

# Trigeminal Neuralgia with Autonomic Symptoms

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## Introduction

**Trigeminal neuralgia (TN)**, primarily affecting the maxillary and mandibular branches, manifests as sudden and severe facial pain without **autonomic symptoms** such as tearing and ptosis. However, rare cases present with such symptoms, which necessitates differentiation from short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT)/short-lasting unilateral neuralgiform headache attacks with cranial autonomic symptoms (SUNA), as these disorders share similar pain episodes within the trigeminal sensory territory, often including autonomic manifestations. This study aims to clarify distinguishing features and facilitate accurate diagnosis.



## Methods

We report a 63-year-old woman presenting with left upper premolar area pain upon infraorbital, zygoma, and upper lip contact. Her pain history followed re-endodontic and prosthodontic treatment of the left upper second premolar, and examination showed electric-like sensations without spontaneous pain. Treatments included anti-inflammatory medications and occlusal adjustments, which proved ineffective. A tentative diagnosis of TN led to treatment with carbamazepine, oxcarbazepine, and baclofen, noting episodic conjunctival injection and asymmetric tongue sensations during severe attacks.



## Results

**Table 1.** Differential diagnosis of trigeminal neuralgia and SUNCT/SUNA

|                                       | SUNCT/SUNA   | Trigeminal Neuralgia  |
|---------------------------------------|--|---|
| <b>Pain location</b>                  | More common in V1<br><br>Can occur outside the trigeminal sensory territory (back of the head) | More common in V2/V3<br><br>Exclusive to the trigeminal sensory territory |
| <b>Pain duration</b>                  | 1-600 seconds(longer)  | 1-120 seconds   |
| <b>Frequency/day</b>                  | 1-600  | Triggerable   |
| <b>Refractory period</b>              | Absent   | Present   |
| <b>Autonomic symptoms</b>             | Intense<br><br>Associated with relatively lower pain levels                                    | Less intense<br><br>Associated with increasingly severe pain              |
| <b>Associated neurologic deficits</b> | Miosis and/or ptosis may occur ipsilateral to pain   | No clinically evident neurological deficits                               |
| <b>Response to treatment</b>          | More respond to lamotrigine, gabapentin, topiramate  | More response to carbamazepine  |



## Conclusion

This case, marked by touch-evoked, short-duration pain in the maxillary branch and late-emerging mild autonomic symptoms, responded well to carbamazepine, **favoring a TN diagnosis over SUNCT/SUNA.** The presence of autonomic symptoms in suspected TN cases necessitates careful reevaluation to distinguish from SUNCT/SUNA, particularly when carbamazepine response is suboptimal. Accurate differentiation is crucial for targeted therapy, as medication efficacy varies significantly between these conditions.