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Trigemianl Neuralagia (Anatavata) and its Ayurvedic Management: Case Study

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Abstract

Ananta Vata compiles two words - Ananta + Vata 'Ananta' limitless or endless, eternal or infinity etc. 'Vata' refers to Vata Dosha. Ananta Vata is described all Brihattrayis under the Shiro rogas. Ananta Vata in modern science correlates with Trigeminal neuralgia. Trigeminal neuralgia is a sudden, usually unilateral, severe, brief, stabbing, recurrent pain in the distribution of one or more branches of the fifth cranial nerve. Trigeminal neuralgia (tic douloureux) is an episodic condition of paroxysmal pain in the trigeminal distribution that is triggered by light touch. This study describes a case report of 61 years of old lady of trigeminal neuralgia attend the Shalakya Tantra OPD of Patanjali Ayurved College, Haridwar and in present study it is observed the condition was successfully managed by the Ayurvedic treatment like Ksheer Dhoom, Shiropichu, Talam, Mukha Lepa, Marsa Nasya, Matra Vasti, Jalouka Avcharana and Agni Karma along with oral medicines. After treatment there was a remarkable reduction of the pain and symptoms and found reduced reoccurrence.

Keywords: Ananta vata; Trigeminal neuralgia; Ksheer dhoom, Shiropichu, Marsa nasya, Matra vasti, Jalouka avcharana, Agni karma.

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Introduction

Trigeminal nerve is the fifth (V) cranial nerve and is also known as Trifacial nerve. It is the largest of the twelve cranial nerves and has a broad territory of distribution. It is a mixed nerve with both motor and sensory fibers. The nerve originates from the brainstem (pons) and supplies various structures of the head and face. It is a paired nerve, and each nerve supply ipsilateral half of the head and face. Each trigeminal nerve has three main branches and so the name trigeminal (from Latin word "trigeminus" meaning three twins).[1] These are the ophthalmic (V1), maxillary (V2) and mandibular (V3) nerves. These branches pierce the Meckel's cave and passes forward to exit the middle cranial fossa through small openings or foramen. The ophthalmic and maxillary divisions carry only sensory fibers whereas the mandibular division carries both sensory and motor fibers.[2]

Epidemiology

The overall incidence of TGN is about 40–50 cases per one million and estimated prevalence is approximately 100–200 per million population[3] Incidence of TGN varies significantly with age, with less than 5 per million in people younger than 18 years, and some studies estimating as high as 800 per million in older age groups.[4-6] Patients in the age range of 35–65 years are most commonly affected[7] TGN is nearly twice more common in females than males.[8,9] Hereditary forms of TGN have been reported but are rare and constitute less than 4–5% of overall TGN.[10]

Definition

Trigeminal neuralgia is defined by the International Association for the Study of Pain[11] as 'a sudden, usually unilateral, severe, brief, stabbing, recurrent pain in the distribution of one or more branches of the fifth cranial nerve.

Etiology of trigeminal neuralgia:

According to Love and Coakham,[12] the majority of trigeminal neuralgia cases are caused by compression of the trigeminal nerve root, usually within a few millimetres of entry into the Pons, specifically the root entry zone less commonly, trigeminal neuralgia is due to a primary demyelinating disorder. Other, rare causes include infiltration of the trigeminal nerve root, ganglion or nerve by a tumor or amyloid, and small infarcts or angioma in the Pons or medulla. In a few cases the etiology is unknown.

Classification:

The two most commonly used classification systems are those proposed by the International Association for the Study of Pain (IASP) and the International Headache Society (IHS). According to the IASP classification, there are three subtypes of TGN: (1) Idiopathic, (2) Classical, and (3) Secondary. In the classification system proposed by the IHS, TGN can be either: (1) Classical, or (2) Symptomatic.[13,14]

Clinical Features

Trigeminal neuralgia is episodic, and patients may have weeks or months of remission interspersed with varying intervals of pain.[15] According to Harris,[16] trigeminal neuralgia becomes more chronic with the passage of time, and the intervals decrease between the episodes of pain, although some patients have periodic bouts of pain for several weeks or months every year. He describes one case where the pain disappeared with advancing age but says that is a very rare occurrence.[16] The pain is paroxysmal and is characterized by sudden bursts of extremely intense pain lasting from a few seconds to a few minutes[17] or 20-30 seconds.[17] The pain is like an "electric shock" and is followed by relative freedom from pain for a few seconds to a minute,[17] The pain is triggered by light touch about the face especially in the perioral area. Talking, eating, brushing the teeth, washing the face, a light wind, and, in severe cases, any movement of the body may precipitate the pain. The pain is followed by a refractory period of up to 2-3 minutes during which it is difficult to elicit pain.[19]

Diagnostic criteria for trigeminal neuralgia:

The clinical hallmark of trigeminal neuralgia is a sudden, excruciating paroxysm of pain in the distribution of the trigeminal or fifth cranial nerve.[20] The diagnosis of trigeminal neuralgia depends strictly on clinical criteria.[21] The IHS suggested criteria for the diagnosis of trigeminal neuralgia. (Table 1)[22]

Ayurvedic view:

Parallel to this trigeminal neuralgia, Ananta Vata is similar to this in Ayurveda. Ananta Vata compiles two words - Ananta + Vata 'Ananta' limitless or endless, eternal or infinity etc. excessive beyond tolerance. 'Vata' refers to Vata Dosha. Ananta Vata is described all Brihattrayis under the Shiro rogas. According to Ayurveda classics Ananta Vata is the disease of head in which a violent pain is felt at the Manya and the Ghata (nape of the neck) which ultimately affects the region of the Akshi, Bhru and Shankha Pradesha and these Dosha create vibrations especially in the lateral side of Ganda Pradesha. In the end Hanugraha and Akshi Roga are produced. The disease is known as Ananta Vata and it is due to the concerted action of Tri Doshas.[23] Ayurvedic Management for Ananta Vata is same as that of Suryavarta added with Siravedha.

Case report: A 61 year old lady resident of Udhamisingh Nagar Uttrakhand visited OPD of Shalakya Tantra department, Patanjali Ayurvedic Hospital in Haridwar, November 2017 with complaint of pain in RT side over frontal side of face since 21 years.

Chief Complaints and Associated Symptoms: The twitching pain over right temporal, frontal, cheek and eye brow. It was brief but excruciating which comes in repeated flashes. The episodes of pain aggravates on exposure to cold, wind, on physical as well as mental exertion. During the episode, the pain is triggered when wash the face with cold water, travelling in a two-wheeler and sitting in the cool breeze of the fan, especially in the morning and night time.

History of Present Illness: A female patient, age 61 years was apparently normal 21 years back then she gradually started developing symptoms since 21 years. She went to the family physician and was given analgesic medicines which would give her temporary relief and then again get aggravated when medicines were stopped. So, he came to OPD of Shalakya Tantra department, Patanjali Ayurvedic Hospital in Haridwar, for the treatment of Trigeminal Neuralgia.

General examination:

Pallor- Nil	Pulse- 74 bpm
Icterus- Nil	Respiratory rate- 18 episodes/min
Cyanosis- Nil	B.P. – 122/80 mm/Hg
Oedema- Nil	Temperature – 98.6°C
Weight – 62 kg	Height – 165 cm

Personal History

Bowel – regular	Micturition – normal
Appetite – good	Sleep – disturbed
Diet: Vegetarian	Addiction-No

Systemic Examination: No Abnormality detected in any system.

Treatment & methodology schedule: The treatment plan included both Shodhana therapy and Shamana medications. (Table 2)

Observation and Results

The patients got tremendous relief of the pain and symptoms after the treatment. She had given the above mentioned table as the discharge medicines. The follow up taken after 1 month which shows that patient was free for the pain and symptoms. Patient did not experience this kind of pain after treatment. Scoring of Defence and Veterans Pain Rating Scale (DVPRS). The Scale was used to understanding the severity of pain before, during and after treatment. Symptoms graded with Defence and Veterans Pain Rating Scale from 0-10. (Table 2 and 3)

Table 1: IHS diagnostic criteria for trigeminal neuralgia.

	Classic trigeminal neuralgia
A	Paroxysmal attacks of facial or frontal pain that last a few seconds to less than 2 minutes, affecting one or more divisions of the trigeminal nerve and fulfilling criteria B and C.
B	Pain has at least one of the following characteristics: 1. Intense,sharp,superficial or stabbing 2. Precipitated from trigger areas or by trigger factors 3. The patient is entirely asymptomatic between paroxysms.
C	Attacks are stereotyped in the individual patient.
D	There is no clinically evident neurological deficit
E	Not attributed to another disorder.
	Symptomatic trigeminal neuralgia
A	Paroxysmal attacks of pain lasting from a fraction of a second to 2 minutes, with or without persistence of aching between paroxysms, affecting one or more divisions of the trigeminal nerve and fulfilling criteria B and C.
B	Pain has at least one of the following characteristics: 1. Intense,sharp,superficial or stabbing 2. Precipitated from trigger areas or by trigger factors 3. Attacks are stereotyped in the individual patient 4. A causative lesion, other than vascular compression, has been demonstrated by special investigations and/ or posterior fossa exploration

Table 2: Panchakarma intervention

S. No.	Panchakarma procedure	Medicines used	Date
1.	Ksheer Dhoom	Bala, Dashmool Kwath	13-11-2017 to 19-11-2017
2.	Talam	Nimbamritaadi, Rasnaadi	13-11-2017 to 15-11-2017
3.	Marsa Nasya	Ksheer Bala Taila 101(A)	13-11-2017 to 15-11-2017
4..	Shiro Pichu	Ksheer Bala Taila	16-11-2017 to 20-11- 2017
5.	Mukha Lepa	Lodhraadi	16-11-2017 to 20-11-2017
6.	Matra Vasti	Ksheer Bala Taila	16-11-2017 to 20-11-2017
7.	Jalouka Avcharana	-	16-11-2017
8.	Agni Karma	-	18-11-2017

Table 3: Patient discharged with the following medication and advised to come for check up after for 1 month:

S. No.	Medicine	Qty.	Schedule	Anupana
1.	Vatari Churna	100 gm	Mix all and take half teaspoon twice a day before meals in the morning and evening.	With lukewarm water/ honey
	Swarnmakshik Bhasm	5 gm		
	Ekangveer Rasa	10 gm		
	Vrihat Vatchintamani Ras	2 gm		
	Mahavat Vidhwansan Ras	5 gm		
	Makardhwaj	2 gm		
2.	Vishtinduk Vati	20 gm	Take 2 tabs. Each after food.	With lukewarm water/ milk
	Aamvatari Ras	20 gm		
	Saptvishanti Guggul	40 gm		
3.	Badam Rogan	60 ml	3-3 drops in each nostril mor-eve	
4.	Brahmi Ghrita	200 ml	1/2-1/2 tsp mor-eve before food	With lukewarm water/ milk

Table 4: showing the results.

S. No.	Symptoms	BT	AT	FU 1
1	Pain over right temporal	9	4	0
2	Pain over frontal	8	3	0
3	Pain over in checks	7	2	0
4	Pain over eye	8	3	0

BT - Before Treatment; AT - After Treatment; FU1 - Follow up after 1 month

Discussion

As per Ayurveda classics the 11 type of Shiro rogas are explain among them Ananthavata is one of the Shirogata Roga. According to Acharya Sushruta the Ananthavata is a Sannipataja Vyadhi. Ksheer Dhoom with the combination of Bala, Dashmool and Ksheer is highly nutritive. Ksheer Dhoom provide to strength in facial muscle and nerve and helps in recovery. Ksheer Dhoom controls vitiated Vata Dosha in upper part of body and hence is useful in neurological disorder afflicting head and neck. Ksheer Dhoom it also relieves pain and alleviates the Tridosha mainly Vata Dosha Hara properties. Shiropichu with Ksheer Bala Taila can be describing locally as well as systemically. Local effect is based on cellular absorption of drug through transdermal route. Systemically cellular absorption and circulation has effect on central nervous system (CNS). Shiropichu improve the circulation there by correcting the brain circulation which is very important in stress. Shiropichu may helpful in regularizing the blood supply of brain and can relive the pain. Shiropichu is one of the most effective treatment for reducing the pain, stress and nervous tension. Talam with Nimbamritaadi and Rasnaadi drugs are used and the scalp is formed five layers that is skin, connective tissue, loose areolar layer and pericardium the dense subcutaneous connective tissue has the richest cutaneous blood supply in the body. Through this absorbs the medicinal properties and relieves the pain and stressful condition and also nourishes the central nervous system. Mukha Lepa with Lodhraadi percutaneous absorption necessitates through the stratum corneum, epidermis, papillary dermis in to blood stream and purifies the blood thereby helps to remove the toxin or dead cells from the face thereby nourishes the cells. Thus help to rectify the problem. Drug are used in Mukha Lepa are Pitta and Kapha Shamaka property. Marsa Nasya with Ksheer Bala Taila (101) A the drug absorbs through the Shringataka, a Shiramarma and circulates the Prana and Shiramarma, reaches local as well as general circulation and alleviates the Dosha. According to modern drug absorption may be through receptor cells of olfactory mucosa, sensory receptors of trigeminal nerve and cavernous sinus and circulation of drug through the neural pathway olfactory and trigeminal nerve and circulatory pathway cavernous sinus. Target the limbic system and sensory area of trigeminal nerve and reduce the pain of Ananthavata (TN). Matra Vasti with Ksheer Bala Taila helps in Rasayana, Balyam, Brimhanam, Jeevanam, Vata Hara, Medhyam and Sarva Indriya Prasadanam. Ksheer Bala Taila cures all types of Vata Rogas. Jalouka Avcharana the saliva contains enzymes and compounds that act as an anticoagulation agent. The most prominent of these anticoagulation agents is hirudin, which binds itself to thrombins thus effectively inhibiting coagulation of the blood. Anti-inflammatory effects of leeches Bdellins is compound in the leech's saliva that act as an anti-inflammatory agent by inhibiting

trypsin as well as plasmin. Jalouka Avcharana the saliva of the Jalouka contains anaesthetic substances which deaden pain. The pain and inflammation will feel relief from anti-inflammatory and anaesthetic affects of the Jalouka saliva. Agni Karna is pain management procedure described in Ayurved. Agni Karma is also considered as best treatment therapy for Vata and Kapha Dosha because Agni possesses Ushna, Sukshma, Tikshna Guna Aashukari Guna which are opposite to Vata and Kapha. It removes Shrotovarodha and increase the Rasa Rakta Samvahana to the affected area. Agni Karma increase metabolism, blood circulations, decreased pain, stimulates nerve, decreased stiffness and inflammation. Agni Karma superior to Bheshaja, Shastra, & Kshara Karma as a disease burnt with Agni will never reoccur. Disease which cannot be cured with Aushadha, Shastra and Kshara, can be cured with Agni. The follow up medicines further alleviates the Tridosha by taking mixture of Vatari Churna, Swarnmakshik Bhasm, Ekangveer Ras, Vrihat Vatchintamani Ras, Mahavat Vidhwansan Ras and Makardhwaj. Vishtinduk Vati, Aamvatari Ras and Saptvishanti Guggul these are also reduced the Tridosha. Badam Rogan Taila boast the immune system and also beneficial for the brain and nerves. Brahmi Ghrita is good neurotransmitters, nourishes and gives the strength to the brain and cranial nerves. It also works as Antistress, antidepressants and anticonvulsant.

Conclusion

TGN is a dreadful disease, which can lead to incapacitating consequences. Descriptions of human suffering and attempts to understand and treat the disease have been ongoing for hundreds of years. Knowledge of the disease pathophysiology and better treatment modalities have surged in the last few decades. While the disease is still not understood in its entirety, use of Ayurvedic therapy and medicinal treatment reduced the pain and symptoms of TGN on parameters of Defence and Veterans Pain Rating Scale (DVPRS), and also helps in preventing the reoccurrence and complication of TGN.

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