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Management of Classical Trigeminal Neuralgia with Ayurvedic Interventions: A Case Report

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ABSTRACT:

Background: Classical trigeminal neuralgia (CTN) is a chronic neuropathic pain disorder characterized by severe, paroxysmal facial pain attributable to neurovascular compression of the trigeminal nerve. Conventional treatments often provide incomplete relief or lead to recurrence, prompting exploration of alternative systems such as Ayurveda. Case Presentation: A 50-year-old female patient presented with a two-year history of intermittent, excruciating pain on the right side of the face, affecting the upper lip, cheek, and chin. Pain paroxysms occurred every 1–2 hours, lasting 1–2 minutes each. Magnetic resonance imaging (MRI) confirmed right-sided classical trigeminal neuralgia due to vascular loop indentation on the cisternal segment of the trigeminal nerve. The patient had received allopathic pharmacotherapy for two years with recurrent episodes and inadequate control, leading her to seek Ayurvedic management. Interventions: The patient underwent a three-month course of Ayurvedic treatments, including oral medications, Nasya (nasal instillation), Kavalagraha (oral retention), and Gandusha (oral gargling/holding). Outcomes: Marked improvement was observed post-treatment, as evidenced by substantial reductions in pain intensity on the Visual Analogue Scale (VAS) from 8 to 2 and in anxiety and depression scores on the Hospital Anxiety and Depression Scale (HADS). Improvement in all the domains of SF-36 was observed, with a total percentage improvement from 11% to 83%. Conclusion: This case illustrates the potential utility of integrated Ayurvedic interventions i.e. oral medications combined with Nasya, Kavalagraha, and Gandusha in alleviating acute paroxysmal pain episodes, mitigating associated psychological distress, and enhancing quality of life in patients with classical trigeminal neuralgia. These observations support further clinical studies to validate Ayurvedic approaches in managing refractory CTN..

Keywords: Ayurvedic management of CTN , Classical Trigeminal Neuralgia, Gandusha, Kavalagraha, Nasya, Neurovascular compression.

INTRODUCTION

Trigeminal neuralgia (TN) is a severe neuropathic condition marked by sudden, intense, unilateral facial pain along the distribution of the trigeminal nerve, often described as one of the most excruciating pains experienced by humans.[1] Trigeminal nerve, the fifth cranial nerve is the largest among the 12 cranial nerves, supplies sensory innervation to the anterior head and facial skin. Pain typically affects the maxillary and mandibular divisions, with rare involvement of the ophthalmic branch (about 4% of cases).[2] In classical TN (CTN), the primary aetiology is neurovascular compression leading to nerve root atrophy or displacement, predominantly involving the second and third branches. TN shows a higher prevalence in women, with incidence rising with age and peaking after 50 years.[3] Estimates suggest an occurrence of 1 in 15,000 - 20,000 individuals, though under diagnosis likely results in higher actual figures.[4] The increased susceptibility of the trigeminal nerve compared to other cranial nerves may stem from its longer intracranial course and greater central myelin volume. Common triggers encompass light touch activities such as shaving, facial contact, eating, drinking, tooth brushing, speaking, exposure to wind, smiling, or face washing[5].

TN is classified into three subtypes: Classical TN (CTN), where definite neurovascular compression (beyond mere contact) is confirmed via MRI or surgery; Secondary TN (STN), arising from underlying pathologies like multiple sclerosis or cerebello-pontine angle tumours; and idiopathic TN (ITN), where symptoms align with TN but lack

evidence for classical or secondary causes.[6] Diagnosis relies primarily on clinical presentation, focusing on pain location and distribution consistent with trigeminal innervation. The condition profoundly impairs quality of life owing to the paroxysmal, debilitating nature of attacks.

Modern management includes pharmacological options for acute relief and long-term control, with carbamazepine or oxcarbazepine as first-line agents, supplemented by lamotrigine, gabapentin, pregabalin, baclofen, phenytoin, or botulinum toxin type A, either alone or in combination. Surgical intervention is considered when medical therapy fails to provide adequate relief or is poorly tolerated.[7] In Ayurveda, TN correlates closely with *Anantavata*, one of the 11 *Shirorogas* described by Acharya Sushruta.[8] This condition involves aggravation of all three *Doshas*, with predominant *Vata* imbalance manifesting as severe pain. Pain in Ayurveda is fundamentally linked to aggravated *Vata*, guiding therapeutic principles toward *Vata* pacification through appropriate interventions.[9] This case report illustrates the application and outcomes of Ayurvedic management in a patient with CTN, highlighting the potential of traditional approaches in alleviating symptoms, reducing attack frequency and intensity, and enhancing overall well-being where conventional treatments may fall short.

Patient information:
A 50-year-old female presented to the outpatient department of *Kriya Sharira,* ITRA, Jamnagar with complaints of sudden onset of electric shock-like pain on the right side of the face and neck, accompanied by reduced facial sensation on the same side. These symptoms had persisted for the past 2 years and were aggravated by exposure to wind & while washing the face. The pain was episodic in nature, presenting in sudden paroxysms rather than being continuous. The episodes remained similar in character over the years, with no significant progression in severity; however, their frequency of occurrence gradually increased with time. The pain occurred at intervals of 1–2 h, and each episode lasted for a few seconds to up to a minute. She had no history of systemic illness. The patient had no history of trauma, dental surgery, or sinus surgery. The patient had previously consulted at a private allopathic hospital, Jamnagar where she was prescribed carbamazepine (200 mg) twice daily, Amitriptyline(10 mg) and Gabapentin(75 mg) once daily but reported no relief from symptoms. No significant family history of neurological or chronic pain conditions was present. The patient had no history of addictions, including tobacco or alcohol. She did not report any significant occupational exposures to factors such as cold air, dust, or physical strain, as she was a housewife. Her lifestyle factors, including sleep, stress levels, and diet, were unremarkable. At the time of consultation, the patient was not on any medication. She had an average build, weighed 65 kg, and exhibited the following vital signs: a pulse rate of 72 beats/min, blood pressure of 120/78 mm Hg, a respiratory rate of 22 breaths/min, and a body temperature of 98.2°F. Urine and bowel habits were normal.

***Dashvidha Pariksha* (~10-fold Ayurveda examination)**

Prakriti (~body constitution)	*Pitta-Kaphaja*
Sara (~excellence tissue element), *Samhanana* (~compactness of tissue or organs)	*Uttama* (~excellent)
Pramana (~anthropometry), *Satva* (~psyche)	*Madhyam*
Satmya (~suitability or homologation)	*Sarvrasa*,
Vaya (~age)	*Vridhaawastha* (~middle age)
Aharashakti (~capacity of intake of food) was examined as *Abhyavaharana* (~capacity of intake of food), and *Jaranashakti* (~power of digestion)	*Madhyama*
Vyayama Shakti (power of performing exercise)	*Madhyama*

Clinical findings:

Oral examination- The tongue was coated with small reddish ulcers on the left lateral aspect. The palate, anterior and posterior pillars, tonsils, and posterior pharyngeal wall appeared normal.

Aural examination- Otoscopy revealed clear external auditory canals. Tympanic membranes were intact, and the cone of light was visible in both ears.

Nasal examination- The nasal septum was within normal limits. Both the turbinate was normal.

Neurological examination- Speech and higher mental functions were intact. All cranial nerves were normal. There was no sensory loss or facial weakness. The motor examination revealed normal muscle bulk, tone, power, and coordination in all limbs bilaterally.

Clinical examination of TN:

All three branches of the trigeminal nerve (V1, V2, V3) were systematically tested for touch, pinprick, and temperature sensation. Palpation of common trigger zones in the right maxillary (V2) region, including the cheek and nasolabial fold, elicited the characteristic sudden, electric shock-like pain, consistent with TN. Sensory examination of all three branches revealed no deficits, and reflexes were normal.

Investigations: All routine laboratory investigations were within normal limits. An MRI of the brain with posterior fossa, conducted on May 18, 2024 showed right-sided classical trigeminal neuralgia due to vascular loop indentation on the cisternal segment of the trigeminal nerve. Normal visualization of the bilateral seventh and eighth nerve complexes. No significant displacement or thinning of nerve is seen. No evidence of mass lesion or acute infract on diffusion images is seen.

Timeline: A detailed timeline of the patient's events is presented in Table 1

Date	Event
June 17, 2024	The patient reported electric shock-like pain on the right side of the face for 2 years, triggered by washing the face and exposure to wind, accompanied by anxiety related to the pain. The neurological examination revealed normal speech, higher mental functions, cranial nerves, and motor function. Laboratory tests were normal. An MRI from May 18, 2024 showed right-sided classical trigeminal neuralgia due to vascular loop indentation on the cisternal segment of the trigeminal nerve.
July 04, 2024	On examination, after 15 days, there was mild improvement in symptoms of pain, while anxiety persisted
August 14, 2024	Upon examination after 1.5 months, there was a mild improvement in the symptoms of pain, although the patient remained anxious
September 12, 2024	On examination, after 2.5-month patient had relief in pain and anxiety
October 09, 2024	On examination, after 3.5 months, there was improvement in symptoms of pain and anxiety.
November 07, 2024	On examination after 4.5 months, there was a complete improvement in pain, and the patient experienced an anxiety reduction.

[Table 1]

Diagnosis:

Based on the clinical presentation and MRI findings dated May 18, 2024, the condition was diagnosed as classical trigeminal neuralgia (CTN). The imaging revealed features indicative of right-sided classical trigeminal neuralgia attributable to neurovascular compression by a vascular loop indenting the cisternal segment of the trigeminal

nerve, without appreciable displacement or atrophy of the nerve root. Additionally, bilateral frontal white matter exhibited a few small hyperintense foci on T2/FLAIR sequences, consistent with chronic ischemic changes (Fig. 1). Diffusion-weighted images showed no evidence of acute infarction or space-occupying lesion. In Ayurvedic parlance, this presentation corresponds to the entity of *Anantavata*, a *Vata*-predominant *Tridoshaja Shiroroga* characterized by severe, paroxysmal, lancinating pain in the distribution of the trigeminal nerve, often involving the supraorbital, infraorbital, and mandibular regions, along with associated features attributable to aggravated *Vata Dosha* affecting the cranial nerves and related structures.

Therapeutic Intervention:

The patient underwent a comprehensive Ayurvedic management protocol encompassing *Shamana* (palliative) medications, *Shodhana* (purificatory) procedures, *Nasya* therapy, local applications, and *Pathya-Apathya* (wholesome and unwholesome) guidance on diet and lifestyle. The oral medications comprised *Triphala Guggulu* (500 mg twice daily), *Ekangaveera Rasa* (250 mg twice daily), *Pathyadi Kwatha* (15 mL twice daily, mixed with an equal volume of water), *Ksheerbala 101 Avarthi* capsules, and *Avipattikara Churna* (3 g at bedtime with lukewarm water). *Nasya* therapy was initiated with *Shadbindu Taila* for *Shodhana Nasya* over 3 consecutive days, followed by *Pratimarsha Nasya* with *Anu Taila* (two drops in each nostril, twice daily). Local intervention included *Abhyanga* with *Ksheerbala Tailam* & *Gandusha* (oral retention) using *Dashamoola Kwatha* and *Tila Taila*. Concurrently, the patient received detailed counselling regarding *Pathya* (wholesome regimen) and *Apathya* (unwholesome factors) in terms of *Ahara* (diet) and *Vihara* (lifestyle). She was specifically advised to avoid hot, spicy, acidic, and excessively sweet food items, which are liable to aggravate *Vata Dosha* and exacerbate neuralgic manifestations. Emphasis was placed on adopting light, easily digestible meals along with adherence to a disciplined daily routine to augment the efficacy of the therapeutic interventions [Table 2].

Sr. No.	Drug Name	Dose	Route	Frequency	*Anupana*	Duration
01	*Shadbindu Tailam Shodhana Nasya*	6 drops in each nostril	Nasal	Once a day	-	3 days
02	*Pathyadi Kwatha*	15 ml	Orally	Twice a day	Lukewarm water	15 days f/b SOS
03	*Triphala Guggulu*	500 mg	Orally	Twice a day	Lukewarm water	120 days
04	*Ekangaveera Rasa*	250 mg	Orally	Twice a day	Lukewarm water	30 days (Discontinued after 30 days)
05	*Ksheerbala 101 Avarthi* capsules,	1 capsule	Orally	Twice a day	Lukewarm water	90 days
06	*Avipattikara Churna*	3 g	Orally	Hs (Bedtime)	Lukewarm water	175 days
07	*Ksheerbala Tailam Abhyanga*	-	-	Twice a day, Before *Nasya*	-	120 days
08	*Pratimarsha Nasya* with *Anu Tailam*	2 drops in each nostril	Nasal	Twice a day, Empty stomach	-	120 days
09	*Gandusha* using *Dashamoola Kwatha* and *Tila Taila*	30 ml + 15 ml	Oral	Once a day in the morning, empty stomach for 5 min	-	30 days

[Table 2]

Follow-up and Outcome:

Clinical assessments were performed at baseline (Day 0) and subsequently on Days 18, 28, 56, 84, 112, 140, and 175. The patient remains under regular follow-up, and no recurrence of pain or associated symptoms has been reported to date [Table 2]. Following the 6.5-month Ayurvedic intervention, the patient achieved complete relief

of pain on the right side of the face, along with resolution of associated anxiety. No adverse events were observed throughout the treatment and follow-up period. Quantitative assessment demonstrated substantial improvement across all evaluated parameters. Pain intensity, measured using the visual analogue scale (0–10), decreased from 8 (agonizing pain) at baseline to 2(minimal pain) after treatment and 0 (no pain) at the final follow-up. The frequency of acute pain episodes reduced from every 1–2 h to complete absence, and their duration shortened, with no episodes. Psychological assessment using the hospital anxiety and depression scale (HADS) revealed marked improvement. Depression scores (HADS-D) decreased from 12 (abnormal) to 0 (normal), and anxiety scores (HADS-A) decreased from 14 (abnormal) to 1 (normal), indicating complete resolution of affective symptoms.

A summary of clinical outcomes is provided in Table 3, showing progressive improvement at each assessment point, highlighting the change from baseline to post-treatment and follow-up. These results indicate that the combined Ayurvedic intervention - oral medications, *Abhyanga*, *Gandusha* therapy and lifestyle modifications was effective in achieving sustained symptomatic relief in TN, encompassing both somatic and psychological domains.

Sr. No.	Clinical Feature	Grading Scale Adopted	Before Treatment	After Treatment	After Follow-up
01	Pain	VAS Score	8	2	0
02	Frequency of Acute Episodes	-	Within 1-2 hr	Within 12-14 hr	No Episodes
03	Duration of Acute Episodes	-	Seconds to minutes	Less than 10 sec	No Episodes
04	Depression	HADS-D Score	12	4	0
05	Anxiety	HADS-A Score	14	6	1

[Table 3]

Discussion:

Trigeminal neuralgia (TN) is characterized by paroxysmal, lancinating facial pain along one or more divisions of the trigeminal nerve. From an Ayurvedic perspective, the clinical picture closely resembles *Anantavata* with predominant *Vata* aggravation involving *Urdhvajatrugata Strotasa*.[10] Accordingly, the therapeutic approach in the present case was designed to achieve *Vata - Kapha shamana, Srotoshodhana, Vedanasthapana*, and *Brimhana* while maintaining *Agni Deepana* and *Pitta Anulomana* (gastrointestinal and metabolic balance).

Nasya and local therapies-

Shodhana Nasya with *Shadbindu Taila* was administered initially to eliminate vitiated *Doshas* from the *Shiras* region. The formulation's *Tikshna, Ushna*, and *Srotoshodhaka* properties facilitate clearance of obstructive *Kapha* and normalize *Vata gati*. Its key constituent, kaempferol, along with luteolin, embelin, lupeol, and β-sitosterol, contributes to pain relief through anti-inflammatory action, inhibition of bradykinin-mediated nociception, and modulation of central pain pathways. These effects help reduce both peripheral and central sensitization seen in trigeminal pain. The sesame oil base enhances trans-nasal absorption and facilitates action on trigeminal pathways. In Ayurvedic terms, this reflects *Vata-shamana*, *Shothahara*, and *Vedanasthapana* properties, supporting its use as an effective *Nasya* therapy in *Shiroroga* and cranial neuropathic pain. The subsequent maintenance regimen of *Pratimarsha Nasya* with *Anu Taila* for 120 days aimed to provide sustained *Vata-shamana* through gentle daily oleation, supporting neuroprotective *Snehana* and nourishment of the *Indriyas*. Its lipid base enhances trans-nasal absorption and facilitates action along olfactory and trigeminal pathways. Key ingredients such as *Yashtimadhu*, *Haridra*, *Daruharidra*, and *Devadaru* exert anti-inflammatory and neuroprotective effects via compounds like glycyrrhizin, curcumin, berberine, and volatile oils, which help reduce cytokine-mediated neuro-inflammation and stabilize neuronal activity. These actions collectively aid in reducing peripheral and central sensitization, making it beneficial in managing conditions like Trigeminal Neuralgia while promoting overall sensory function. Daily *Abhyanga* with *Ksheerbala Taila*, when complemented with *Nasya*, provides both systemic and local *Brimhana* and *Vatahara* effects; *Abhyanga* facilitates transdermal absorption of lipid-soluble actives, promoting neuromuscular relaxation, improving peripheral circulation, and supporting myelin integrity, thereby

reducing *Vata*-induced neuronal hyperexcitability. *Ksheerbala Taila*, rich in *Bala* (Sida cordifolia) and processed with milk, imparts *Brimhana* (nourishing) and neuroprotective effects through anti-inflammatory and mild central modulatory actions. Concurrently, *Nasya* enables direct drug delivery to the cranial region via olfactory-trigeminal pathways, enhancing local anti-inflammatory and analgesic action. This combined approach helps attenuate peripheral and central sensitization, offering sustained pain relief and functional restoration. *Gandusha* with *Dashamoola Kwatha* and *Tila Taila* provided localized anti-inflammatory, analgesic, and *Vata-Kapha shamana* actions in the orofacial region. The retention of medicated liquid in the oral cavity is known to enhance local circulation, reduce neural hypersensitivity, and stabilize *Vata* in *Mukhapradesha*, which may be particularly relevant in trigeminal distribution pain.

Internal medications- *Pathyadi Kwatha* was prescribed for its established role in *Shiro roga*, especially in *Vata–Pitta* predominant cephalalgias. Its key constituents, including *Haritaki*, *Amalaki*, *Guduchi*, *Nimba* and *Haridra*, exert *Shothahara*, *Raktaprasadana*, and *Vedanasthapana* effects through anti-inflammatory, antioxidant, and analgesic mechanisms. These actions help attenuate neuro inflammation, enhance microcirculatory function, and regulate nociceptive signalling, thereby reducing neurovascular irritability and trigeminal sensitization. *Triphala Guggulu*, administered for 120 days, contributed *Shothahara*, *Lekhana*, and *Srotoshodhaka* actions through the synergistic effects of *Triphala* and *Guggulu*. Bioactive compounds such as guggulsterones (from *Guggulu*), along with gallic acid, ellagic acid, and chebulinic acid (from *Triphala*), demonstrate anti-inflammatory, antioxidant, and metabolic regulatory properties. These act by downregulating inflammatory mediators, reducing oxidative stress, and improving microcirculation, thereby helping to clear obstructed channels and restore tissue function.
Ekangaveera Rasa was used for 30 days during the early phase to achieve rapid *Vata shamana* and analgesia, consistent with its classical indication in *Vata vyadhi*. Its key constituents, including purified metals/minerals and *Vata*-pacifying herbs, exert potent neuro-modulatory and anti-inflammatory effects. Active principles such as piperine (from *Trikatu* components) enhance bioavailability and modulate nociceptive pathways, while mineral components contribute to stabilization of neuronal excitability. These combined actions help reduce acute neural inflammation, suppress hyperactive pain signaling, and provide quick symptomatic relief. Discontinuation after 30 days aligns with prudent practice to avoid prolonged use of mineral preparations once symptomatic stabilization is achieved.
Ksheerbala 101 *Avarthi* capsules provided sustained *Brimhana* and *Majja dhatu poshana* through its deeply nourishing and neuroprotective actions. The repeated processing (*Avarthi*) enhances potency and facilitates better tissue penetration. Active constituents such as alkaloids and flavonoids from *Bala* (*Sida cordifolia*), along with lipid fractions of sesame oil, help reduce neuroinflammation, stabilize neuronal membranes, and support myelin integrity. These actions aid in modulating neuronal excitability and reducing pain transmission, thereby contributing to sustained relief and restoration of nerve function
Avipattikara Churna was administered at bedtime helps to maintain *Pitta Anulomana* and optimize *Agni* through its mild laxative, carminative, and *Pitta*-pacifying actions. Ingredients such as *Trivrit*, *Haritaki*, and aromatic spices regulate digestion, promote proper bile flow, and facilitate elimination of accumulated *Ama* (metabolic waste). By correcting *Agni* and clearing *Ama*, it prevents *Srotorodha* and improves systemic metabolic balance. In conditions like Trigeminal Neuralgia, this reduces underlying inflammatory load and helps in lowering sensitization of pain pathways, thereby supporting better therapeutic outcomes.

Therapeutic rationale and outcome interpretation
The regimen demonstrates a stepwise strategy: (1) *Shodhana* of the cranial region, (2) sustained *Snehana* and *Vata shamana*, (3) systemic anti-inflammatory and metabolic correction, and (4) localized orofacial stabilization. The combined use of *Nasya*, *Abhyanga*, and *Gandusha* with internal *Vatahara* and *Rasayana* -oriented formulations addresses both *Nidana* and *Samprapti* components of TN. The chronic administration of *Ksheerbala*-based therapy and *Triphala Guggulu* plausibly supports neural repair mechanisms and reduces recurrence frequency, while *Pathyadi Kwatha* and *Avipattikara Churna* maintain homeostatic balance.

Limitations and future scope:
As an individualized therapeutic protocol, generalizability is limited. Objective pain scales, trigger frequency documentation, and long-term follow-up would strengthen clinical inference. Future controlled studies evaluating *Nasya*-centered protocols with standardized outcome measures in trigeminal neuralgia are warranted to substantiate efficacy and elucidate mechanisms within an integrative neurobiological framework. Overall, the multidimensional Ayurvedic approach targeting *Vata* dysregulation, *Srotorodha*, and tissue nourishment appears clinically rational for trigeminal neuralgia and may offer a safe, sustained alternative or adjunct to conventional management.

Conclusion:
The Ayurvedic interventions employed in the present case demonstrated beneficial effects in attenuating acute

paroxysmal pain episodes in classical trigeminal neuralgia and in enhancing overall quality of life. The therapeutic approach appears clinically applicable for similar presentations in routine practice. However, systematic clinical studies with larger samples are warranted to validate and further substantiate these preliminary observations.

Adverse Events:
No adverse or unanticipated events were observed during or following the course of treatment.

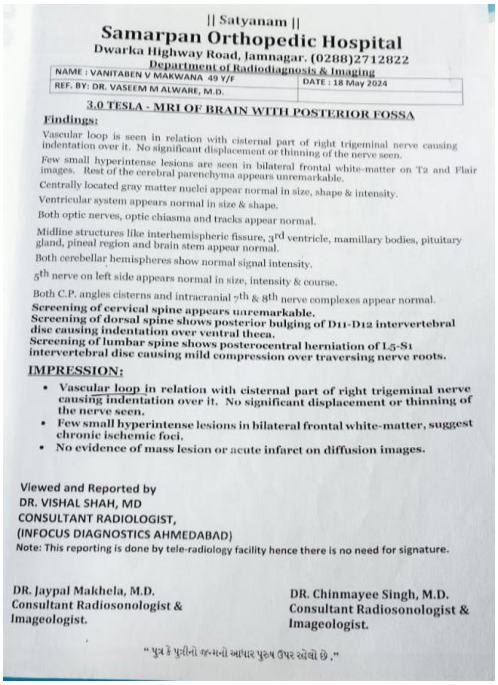
Patient's Perspective:
The patient reported satisfaction with the Ayurvedic intervention, noting a marked reduction in pain episodes. She described a profound sense of relief and renewed well-being. Additionally, she experienced improved functional capacity in performing daily activities, along with a notable enhancement in mood.

Informed consent:
Informed consent for publication of the data was taken from the patient.

Conflict of Interest:
None

Funding source:
None

Annexure:
Details of interventions used in the treatment of the present case.



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REF. BY: DR. VASEEM M ALWARE, M.D.

3.0 TESLA - MRI OF BRAIN WITH POSTERIOR FOSSA

Findings:

Vascular loop is seen in relation with cisternal part of right trigeminal nerve causing indentation over it. No significant displacement or thinning of the nerve seen.
Few small hyperintense lesions are seen in bilateral frontal white-matter on T2 and Flair images. Rest of the cerebral parenchyma appears unremarkable.
Centrally located gray matter nuclei appear normal in size, shape & intensity.
Ventricular system appears normal in size & shape.
Both optic nerves, optic chiasma and tracks appear normal.
Midline structures like interhemispheric fissure, 3rd ventricle, mamillary bodies, pituitary gland, pineal region and brain stem appear normal.
Both cerebellar hemispheres show normal signal intensity.
5th nerve on left side appears normal in size, intensity & course.
Both C.P. angles cisterns and intracranial 7th & 8th nerve complexes appear normal.
Screening of cervical spine appears unremarkable.
Screening of dorsal spine shows posterior bulging of D11-D12 intervertebral disc causing indentation over ventral theca.
Screening of lumbar spine shows posterocentral herniation of L5-S1 intervertebral disc causing mild compression over traversing nerve roots.

IMPRESSION:

- **Vascular loop in relation with cisternal part of right trigeminal nerve causing indentation over it. No significant displacement or thinning of the nerve seen.**
- **Few small hyperintense lesions in bilateral frontal white-matter, suggest chronic ischemic foci.**
- **No evidence of mass lesion or acute infarct on diffusion images.**

Viewed and Reported by
DR. VISHAL SHAH, MD
CONSULTANT RADIOLOGIST,
(INFOCUS DIAGNOSTICS AHMEDABAD)
Note: This reporting is done by tele-radiology facility hence there is no need for signature.

DR. Jaypal Makhela, M.D.
Consultant Radiosonologist & Imageologist.

DR. Chinmayee Singh, M.D.
Consultant Radiosonologist & Imageologist.

"પુત્ર કે પુત્રીનો જન્મનો આધાર પુરુષ ઉપર રહેલો છે."

Figure 1: MRI Report

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REFERENCES

1. Shankar Kikkeri N, Nagalli S. Trigeminal Neuralgia. [Updated 2024 Mar 3]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2026 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK554486/https://www.ncbi.nlm.nih.gov/books/NBK482283/#_ncbi_dlg_citbx_NBK482283

2. Hall GC, Carroll D, Parry D, McQuay HJ. Epidemiology and treatment of neuropathic pain: the UK primary care perspective. Pain. 2006 May;122(1-2):156-62. doi: 10.1016/j.pain.2006.01.030. Epub 2006 Mar 20. PMID: 16545908.

3. Gillian C. Hall, Dawn Carroll, David Parry, Henry J. McQuay, Epidemiology and treatment of neuropathic pain: The UK primary care perspective, PAIN®, Volume 122, Issues 1–2, 2006, Pages 156-162

4. Belwanshi, Chanchlesh; Kundal, Pankaj; Yadav, Kajal; Meher, Kapil; Rajagopala, Manjusha; Tripathi, Ankur; Bavalatti, Narayan. Effect of Ayurveda interventions in the management of Anantavata (trigeminal neuralgia): A case report. Journal of Research in Ayurvedic Sciences 9(5):p 219-224, September-October 2025. | DOI: 10.4103/jras.jras_340_24

5. Noguchi T, Shimamoto Y, Fukuda KI. Clinical characteristics of trigeminal neuralgia in a dental hospital. J Dent Anesth Pain Med. 2021 Oct;21(5):431 440.https://doi.org/10.17245/jdapm.2021.21.5.431

6. Al-Quliti KW. Update on neuropathic pain treatment for trigeminal neuralgia. The pharmacological and surgical options. Neurosciences (Riyadh). 2015 Apr;20(2):107-14. doi: 10.17712/nsj.2015.2.20140501. PMID: 25864062; PMCID: PMC4727618.

7. Acharya Ambikadutta Shastri, Sushruta Samhita of Sushruta, Sthana Uttartantra. Ch. 25, Ver. 13-14. 2020 Reprint edition Varanasi Chokhambha Sanskrita Sansthan: 165.

8. Belwanshi, Chanchlesh; Kundal, Pankaj; Yadav, Kajal; Meher, Kapil; Rajagopala, Manjusha; Tripathi, Ankur; Bavalatti, Narayan. Effect of Ayurveda interventions in the management of Anantavata (trigeminal neuralgia): A case report. Journal of Research in Ayurvedic Sciences 9(5):p 219-224, September-October 2025. | DOI: 10.4103/jras.jras_340_24

9. Acharya Ambikadutta Shastri, Sushruta Samhita of Sushruta, Sthana Uttartantra. Ch. 25, Ver. 13-14. 2020 Reprint edition Varanasi Chokhambha Sanskrita Sansthan: 165.

10. U.M.G.D. De Silva, G. Mangal, A.M.H.S. Attanayake, A. Upadhyay, S.M. Vedpathak, Effects of Ayurveda interventions on acute pain and quality of life of a trigeminal neuralgia patient - A case report, Journal of Ayurveda and Integrative Medicine, Volume 14, Issue 4, 2023, 100743 https://doi.org/10.1016/j.jaim.2023.100743.

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