

Management of Post-Traumatic Trigeminal Neuropathy - An Ayurvedic Approach

Savita S Angadi

Author Affiliation: HOD & Professor, P.G. Department of Shalakya Tantra, KAHER's Shri B.M.K Ayurveda Mahavidyalaya, Belagavi, Karnataka 590005, India.

Corresponding Author: Savita S Angadi, HOD & Professor, P.G. Department of Shalakya Tantra, KAHER's Shri B.M.K Ayurveda Mahavidyalaya, Belagavi, Karnataka 590005, India.

E-mail: savita.angadi@yahoo.com

Received on 01.07.2019; **Accepted on** 16.08.2019

Abstract

Trigeminal neuropathy a chronic or recurrent pain in the area of trigeminal nerve distribution caused by trauma or injury. The incidence following injuries to the peripheral branches of the trigeminal nerve following implants, 3rd molar extractions, orthognathic surgery, mid-face fractures and root canal therapy is around 3-5%. Considering the wide prevalence of such injuries and procedures PTTN is suspected to be common. Although it may occur at any age typical age of onset is around 50 years, and patients are largely female. Prognosis of PTTN is poor. There is a limited response to available and recommended pharmacotherapeutic interventions. Peripheral surgical interventions aimed at pain relief are generally contraindicated; however microsurgical nerve repair may improve sensation. But whatever the line of treatment is there is having its own merits and demerits with limitations. Hence undoubtedly there is a need for an integrated therapeutic approach in PTTN. In this regard an effort was made to treat the PTTN and the study showed good results in the management of PTTN with a course of *Hanubasti* and *Nasya* along with some internal medications. A case report of 52-year-old female who presented with complaints of burning sensation and dull aching pain over the right side of the temporal, pre auricular, infraorbital and maxillary regions, pain in temporomandibular joint after chewing, continuous and loud talking, continuously since 2 years has been presented here.

Keywords: *Anantavata; Hanubasti; Nasya; Trigeminal neuropathy.*

How to cite this article:

Savita S Angadi. Management of Post-Traumatic Trigeminal Neuropathy: An Ayurvedic Approach. Indian J Ancien Med Yog. 2019;12(3):116-118.

Introduction

The trigeminal nerve is the largest sensory nerve in the head and neck, protecting the essential organs that support our very existence (brain, eyes, nose, and mouth). It is no wonder that pain within the trigeminal system in the face is often tempting and inevitable for the affected individual. The incidence of PTTN is low, around 3% to 5%.

Trauma, either accidental or iatrogenic, is the most common cause of trigeminal neuropathy.¹ Most cases of post-traumatic TN are the result of oral surgical operations, particularly the removal of impacted lower third molars. The sensory defects are located mainly in the territories innervated by the inferior alveolar nerve and the lingual nerve.² Most of these lesions are reversible, though more persistent cases can adversely affect patient quality



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0.

of life.³ The mainstays of pharmacologic treatment of PTTN remain the antiepileptic drugs (AEDs) and the tricyclic (TCAs) and newer antidepressants.^{4,5} But there is a limited response to available and recommended pharmacotherapeutic interventions.⁶

In Ayurveda, Trigeminal neuropathy can be considered as *Anantavata*, one among the 11 Types of *shirorogas*. *Anantavata* is a disorder of *vata pradhana tridosha*, characterized by pain at eye brow, temporal region with vibration of maxilla, disturbed or discomfort in the eyes and spasm of mandible. According to Charaka it has been classified as *siromarmasrita vyadhi*.

'*Bahyaparimarjana* (external therapies)' is a popular treatment modality in Ayurveda, advocated for disorders of *vata* include *abhyanga* (massage), *swedana* (fomentation), *nasya*, etc. Ayurveda recommends *nasya* therapy for the diseases of cranial structures considering nose as a door to the cranium.⁷ As the disease affects the parts of the head, *nasya* helps in eliminating the vitiated *doshas* and brings the normalcy of *doshas*. *Hanubasti* (retaining oil on temporomandibular joint) is the procedure of applying heat to the temporomandibular region by retaining warm medicated oil within a specially formed frame on this region. Warm medicated oil by virtue of its *snigdha* (unctuous quality) is likely to correct the imbalance of *vata dosha*. In addition to this, the warmth of the oil helps in rectifying the morbid *kaphadosha* as well. Hence considering this, *Hanubasti* was selected as treatment of choice to combat the root cause of *Anantavata*. Hence considering this point it is assumed that the use of *nasya* with *Ksheerabala* 101 drops and *hanubasti* with *nirgunditaila* can be an effective solution in the management of *Anantavata* w.s.r to trigeminal neuropathy. This case showed good results.

Case Report

A 52-year-old female presented with the complaints of burning sensation and dull aching pain over the right side of the infraorbital, temporal, pre auricular, maxillary regions, continuously, pain in temporomandibular joint after chewing, continuous and loud talking since 2 years. On physical examination, no significant facial asymmetry was noted. Mandibular movement was unrestricted with mild pain to palpation in the pericranial musculature and the temporomandibular joint. Gross cranial nerve examination was normal other than disturbed sensations to pinprick and cotton wool stimuli in the right infraorbital and

maxillary region. Specifically, eye movements were unrestricted in all six cardinal directions and the patient did not report diplopia. The remaining head and neck examination was unremarkable.

Past history

The patient was apparently normal 2 years back. Then she had severe toothache on/off in last two upper and lower molar teeth. The patient was approached to dentist and had taken medical management which includes analgesics and antibiotics for few courses, but of no use. After that as per the sayings of the patient, 10 teeth (6 from right quadrant and 4 from left quadrant) were extracted within a period of 3 months. Then she had started burning sensation and dull aching pain over the right side of the infraorbital, temporal, pre auricular, maxillary regions, continuously, pain in temporomandibular joint after chewing, continuous and loud talking. For this symptom she had taken treatment for two years continuously but of no pain relief. Then patient approached to Ayurvedic doctor.

Table 1: Procedures administered to the patient

Sl. No.	Name of the treatment	Medicines used	No. of days
01	<i>Nasya</i> therapy	<i>Murchitaila</i> for <i>mukhabhyanga</i> t/b <i>Bashpasweda</i> <i>Nasya</i> with KBT 101 drops 8-8 each nostril <i>Haridradi Dhumapana</i> <i>Dashamulakwath + gritakavala</i>	7 days
02	<i>Hanubasti</i>	<i>Hanubasti</i> with <i>Nirgunditaila</i>	7 days

2nd course of only *hanubasti* was done after 15 days for 7 days

Follow Up: The patient was advised to follow up for once in a month for 6 months.

Results

During 1st course there was marked reduction in the symptoms, i.e. burning sensation and pain was reduced to 70%. After 2nd sitting of *hanubasti* the pain was reduced to 80%. After 2 months of internal medication *Rasnadiguggulu* 1 TID, *Dashamularista* 2 tsf BD and *jeevantiyadigrita* 1tsf BD, there was no pain or burning sensation at all. The internal medication was continued for 3 months. After 6 months the patient was absolutely normal. No side effects were seen.

Discussion

Anantavata is a condition in which, when *vata pradhana tridosha* gets vitiated and takes shelter in *manyapradesha* (side of the neck region) causes severe pain *ghatapradesha* (nape), sides of neck, in the eyes, eyebrows and temples, twitching on posterior side cheek and lock jaw.⁸ General line of treatment mentioned in Sushruta is the *nasya*, *raktamokshana*, *snehana*, *upanaha*, *gritapana* and internal medications.⁹ Out of these listed treatments *nasya* and *snehana* followed by *swedana* has a vital role to play as these procedures are performed directly on the affected part. Charaka says that, depending on the location and *dushya* (tissue element vitiated by *Vata*) each patient should be given specific therapies.¹⁰ Hence *Hanubasti* was selected, as this procedure is performed directly over the area where the trigeminal nerve distribution is present and can play a vital role in recovery. This procedure may be considered as a variety of *Snigdhasweda*. It may be understood that the warm oil kept over the pre auricular area removes *doshas* accumulated in micro channels by virtue of its *Sukshma*, *Ushna*, and *Vyavayiguna* (*srotasamnirmalatwam*-softens the channels).¹¹ *Rasnadi Guggulu*, *Dashamularista* and *Jeevantyadi grita* are having the properties of *vataghna*, *vedanasthapana*, *balya* and acts as nerve tonic. Thus helps in pacifying the vitiated *vatadosha*.

Conclusion

As per the available treatment modalities of *Anantavata*, the local treatment like *hanubasti* and *nasya* are the best, taking into the consideration its convenience, easy adoptability, cost-effectiveness and curative results. This effectiveness of topical treatment along with *shamanoushadhis* can be attributed to the *vataghna* properties of *KBT* and *Nirgunditaila* and *shamanoushadhis*.

References

1. Peñarrocha MA, Mora E, Bagán JV, García B, Peñarrocha M. Idiopathic trigeminal

neuropathies: A presentation of 15 cases. *J Oral Maxillofac Surg.* 2009;67:2364–8. [PubMed]

2. Blackburn CW. A method of assessment in cases of lingual nerve injury. *Br J Oral Maxillofac Surg.* 1990;28:238–45. [PubMed]
3. Jerjes W, Upile T, Shah P, *et al.* Risk factors associated with injury to the inferior alveolar and lingual nerves following third molar surgery-revisited. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2010;109:335–45. [PubMed]
4. Attal N, Cruccu G, Baron R, *et al.* EFNS guidelines on the pharmacological treatment of neuropathic pain: 2010 revision. *Eur J Neurol.* 2010;17:1113–88.
5. Finnerup NB, Sindrup SH, Jensen TS. The evidence for pharmacological treatment of neuropathic pain. *Pain.* 2010;150:573–81.
6. Haviv Y, Zadik Y, Sharav Y, *et al.* Painful traumatic trigeminal neuropathy: An open study on the pharmacotherapeutic response to stepped treatment. *J Oral Facial Pain Headache.* 2014;28: 52–60.
7. Vagbhata, *AsthangaHridaya*, Vol-I, *Sutrasrhana*, 20th Chapter, *Nasyavidhi*, *Chaukhambha Krishnadas Academy*, *Varanasi*, Reprint 2003.p.255.
8. Ambikadatta Shastri, *Sushruta*, *Shusruta Samhita*, *Uttaratantra*. 25th Chapter, *Shiroroga Adhyaya*, *Chaukhambha Sanskrit Sansthana*, *Varanasi*, 16th edition 2003.pp.127–128.
9. Ambikadatta Shastri, *Sushruta*, *Shusruta Samhita*, *Uttaratantra*. 26th Chapter, *Shiroroga Pratisheda Adhyaya*, *Chaukhambha Sanskrit Sansthana*, *Varanasi*, 16th edition 2003.pp.139–40.
10. Brahmanand Tripathi *Charaka Samhita of Agnivesha*, Revised by Charaka and Dridhabala with Charaka Chandrika Hindi Commentary. Part-II. *Chikitsa Sthana*; Chapter 28, *vatvyadhi adhyaya*, *Varanasi: Chaukhambha Surabharati Prakashan*; Reprint edition 1996.P.957.
11. Kasture HM. *Ayurvedeeya Panchakarma Vijnana*. 15th edition, Chapter 13, *Nagpur, Vaidyanath Ayurved Bhavan* 2012.p.196.

