FACIAL PAIN & TRIGEMINAL NEURALGIA

Saint Alphonsus
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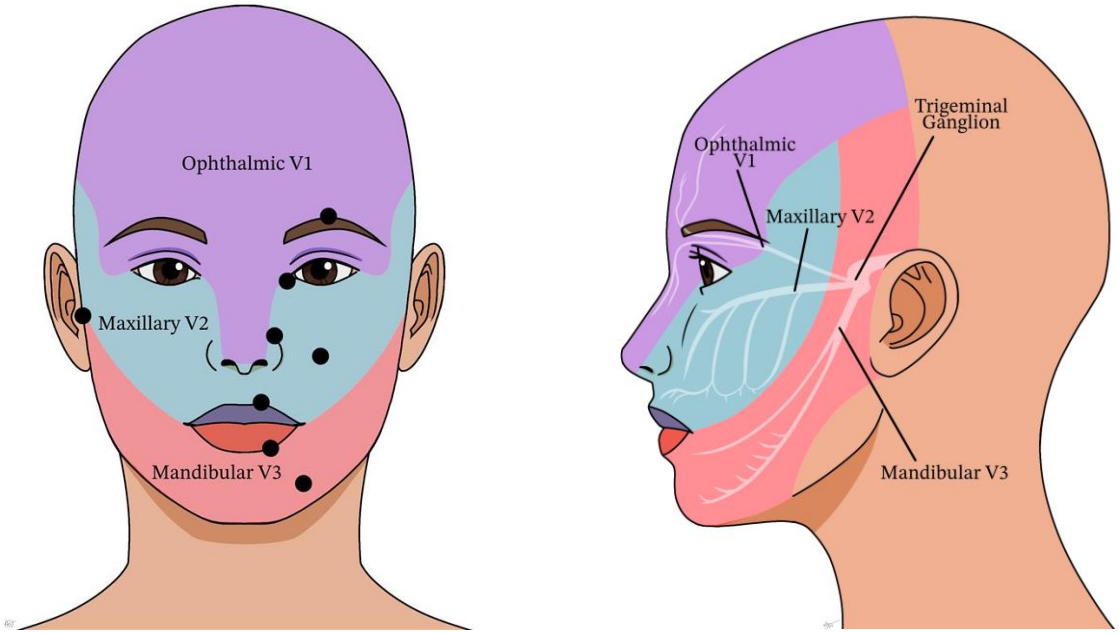
Overview of Trigeminal Neuralgia

Trigeminal neuralgia (TN) is extreme pain in the face. Often referred to as "Suicide Disease," TN causes relentless stabbing/electric shock-like discomfort that can consume a patient's life. The trigeminal nerve (fifth cranial nerve) is predominantly a sensory nerve supplying sensation from the forehead, cheek, and jaw, as well as inside of the mouth and side of the tongue. Its motor branch supplies muscles of mastication (chewing) but not facial expression (this is controlled by seventh cranial nerve). There are many causes of facial pain but in actual trigeminal neuralgia, a blood vessel commonly causes the pain by compression of the nerve root entry zone at the brainstem. This can result in irritation of the nerve and intense attacks of severe facial pain. TN pain can last several days or weeks, followed by remission for months or years. Frequency of painful attacks increases over time and may become disabling.

Features of Trigeminal Neuralgia (Type I, Typical):

- Lancinating, electric shock-like pain on one side of the face (usually) in one or two branches of the nerve
- Pain occurs in repeated waves (patient may initially experience short, mild attacks)
- Periods of remission (pain free between episodes)
- Pain is triggered by contact with the patient's face; touching their face, chewing food, consuming hot or cold food/drink, brushing their teeth, wind, shaving, etc. A patient touching/rubbing their face likely does not have TN.
- Pain is in the trigeminal divisions (V1, V2, V3) and is often correlated to trigger zones on the face (nose, lips, eyes, ear, inside the mouth)



Other Types of Facial Pain:

- **Atypical TN** or **MS** related pain (constant, dull pain)
- **TMJ** pain (directly over the joint)
- **Dental pain** (focal tooth ache, often after oral procedures which can also trigger actual TN)
- **Post-Herpetic Neuralgia** (caused by shingles)

Consider using a facial pain questionnaire, such as the OHSU Facial Pain Tool, to distinguish between TN and Non-TN Facial pain.

CONTINUE TO BACK FOR TREATMENT & REFERRAL INFORMAITON

Treatment Recommendations for Trigeminal Neuralgia

Patients with symptoms of trigeminal neuralgia should be started on medical therapy for pain management.

First Line Agents:

1. **Trileptal (oxcarbazepine) 150mg BID (PO)**

   OR

2. Tegretol (carbamazepine) 200mg BID (PO)

If pain is not improving after 2-3 weeks on one of the above agents:

ADD **gabapentin 300mg nightly (PO).**

There is a synergistic effect between this medication and the first line agents. Trileptal has better efficacy and lower side effect profile, therefore with recurrent TN on Tegretol, patients are commonly switched to and escalated on Trileptal.

Additional agents used for TN management in addition to those above (<u>usually by neurologist):</u>

– Pregabalin (Lyrica)
– Baclofen (Lioresal)
– Lamotrigine (Lamictal)
– Valproic acid (Depakote)
– Phenytoin (Dilantin); helpful in IV form to terminate a severe attack

When to Refer:

A neurosurgery referral is appropriate if medical therapy has been initiated without relief from typical TN symptoms. Please obtain a **<u>Brain MRI without contrast including FIESTA/CISS sequences</u>** at the time of referral.