organs.
9. This disease on a long run can affect the normal functioning of eyes and ears. Hence *Netra Tarpana* and *Karnapoorana* are advised.
10. *Shiro lepas* are few local application which pacifies the pain temporarily in the head region.
11. Trigeminal Neuralgia leads to sleep disturbances, depression, anxiety etc hence *Medhya Rasayanas* can be used in the management of Trigeminal Neuralgia.

12. *Aahara*(diet) of good quality and quantity when consumed gives a long life span, stable *Agni* good *Bala* to the *Sharira*, *Manas*, *Indriyas* and also good immunity to fight the diseases.

CONCLUSION

1. Trigeminal Neuralgia is the disease affecting the *Shiras* which is a *marma*. Hence it should be treated effectively as soon as possible.
2. *Vata dosha* in its normal state gives stimulus to the proper functioning of *Manas*. Due to its vitiation the person witnesses many problems like depression, anxiety and sleep disturbances.
3. *Rasayana therapy*(Rejuvenation) will restore the *dhatu kshaya* and the *Medhya Rasayanas* particularly will help in increasing *buddhi*, *medha* and give good *bala* to the body.
4. Nose is the door to the *Shiras*(head). Hence *Nasya* therapy is very effective in the management of *Shirorogas* like Trigeminal Neuralgia.
5. The disease when does not subside with *sneha*, *sweda*, *nasya* etc therapies then Bloodletting therapy is advised.
6. *Murdha tailam* is advised in Trigeminal Neuralgia to give good nourishment to the *Shiras*(head), to strengthen the nerves and pacify the aggravated *Vata* or *VataPitta dosha*.
7. *Netra tarpana* and *Karnapoorana* therapy helps in preventing diminution of vision and hearing disabilities on a long run.
8. According to *Samanya Vishesha Siddhanta* the loss of Myelin in Trigeminal Neuralgia is restored by use of *Snigdha dravyas* like *ghritham*, *tailam*, *vasa*, *majja*, *mamsa rasa*, milk etc and following *Vata Pittahara Aahara*(diet) and *Vihara*(activities).

REFERENCES

1. Kaviraj Atrideva Gupta edited *Ashtanga Hridayam, Uttaraasthanam, Adhyaya 24*, verse 58, Chaukhambha Prakashan, Varanasi, 2016; 734.
2. Vaidya Jadavji Trikamji edited *Charaka Samhita, Sutrasthana, Adhyaya 12*, verse 8, Chowkhamba Krishnadas Academy, Varanasi, 2006; 79.
3. K sembulingam, Essentials of Medical Physiology, 7th edition, Jaypee Brothers Medical Publishers Ltd, New Delhi, 2016; 863.
4. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhistanam, Adhyaya 9*, verse 84, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1293.

5. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 9*, verse 74, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1291.
6. Kaviraj Atrideva Gupta edited *Ashtanga Hridayam, Uttaraasthanam, Adhyaya 23*, verse 1-2, Chaukhambha Prakashan, Varanasi, 2016; 726.
7. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 9*, verse 85, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1293.
8. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 9*, verse 75-76, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1291.
9. Kaviraj Atrideva Gupta edited *Ashtanga Hridayam, Uttaraasthanam, Adhyaya 23*, verse 3-6, Chaukhambha Prakashan, Varanasi, 2016; 726.
10. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 9*, verse 86, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1293.
11. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 9*, verse 77-78, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1291.
12. Kaviraj Atrideva Gupta edited *Ashtanga Hridayam, Uttaraasthanam, Adhyaya 24*, verse 1-3, Chaukhambha Prakashan, Varanasi, 2016; 729.
13. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 10*, verse 19-20, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1303.
14. Dr. Brahmanand Tripathi edited *Charaka Samhita, Siddhithana, Adhyaya 12*, verse 15, Chaukhambha Surbharati Prakashan, Varanasi, 2005; 1324.
15. Kaviraj Atrideva Gupta edited *Ashtanga Hridayam, Sutrasthanam, Adhyaya 22*, verse 23, Chaukhambha Prakashan, Varanasi, 2016; 734.
16. Dr. Brahmanand Tripathi edited *Sarangadhara Samhita, Uttara khandam, Adhyaya 11*, verse 62-63, Chaukhambha Surbharati Prakashan, Varanasi, 2007; 400.
17. Kaviraj Atrideva Gupta edited *Ashtanga Hridayam, Uttaraasthanam, Adhyaya 39*, verse 44-53, Chaukhambha Prakashan, Varanasi, 2016; 815-816.
18. Dr. Anant Ram Sharma edited *Susruta Samhita, Uttaraasthanam, Adhyaya 26*, verse 37-38, Chaukhambha Surbharati Prakashan, Varanasi, 2012; 196.