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## TREATMENT MODALITIES FOR TRIGEMINAL NEURALGIA – A REVIEW

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## ABSTRACT

Trigeminal neuralgia (TN) is also known as Tic douloureux and is most common among the cranial neuralgias. Most of the times, it affects individuals older than 50 years of age. It has typical features of unilateral facial pain, episodes of intense shooting, stabbing pain that lasts for a few seconds and then there is a pain free period. Treatment may include medicines, brain surgery or radiation therapy. Carbamazepine is the drug of choice. If medicines are not effective or side effects are intolerable then surgery is the choice. But it is associated with complications in most cases after surgery and also pain episodes may recur after some years. Recently LASERs are used as adjunctive in the treatment of TN for reduction of pain intensity. Ayurveda plays important role in management and for better quality of life of TN patients. In Ayurveda *Panchkarma* is the best treatment modality for stopping recurrence of disease and being healthy ever. So here an attempt is made to summarize the available treatment modalities for TN.

KEYWORDS: Carbamazepine, LASER, Ayurvedic management, Panchakarma, Ananta Vata.

### INTRODUCTION

The trigeminal nerve is one among 12 pairs of cranial nerves. The nerve has three branches that conduct sensations from the upper, middle, and lower portions of the face. The ophthalmic, branch provides sensation to most of the scalp, forehead, and front of the pinnacle. The maxillary branch passes through the cheek, maxilla, upper lip, teeth and gums, and to the nose. The mandibular branch passes through the mandible, teeth, gums, and lower lip.

Trigeminal neuralgia (TN) is defined by the International Headache Society (IHS)<sup>[1]</sup> as "unilateral disorder characterized by brief electric shock-like pains, abrupt in onset and termination, and limited to the distribution of one or more divisions of the trigeminal nerve"

#### Causes

The trigeminal nerve is a mixed type of cranial nerve responsible for sensory functions like pressure, temperature, and pain and it is also responsible for the motor function of the muscles of mastication. Demyelination of the myelin sheath of the nerve fiber due to compression, injury or due to other causes leads to the disturbance in the conduction system of the nerve is the possible cause of the pain syndrome. This can lead to pain episodes at the slightest stimulation of any area supplied by the nerve and also hinder the nerve's ability to stop the pain signals after the stimulation ends. This type of injury may also rarely be caused by an aneurysm (an out pouching of a blood vessel); by an AVM (arteriovenous malformation), multiple sclerosis, by a tumor; such as an arachnoid cyst or meningiomas, by a traumatic event such as an accident or even brainstem diseases from strokes, Post herpetic neuralgia, which occurs after shingles, may cause similar symptoms if the trigeminal nerve is damaged.

Short-term peripheral compression is often painless. Persistent compression results in local demyelination with no loss of axon potential continuity. Chronic nerve entrapment results in demyelination primarily, with progressive axonal degeneration subsequently.

When there is no apparent structural cause, the syndrome is called idiopathic.<sup>[2]</sup>

### Signs and Symptoms of Trigeminal Neuralgia

This disorder is characterized by episodes of intense facial pain along the trigeminal nerve divisions. Any one or all the three branches of the nerve may be affected at a single time. Trigeminal neuralgia (TN) most commonly