



Case Study

AN INTEGRATED APPROACH THROUGH PANCHAKARMA IN THE MANAGEMENT OF TRIGEMINAL NEURALGIA W.S.R ANANTAVATA

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ABSTRACT

Anantavata is a Tridosha Pradhana vyadhi afflicting the Manya, Hanu, Shiras, Lalatadi Pradesha characterised by Teevra Ruja, Kampa in the affected parts, Hanu graha, Akshiroga. It can be correlated with trigeminal neuralgia, which is one of the most painful conditions known to the mankind and is most commonly caused due to compression of the root of trigeminal nerve. The pain is so severe that it affects the day-to-day activities of the patients eventually hampering the quality of life. In extreme conditions, it also leads to insomnia, psychological derangements and depression and makes the patient dependent on anti-depressants and analgesics for their lifetime. Hence an intervention, that focuses on the root cause, alleviates the pain, strengthens the affected part and prevents reoccurrence is quintessential. In the view of achieving the same, the following case study was taken up where a female patient aged 57 years, complained of numbness over whole face, shocking sensation over Rt. half of the face, hyperaesthesia and pain in neck radiating to B/L upper limbs since 4 years and was treated with Abhyanga, Parsisheka, Nasya, Shirodhara, Gandusha leading to a significant improvement in the signs and symptoms.

INTRODUCTION

Trigeminal Neuralgia is a severe paroxysmal, lancinating facial pain due to disorder of the 5th cranial nerve. The trigeminal nerve or the 5th cranial nerve, arises from the trigeminal ganglion at the level of pons. It is responsible for the sensation over the face and motor functions such as biting and chewing. Trigeminal nerve has three major branches namely Ophthalmic (V1), Maxillary (V2), Mandibular (V3). Due to its vicinity to other structures like the Superior cerebellar artery, posterior cerebellar artery, the 5th cranial nerve is prone to compression causing neuralgia. Various studies show that the main cause of trigeminal neuralgia is said to be demyelination of trigeminal sensory nerve fibres, mostly in the nerve root, rarely in the brain stem. Most commonly, demyelination is a resultant of compression over the

nerve fibres usually by an artery.^[1] Depending on the branch involved, presentations of the disease is variable. The lifetime prevalence of TN is estimated to be 0.16%–0.3%^[2]. It affects mainly adults, especially old people. It is more prevalent in women than in men (F:M ratio 3:2).

Trigeminal Neuralgia can be closely identified in Ayurvedic classics as Anantavata where there is Tridosha Vaishmya taking Sthana samshraya in Manyaadi Pradesha, characterised by symptoms like Akshi, Bhru, Shankhadeshe Teevra Ruja, Gandasya Parshwe Kampa, Hanugraha, Akshi Roga.^[3] Acharya Sushruta explains Vata-pittahara Kriya, and Suryavartavat Chikitsa for Anantavata which mainly emphasises on Nasya Kriya.^[4]

MATERIALS AND METHODS

Case Report

Female patient aged 57 years, complained of numbness over whole face, shocking sensation over Rt. Half of the face, hyperaesthesia, headache and pain in neck radiating to B/L upper limbs since 4 years.

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History of Present Illness

Female patient aged 57 years, a home-maker who is not a known case of diabetes mellitus, hypertension or thyroid dysfunction complained of numbness over whole face, shocking sensation over Rt. half of the face, hyperaesthesia, headache and pain in neck radiating to B/L upper limbs since 4 years.

Patient was asymptomatic 4 years ago. She initially developed pain in nape of the neck radiating to Rt. upper limb for which she did not seek any medical help. Gradually the complaints worsened, and patient slowly developed the above-mentioned symptoms. For this, she consulted elsewhere and was suggested to undergo MRA. The MRA was suggestive of vascular loop of SCA abutting the B/L trigeminal nerves, for which she was prescribed certain medications, details of which were not known to the patient.

As the patient was suffering with sleep disturbances and started experiencing psychological disturbances, she was later prescribed with venlafaxine 75mg (1-0-0).

Even after prolonged medication, as patient did not find any relief, she approached to our hospital.

History of Past illness

Not a known case of hypertension, diabetes mellitus or thyroid dysfunction.

Rogi Pareeksha

General Examination

Gait	Normal
Decubitus	Sitting
General appearance	Ill looking
Pallour	Absent
Icterus	Absent
Cyanosis	Absent
Clubbing	Absent
Lymphadenopathy	Absent
Edema	Absent

Systemic Examination

- **Respiratory system:** Normal vesicular breath sounds heard, no abnormalities detected
- **Cardiovascular System:** S1S2 heard, no added sounds
- **Gastrointestinal System:** P/A soft, non-tender
- **Musculoskeletal System:** Findings shown in Table no. 1

Table 1: Showing Findings of Musculoskeletal system examination

Gait	Normal
Spine	Inspection Curvature: Normal Deformity: Absent Scar marks: Absent Discolouration: Absent
	Palpation Tenderness: Present over cervical spine Doorbell sign: Positive over Cervical spine Warmth: Absent
Range of movements of spine:	Cervical spine – All movements are possible with pain Lumbar spine – ROM within normal limits
Special tests	Spurling sign - +ve Empty can sign - +ve

Central nervous system: Findings shown in Table no.2

Table 2: Showing Findings of Central Nervous system examination

Higher mental Function	Intact				
Cranial Nerves	Trigeminal Nerve Motor part: on Palpation of Masseter and trigeminal muscles: No abnormalities Detected Jaw Jerk: +++ Sensory part: Corneal reflex: Normal Sensation over face: Hyperaesthesia Associated with shocking sensation all over the face Other cranial nerves: No abnormalities detected				
Motor function		RUL	LUL	RLL	LLL
	Power	5/5	5/5	5/5	5/5
	Tone	Normal	Normal	Normal	Normal
	Bulk	Normal	Normal	Normal	Normal

Tendon Reflexes	Superficial			
	Abdominal: ++			
	Corneal: ++			
	Deep			
	Reflexes	Rt	Lt	
	Bicep	+++	+++	
	Triceps	+++	+++	
Supinator	+++	+++		
Knee	+++	+++		
Ankle	+++	+++		
Plantar	Extensor	Extensor		
Cerebellar signs	Rhomberg's sign: Negative			
	Co-ordination: Intact			
	Joint Position Sense: Intact			

Ashta sthana Pareeksha

<i>Nadi</i>	<i>Vata pittaja</i>
<i>Mala</i>	<i>Baddha</i>
<i>Mutra</i>	<i>Prakruta</i>
<i>Jihwa</i>	<i>Lipta</i>
<i>Shabda</i>	<i>Prakruta</i>
<i>Sparsha</i>	<i>Prakruta</i>
<i>Drik</i>	<i>Prakruta</i>
<i>Akriti</i>	<i>Sthoola</i>

Dashavidha Pareeksha

<i>Prakriti</i>	<i>Kapha Vata</i>
<i>Vikriti</i>	<i>Vata, Pitta, Kapha, Rasa, Rakta, Mamsa</i>
<i>Sara</i>	<i>Madhyama</i>
<i>Samhanana</i>	<i>Madhyama</i>
<i>Sattva</i>	<i>Avara</i>
<i>Satmya</i>	<i>Madhyama</i>
<i>Ahara shakti</i>	<i>Avara</i>
<i>Vyayama Shakti</i>	<i>Avara</i>
<i>Pramana</i>	<i>Sthoola</i>
<i>Vaya</i>	<i>Madhyama</i>

Roga Pareeksha**Samprapti Ghataka**

<i>Dosha</i>	<i>Vata pradhana Tridosha</i>
<i>Dushya</i>	<i>Rasa, Rakta, Mamsa, Asthi, Majja, Sira, Snayu</i>
<i>Agni</i>	<i>Jatharagni</i>
<i>Aama</i>	<i>Jatharagni maandya janya</i>
<i>Srotas</i>	<i>Rasa, Rakta, Mamsa, Asthi, Majja</i>
<i>Srotodushti</i>	<i>Sanga, Vimargagamana</i>
<i>Udbhava Sthana</i>	<i>Pakwashaya</i>
<i>Sanchara Sthana</i>	<i>Urdhwa jatru pradesha</i>
<i>Roga marga</i>	<i>Madhyama</i>
<i>Vyakta Sthana</i>	<i>Urdhwa jatru pradesha</i>
<i>Vyadhi swabhava</i>	<i>Chirakari</i>
<i>Sadhyasadhyata</i>	<i>Yapya</i>

Chikitsa Yojana**Table 3: Showing the treatment protocol that was followed**

From	To	Treatment	Observations
Day 1	Day 5	<i>Sarvanga Abhyanga</i> with <i>Sahacharadi Taila</i> followed by <i>Dashamoola Kashaya Parisheka</i> . <i>Shiroabhyanga</i> with <i>Ksheerabala taila</i>	Pain in nape of neck radiating to upper limbs reduced by 50%
Day 6	Day 12	<i>Mukhabhyanga</i> and <i>Shiroabhyanga</i> with <i>Ksheerabala taila</i> followed by <i>Nasya</i> with <i>Dhanwantaram</i> 101 drops 4ml in each nostril.	Hyperaesthesia over face reduced by 50%. Shocking sensation over face reduced by 50%. Recurrence of headache reduced.
Day 13	Day 19	<i>Shiroabhyanga</i> with <i>Ksheerabala taila</i> followed by <i>Shirodhara</i> with <i>Jatamansi siddha ksheera</i>	Reduction in hyperaesthesia upto 70%. Reduction in Shocking sensation by 70%. Headache reduced completely. Sleep quality improved
Day 1	Day 19	<i>Gandusha</i> with <i>Dashamoola Kashaya</i>	

Oral Medication during Treatment

1. *Vata vidwamsaka Rasa* 1-0-1 A/F
2. *Rasna Erandadi Kashaya* 10ml- 0- 10ml A/F
3. *Shirashooladi Vajra Rasa* 1-0-1 A/F

Oral Medication on discharge

1. *Pratimarsha Nasya*- KB101 2/2
2. Cap. Palsinuron 1-0-1 A/F
3. *Trayodashanga Guggulu* 1-1-1 A/F

RESULTS**Table 4: Showing the Results Before and After Treatment**

Symptoms	Before Treatment		After Treatment	
	Frequency	Grade	Frequency	Grade
Shocking sensation over face	20-30 times per day	3	<10 times	1
Hyperaesthesia	persistent	2	relieved	0
Headache	Persistent	3	Intermittent	0

Grading**Table 5: Showing the grading of the symptoms**

Grade	Hyperaesthesia	Headache	Attacks of shocking sensation
0	No hyperaesthesia	No headache	No attacks
1	Hyper sensitive to crude touch	Mild headache (able to carry out daily routine activities)	<10 attacks
2	Hypersensitive to Fine touch	Moderate headache (able to carry out routine activities, after taking analgesics)	10-20 attacks per day
3	Fine touch triggering shocking sensation	Severe headache (requires rest, pain does not subside even after taking analgesics)	20-50 attacks per day
4	-----	-----	>50 attacks per day

DISCUSSION

Trigeminal Neuralgia, also known as tic douloureux, is sometimes described as the most excruciating pain among the neurological pains. The pain can be triggered by an action as routine and minor as brushing teeth, chewing hard foods or the exposure to wind. Attacks may begin mild and short, but if left untreated, trigeminal neuralgia can progressively worsen^[5]. Although trigeminal neuralgia cannot always be cured, there are treatments available to alleviate the debilitating pain.

This can be correlated to *Anantavata* where there is *Tridosha Vaishmya* taking *Sthana samshraya* in *Manyaadi Pradesha*, characterised by symptoms like *Akshi, Bhru, Shankhadeshe Teevra Ruja, Gandasya Parshwe Kampa, Hanugraha, Akshi Roga*. *Acharya Sushruta* explains *Vata-pittahara Kriya, Sira Vyadhana* and *Suryavartavat Chikitsa* which mainly emphasises on *Nasya Kriya*. Other treatises also explain similar treatment along with *Vata pittahara ahara* like *Ghrutapooraka*.

Main aim of the treatment protocol is to-

- Lessen or block the pain signals.
- Decompress the trigeminal root from offending vessels if any.
- Nourish the trigeminal root.

With respect to the above, the treatment should mainly focus on removal of *Avarana*, *Vata-pitta Shamana* and *Brimhana*. Hence, initially, *Avaranahara Chikitsa* with *Sarvanga Abhyanga* with *Sahacharadi Taila* followed by *Dashamoola Kashaya Seka* was given for 7 days. During this course, pain in nape of neck radiating to B/L upper limbs reduced by 50% but facial symptoms persisted.

After this, a course of *Mukhabhyanga* and *Shiroabhyanga* with *Ksheerabala taila* followed by *Nasya* with *Dhanwantaram 101 Avarti taila* - 4ml in each nostril was done for 7 days in order to achieve *Vata shamana* and *Brimhana*, during which hyperaesthesia over face reduced by 50%, shocking sensation over face reduced by 50% and recurrence of headache reduced.

Mukhabhyanga

Mukhabhyanga is not just a pre-operative procedure to *Nasya*, but also holds its own importance in conditions like this where there is *Vata Prakopa* in *Urdhwajatru pradesha*. *Jatrurdhwa Pradesha* is the seat of *Prana vata*, it also supports the *Prakruta karma* of *Vyana vayu* which is *Utkshepana*, *Apakshepana*, *Nimeshana Unmeshanaadi Kriya*^[6] which are affected in this condition. Hence *Mukhabhyanga* with *Vatahara Sneha* helps in alleviating *Prakupita Vata*, and imparting *Bala* to *Manya*, *Akshi*, *Bhru*, *Lalataadi Pradesha*.

The gentle strokes of *Mukhabhyanga* with mild pressure have a soothing action over the facial muscles thereby bringing down the pain in the affected branch of trigeminal nerve. It also improves blood circulation to the face. In addition to this, there may be a release of endorphins, serotonin, dopamine as a common benefit of massage^[7].

Nasya

Nasya with *Dhanvantaram 101 Avarti taila* acts as *Vatahara* and *Balya* to the *Jatrurdhwa pradesha*. It is described as *Sarva Vata Vikaranut* and indicated in *Marmasthigata Vikara*.^[8] *Shiras* is one of the *Trimarma*. It is mainly *Kapha sthana* and in this condition, *Kapha sthana* is afflicted with *Vata*. Due to *Vatakaphahara* action of *Dhanvantara taila*, it is beneficial in this condition in removal of *Avarana*. As *Brimhana* is needed once the *Avarana* is cleared, *Pratimarsha nasya* with *Ksheerabala 101 Avarti taila* was advised as a part of discharge medicine.

Shirodhara

In order to tackle sleep disturbances and psychological derangements, *Shirodhara* with *Jatamansi siddha Ksheera* was performed for 7 days. During this period, reduction in hyperaesthesia upto 70%, reduction in Shocking sensation by 70%, complete alleviation of headache, improvement in quality of sleep were noted. *Shirodhara* produces constant pressure and vibration effect. Studies show that when there is a constant and uniform pressure is applied to a nerve, the generation of impulses is interrupted and relaxation is achieved.^[9] In trigeminal neuralgia, there is frequent generation of strong impulses which causes the recurrent shocking sensations and tingling over the face. Moreover, *Jatamansi* is renowned for its *Medhya*, *Rasayana*, *Nidrajanana* and *Manasarogaghna* properties,^[10] which was very much needed in the following case. Thus, with the help of *Shirodhara*, an arrest in production of shocking pain may be seen. Also, due to the tranquilizing effect and regulation of emotional and behavioural patterns, *Shirodhara* is also beneficial in addressing the sleep disturbances.

Gandusha

In addition to all the above, *Gandusha* with *Dashamoola Kashaya* was advised to the patient until *Gharna srava* or *Akshi srava* was noted. *Gandusha* is the procedure where a *Drava Dravya* is retained in the mouth without moving it. It is beneficial in *Manya*, *Shira*, *Karna mukhakshiroga*.^[11] *Gandusha vidhi* involves the use of muscles like buccinator, orbicularis oris, depressor anguli oris, depressor labii inferioris, and the action of retention of fluid involves active strength of the above muscles, thereby strengthening the facial muscles. *Dashamoola Kashaya* is beneficial in this condition due to its *Vatahara* action.

Shamanaushadhi

Along with *Bahirparimarjana chikitsa*, and *Nasya*, *Shamnoushadhi* like *Vata vidwamsaka Rasa*, *Rasna Erandadi Kashaya* and *Shirashooladi Vajra rasa* were prescribed. *Vata vidwamsaka Rasa*^[12] contains *Shuddha Parada*, *Shuddha Gandhaka*, *Naga Bhasma*, *Vanga Bhasma*, *Abhraka Bhasma*, *Shuddha Vatsanabha*, *Tamra Bhasma*, and other herbal ingredients like *Nirgundi*, *Triphala*, *Trikatu*, *Chandrasura* etc. It is indicated in *Vata vyadhi* and *Vatika Shula*. *Rasna Erandadi Kashaya*^[13] contains *Rasna*, *Erandadi*, *Sahachara*, *Devadaru*, *Dusparsha*, *Vasa*, *Vaari*, *Bala*, *Amruta*, *Ativisha* etc. It is both *Ama pachaka* and *Vatanulomaka*. It is particularly indicated in *Hanugata Vata* and *Shula*. *Shira shooladi vajra rasa*^[14] contains *Shuddha parada*, *Shuddha gandhaka*, in addition to *Loha Bhasma*, *Tamra Bhasma*, *Guggulu*, *Amalaki* and

other ingredients and is indicated in all types of *Shiroroga*.

With such a comprehensive and extensive management of Trigeminal Neuralgia w.s.r *Anantavata*, the patient had overall 70% improvement. At the time of discharge, she was prescribed with Cap. Palsinuron, which acts as a nervine tonic, *Trayodashanga guggulu*^[15] which has *Vatahara*, *Balya* action in addition to its anti-inflammatory and analgesic action and *Pratimarsha Nasya* with *Ksheerabala 101 avarti* drops. *Partimarsha Nasya* imparts *Soumanasya*, *Indriya Prasada*, improves *Nidra* and *Bala*. *Ksheerabala 101 Avarti* drops acts as *Brimhanakaraka* to the *Jatrurdhwa pradesha*. It is *Indriyaprasadaka*, *Rasayana* and it is the mainly indicated in treatment of *Vata vikara*^[16].

CONCLUSION

Trigeminal neuralgia w.s.r *Anantavata* is an extremely painful condition involving the head, neck and face and is mostly managed by analgesics, nervine tonics and anti-depressants or surgical decompression of the nerve root in contemporary medicine. Ayurvedic approach through *Bahirparimarjana Chikitsa*, *Panchakarma*, *Shamanoushadhi* has an upper hand, not just in providing symptomatic relief, but also in improving the quality of life and prevention of recurrence of the condition.

REFERENCES

- Seth Love, Hugh B. Coakham, Trigeminal neuralgia: Pathology and pathogenesis, Brain, Volume 124, Issue 12, December 2001, Pages 2347–2360, <https://doi.org/10.1093/brain/124.12.2347>
- Lambro G, Zakrzewska J, Matharu M. Trigeminal neuralgia: a practical guide. Pract Neurol. 2021 Oct; 21(5): 392-402. doi: 10.1136/practneurol-2020-002782. Epub 2021 Jun 9. PMID: 34108244; PMCID: PMC8461413.
- Acharya YT, ed. Susruta Samhita of Susruta with the Nibandha sangraha Commentary of Sri Dalhanacharya and the Nyayachandrika Panjika of Sri Gayadasacharya on Nidana sthana Chikitsasthana 25th chapter 13th-15th verse, Varanasi: Chaukhamba Surbharati Prakashan, edition reprint 2017, pn. 655
- Acharya YT, ed. Susruta Samhita of Susruta with the Nibandha sangraha Commentary of Sri Dalhanacharya and the Nyayachandrika Panjika of Sri Gayadasacharya on Nidana sthana Chikitsasthana 26th chapter 36th-37th verse, Varanasi: Chaukhamba Surbharati Prakashan, edition reprint 2017, pn. 658
- <https://www.aans.org/Patients/Neurosurgical-Conditions-and-Treatments/Trigeminal-Neuralgia>
- Pt. Paradakara HSS, ed. Astangahrdaya of Vagbhata with the commentaries Sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri, Sutra sthana 12th Chapter, 6th verse Varanasi: Chaukhamba Sanskrit Samsthan, 2016, pn. 193
- www.physio.co.uk/treatments/massage/physiological-effects-of-massage/hormonal-effects/increased-endorphins-serotonin-dopamine.php
- Niteshwar K, Vidyath R. Sahasrayogam, Text with English translation, Taila Prakarana Pno 109
- Divya, K., Tripathi, J. S., & Tiwari, S. K. (2013). An appraisal of the mechanism of action of shirodhara. Annals of Ayurvedic Medicine, 2(3), 114-117
- Purnima, Meenakshi Bhatt and Preeti Kothiyal. A review article on phytochemistry and pharmacological profiles of Nardostachys jatamansi DC-medicinal herb J Pharmacogn Phytochem 2015; 3(5): 102-106.
- Pt. Paradakara HSS, ed. Astangahrdaya of Vagbhata with the commentaries Sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri, Sutra sthana 22nd Chapter, 12th verse Varanasi: Chaukhamba Sanskrit Samsthan, 2016, pn. 300
- Asha Kumari, Premavati Tiwari. A complete treatise on Ayurveda, Yogaratnakara, part two, Vata vyadhi chikitsa Pno 619
- Pt. Parashuram Shastri Vidyasagar, ed. Sarangadhara Samhita by Pandita Sarngadharacharya, Kashaya Prakarana P.no 156
- Gyanendra Pandey. Shri Govindadadas Sen Kruta Bhaishajya Ratnavali, Volume Third, Shirorogadhikara 140-144
- Gyanendra Pandey. Shri Govindadadas Sen Kruta Bhaishajya Ratnavali, Volume Third, Vatarogadhikara 89-92
- Pt. Paradakara HSS, ed. Astangahrdaya of Vagbhata with the commentaries Sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri, Chikitsa sthana 22nd Chapter, 45th-46th verse Varanasi: Chaukhamba Sanskrit Samsthan, 2016, pn. 732

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