



JALAUKAVACHARNA IN MANAGEMENT OF TRIGEMINAL NEURALGIA WITH SPECIAL REFERENCE TO ANANT VATA - A CASE REPORT

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ABSTRACT

Trigeminal Neuralgia is an extremely painful condition that affects the cranial nerve V (fifth) known as trigeminal nerve, one of the facial nerves which is widely distributed in the head. It is known for causing sudden, severe, electric shock like facial pain, typically on one side of face. Main symptoms involve intense facial pain, which is brief, stabbing and recurrent. Pain typically affects cheek, jaw, teeth, gums and lips. Management of this disease can be done by medications like carbamazepine, oxcarbazepine and anticonvulsants. If medicines are not effective then surgery is the choice, but reoccurrence can occur.

A 52 years old female patient a diagnosed case of Trigeminal Neuralgia and was treated with allopathy medications including carbamazepine at a dosage of 200 mg twice daily, baclofen at 50 mg twice daily, and lamotrigine at 200 mg twice daily for a duration of two months she not got any relieve in symptoms. Later patient came with presenting complaints of excruciating pain localized to the left cheek to OPD Dept of Shalya Tantra, PTKLS Bhopal for further treatment on the basis of sign and symptoms Diagnosed as *Ananta Vata*. Leech therapy was provided to the patient and signs and symptoms were assessed before and after the treatment. The leech therapy was found to be the ultimate choice of treatment for relieving symptoms and pain reduction, thus effective in trigeminal neuralgia.

Keywords- *Anant Vata* , Trigeminal Neuralgia, *Jalaukavacharana*, Leech therapy.

INTRODUCTION: Trigeminal Neuralgia is a chronic neuropathic affliction that impacts the trigeminal nerve (cranial nerve V), which transmits sensory information from the face to the brain.⁽¹⁾The trigeminal nerve is a paired cranial nerve comprising three principal branches: V1 - the ophthalmic nerve, V2 - the maxillary nerve, and V3 - the mandibular nerve. This condition predominantly affects the lower branch, known as the mandibular branch (V3)⁽²⁾. It is regarded as one of the most excruciating conditions and has historically been deemed a "suicidal

disease."The pain manifests as sudden, intense, and electric shock-like sensations in the facial region, often triggered by stimuli such as light touch, chewing, or speaking.

Management of this ailment typically involves pharmacological interventions, including carbamazepine and anticonvulsants, which serve to mitigate nerve excitability. Surgical options encompass micro-vascular decompression; however, these are not definitive remedies and carry potential complications such as stroke, hearing loss, seizures,

cerebrospinal fluid leakage, and diplopia.⁽³⁾

In the realm of Ayurveda, *Acharya Sushruta* articulated the concept of *Anant Vata*, classified among the eleven *Shirorogas*. This condition is primarily attributed to *Vata Pradhana Tridosh*. Its manifestations include excruciating pain in the regions surrounding the eyes, eyebrows, cheeks, and temporal areas of the head. Given the striking similarity of these symptoms to those of trigeminal neuralgia, a compelling correlation can be drawn between the two.

CASE REPORT:

A 52 years old female patient came to OPD Dept of Shalya Tantra, Pt. Khushilal Sharma Ayurvedic College and Hospital Bhopal. OPD no. 20240039720 dated 08 June 2024 with presenting complaints of with exhibiting symptoms of excruciating pain localized to the left cheek. Specific movements elicited intense, shock-like sensations. Commonly restricted activities included speaking, smiling, chewing, brushing her teeth, washing her face, and even exposure to wind or light touch around the mouth. A Patient was diagnosed case of trigeminal neuralgia. This condition has persisted for ten years, with episodes of pain on the left cheek lasting between five to ten minutes. The frequency of these painful episodes was reported to be three to four occurrences per week, with triggers identified as light and sunlight. This clinical presentation was diagnosed as Trigeminal Neuralgia with Concomitant Persistent Pain, classified as Atypical Trigeminal Neuralgia or Type 2.

History of Present Illness: -

The patient exhibited normalcy a decade ago. Gradually, she began to experience symptoms resembling electric-shock-like

facial pain and also restricted jaw movements. The episodes of pain persisted for approximately 5 to 10 minutes and were precipitated by exposure to light and sunlight. She underwent treatment with allopathic medications, including carbamazepine at a dosage of 200 mg twice daily, baclofen at 50 mg twice daily, and lamotrigine at 200 mg twice daily for a duration of two months; however, she experienced no relief.

PAST HISTORY:

The patient had undergone dental treatment involving root canal surgery two months prior. There was no recorded history of Diabetes Mellitus or hypertension.

PERSONAL HABITS

Ashtavidha pariksha-

Nadi : Vata pradhan kaphaj Nadi

Mala : Normal, one time per day.

Mutra : four to five times in day, one time in night

Jihva: coated, yellowish

Shabda: normal

Sparsha: normal

Drika: Normal

Akrati : Medium

Dashvidha pariksha –

Prakriti- vata kaphaj

Vikriti – Vata dosha

Sara- Asthi Sara purush

Samhanana – madhyam

Pramana- madhyam

Satmya- Shadarasa satmya

Satva- Pravara satva

Ahara shakti-madhyam

Vyayama shakti- madhyam

Vaya -madhyam

Vitals of the patient-

Blood pressure- 120/80 mmHg

Pulse rate – 75/min

Temperature- Afebrile

Respiration rate – 16/min

Clinical Finding :

The case was documented on June 08 , 2024, in the outpatient department of Shalya Tantra at our hospital for further management. Blood pressure was recorded at 120/80 mmHg, and the pulse was 75 beats per minute. The patient's tongue exhibited a coated appearance. Neurological examination revealed that both speech and higher cognitive functions were intact.

Upon motor assessment, the strength and coordination of the arms and legs were within normal limits; however, there was a notable restriction in the movement of the mouth. An MRI of the brain, conducted on 10 May 2023 with a vertigo protocol, indicated the presence of vascular loops adjacent to the bilateral trigeminal nerves, accompanied by a mild displacement of the left trigeminal nerve.

DIAGNOSIS : On basis of sign and symptoms trigeminal Neuralgia clinically correlated with *Ananta Vata* .

TREATMENT PLAN:

Consent : A Informed written consent was taken from the patient before treatment.

Investigations : dated 24 May 2024

Hb- 10.08 gm/dl

Packed cell volume- 36.60%

RBC- 5.14 mill/mm³

RDW- 18.90%

BT- 4.5 mins

CT- 5 mins

HIV- non reactive

HbsAg – non reactive

Jalauka avacharana was planned in 7 days of interval for relief in symptoms .

Jalauka avacharana was done on 11/06/2024 on left cheek of face after all the essential blood investigations like CBC, Clotting time, Bleeding time, HIV, HBsAg, HbA1c(6.2) and all the findings were normal. After 1st sitting of this therapy there was 50% relief which was graded as five according to VAS scale (Visual Analog Scale) of pain and patient didn't get attack until next sitting however, oral medications continued.

Next 2nd sitting was done on 18/06/2024 and after which there was 80% reduction in symptoms graded as two according to VAS scale (Visual Analog Scale).

3rd sitting was done after 7 days and the patient got complete relief in symptoms of pain as graded zero over VAS (Visual Analog Scale).

Therapeutic Intervention and Timeline Protocol : Table no 1

No. of sittings of <i>Jalaukavacharana</i>				
Sitting no.	Interval	Procedure	Duration	Site
1.	<i>Jalaukavacharana</i>	1 st sitting 11/06/2024	30mins (Sushruta Samhita Sutra 13)	Left cheek of face
2.	<i>Jalaukavacharana</i>	2 nd sitting 18/06/2024	30 mins	Left cheek of face
3.	<i>Jalaukavacharana</i>	3 rd sitting 25/06/2024	30 mins	Left cheek of face

Image 1 AND 2 APLICATION OF LEECH THERAPPY



DISCUSSION :

Trigeminal neuralgia is a neuropathic condition which triggers by light or pressure over trigeminal nerve which causes stabbing pain & restricted movements of mouth.

According to *Acharya Sushruta*, Trigeminal neuralgia can be correlated with *Anantavata* which is aggravated by *Vata Pradhan Tridosh*. Which causes electric shock like pain at cheeks, eyes, temple of head. The Nidana of Anant Vata includes *Diwaswapna* (day time sleep), *Sheetambusevanam* (*drinking cold water*) , *Vataj ahara vihar* (*junk food*) . The *Samprapti* of this disease is when three *Doshas* (*Vata, Pitta ,Kapha*) gets exaggerated then cause symptoms like *Manya Peedan* (pain in back of neck) , eyes and eyebrows pain and *Hanugraha* (restricted movements of jaw). The treatment involves *Siravedh* and *Ghritha Poorna Bhojan* .

Jalaukavacharana was selected as a treatment protocol because it is used as 'bloodletting' or cleansing of impure blood. The leech in its saliva has got a chemical known as *hirudin* which has got anti-inflammatory and analgesic effects.⁽⁵⁾ Platelet derived growth factor (PDF) is assumed to play an important role in producing signals of neuropathic pain which is inhibited by *hirudin*.⁽⁵⁾ Also, *Eglins* are found which are potent anti-inflammatory agents that inhibit certain inflammatory factors (like *elastase* and *cathepsin G*) released by human granulocytes. By reducing inflammation, *eglns* contribute significantly to pain relief⁽⁶⁾. Also, *Destabilase* is found which is primarily known for its thrombolytic (clot-dissolving) properties, *destabilase* also possesses anti-inflammatory and antibacterial effects. By improving blood flow and reducing inflammation, it can indirectly aid in pain reduction.⁽⁷⁾ *Hyaluronidase* enzyme breaks down

hyaluronic acid, a component of the extracellular matrix. By degrading the matrix, hyaluronidase facilitates the penetration and spread of other bioactive molecules from the leech saliva into the tissues, allowing them to reach their target areas more effectively and thus enhancing their pain relieving actions⁽⁸⁾. Collagenase similar to hyaluronidase, collagenase also aids in tissue penetration by breaking down collagen. This helps the other therapeutic substances to reach the site of pain and inflammation. Antistasin and Hirustasin, are protease inhibitors with analgesic and anti-inflammatory effects .⁽⁵⁾ Leeches remove vitiated blood to act like micro vascular decompression & thus cause analgesic action.

CONCLUSION

On the basis of obtained results, the study shows *Jalaukavavcharana* has significant results in Trigeminal Neuralgia in reducing symptoms like facial electric shock pain, restricted movements of jaw with no reoccurrence of the disease. In conclusion, the successful application of leech therapy in the management of Trigeminal Neuralgia (TN), particularly when viewed through the lens of *Anantavata* in Ayurveda, offers a compelling testament to its therapeutic potential for this notoriously debilitating condition.

Trigeminal Neuralgia, characterized by excruciating, paroxysmal facial pain, finds a strong parallel in the Ayurvedic concept of *Anantavata*. As discussed in the *Dashvidha Pariksha*, *Anantavata* is predominantly a *Vata* disorder, marked by severe, often throbbing or piercing pain, indicative of aggravated *Vata* causing obstruction and derangement in the channels (*srotas*) supplying the head and facial nerves. The intense, often radiating nature of TN pain, along with its episodic and unpredictable presentation, aligns well with the erratic qualities of vitiated *Vata*.

Ultimately, the success of leech therapy in treating TN, especially when integrated with a comprehensive Ayurvedic approach that considers the individual's *Prakriti*, *Vikriti*, and the specific manifestation of *Anantavata*, lies in its ability to reduce nerve inflammation and compression by improving local blood flow and reducing edema, alleviate pain through direct analgesic effects and by addressing the underlying *Vata* imbalance causing the pain and restore physiological balance by facilitating the removal of *dosha* vitiation and improving tissue health in the affected area.

For patients suffering from the relentless agony of Trigeminal Neuralgia/*Anantavata*, successful leech therapy represents a significant step towards restoring comfort, reducing the frequency and intensity of attacks, and profoundly improving their quality of life, offering a powerful example of integrative healing.

REFERENCES

- Okeson, JP (2005). "6". In Lindsay Harmon. Bell's orofacial pains: the clinical management of orofacial pain. Quintessence Publishing Co, Inc. p. 114. ISBN 0-86715-439-X.
- Trigeminal neuralgia and hemifacial spasm by UF & Shands, The University of Florida Health System. Retrieved Mars., 2012.
- Bishan Kumar, Mamta, Ayurvedic management of Trigeminal Neuralgia by Jalauka Avacharana - An Experience. J Ayu Int Med Sci. 2023;8(6):279-282. Available From <https://jaims.in/jaims/article/view/2554>
- Dingari Lakshmanacharya. The Shalaky Tantra Diseases of Eye head and ENT. Chaukamba Sanskrit Sansthan, Varanasi, Edition 2011. Vol 2.pp no: 24.
- García PS, Gulati A, Levy JH. The role of thrombin and protease-activated

receptors in pain mechanisms. *Thromb Haemost* 2010;103:1145-51

6.Yadav YR, Nishtha Y, Sonjjay P, Vijay P, Shailendra R, Yatin K. Trigeminal Neuralgia. *Asian J Neurosurg.* 2017 Oct-Dec;12(4):585-597. doi: 10.4103/ajns.AJNS_67_14. PMID: 29114270; PMCID: PMC5652082.

7.Giorgio Cruccu, MD, Nanna B. Finnerup, MD, Troels S. Jensen, MD, PhD, Joachim Scholz, MD, Marc Sindou, MD, PhD, Peter Svensson, DDS, PhD, Dr.Odont, Rolf-Detlef Treede, MD, Joanna M. Zakrzewska, MD, and Turo Nurmikko, MD, PhD Trigeminal neuralgia New classification and diagnostic grading for practice and research

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8.Allam AK, Sharma H, Larkin MB, Viswanathan A. Trigeminal Neuralgia: Diagnosis and Treatment. *Neurol Clin.* 2023 Feb;41(1):107-121. doi: 10.1016/j.ncl.2022.09.001. PMID: 36400550.

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