



FacialPain
Association

When Extractions And Root Canals Are Not The Solution — Neuropathic Pain In The Dental Chair

If your patient has pain but shows no pathology in their teeth, treating them with root canals or extractions may make their pain worse. Before you act, consider that your patient may have trigeminal neuralgia (TN) or nerve damage, called trigeminal neuropathic pain.

Trigeminal neuralgia symptoms include sudden, intense, sharp pain in the face, often described as electric shocks. This sharp shooting pain may last a few seconds to several minutes and may be accompanied with continuous background pain. Triggers include touching the face, cold wind, chewing, speaking, or brushing teeth. It may involve a blood vessel pressing on a nerve, which may be visible on an MRI, and may improve with advanced surgical treatment such as microvascular decompression (MVD). Multiple sclerosis and brain tumors may be secondary causes of trigeminal neuralgia. Dental procedures have never been shown to be an effective treatment; rather, dental procedures are known to cause a flare-up in pain and can lead to immense suffering.

Trigeminal neuropathic pain, sometimes also referred to as trigeminal neuropathy, occurs following injury to one or more components of the trigeminal nerve,

such as with shingles infection, facial trauma, cancer resection surgeries, or from a dental procedure. When trigeminal neuropathic pain is resultant from facial and/or dental injury, it is subclassified as “post-traumatic trigeminal neuropathic pain” or PTTNp. Symptoms, which are predominantly dysesthetic (ordinary stimulus, like touch, causes unpleasant or painful sensation) and constant, may include pain in the mouth and face, tingling, burning, numbness, and pressure. If nerve injury is a known cause of post-traumatic trigeminal neuropathic pain, it is illogical to think that more nerve injury (i.e., dental procedures) will be helpful. Procedures like tooth extractions and root canals are known to exacerbate the existing neuropathic pain, thus making it more resistant to treatment.

Both trigeminal neuralgia and trigeminal neuropathic pain involve any of the branches of the trigeminal nerve but are more prevalent in the maxillary and/or mandibular branches. Both trigeminal neuralgia and trigeminal neuropathic pain can be disabling and cause interference with daily functioning, such as eating, speaking, shaving, kissing, and the ability to work. Depression, anxiety, and strained relationships may be unfortunate side effects.

Some dental procedures that can precipitate Post-traumatic Trigeminal Neuropathic Pain include:

- Removal of teeth, particularly impacted third molars, can injure the inferior alveolar nerve, the lingual nerve, or the trigeminal nerve
- Placement of dental implants
- Endodontic procedures, including overfills and intrusion into the IAN canal
- Local anesthesia injections, which penetrate the nerve

- Chemical nerve injuries, such as irrigation of intracanal medicaments and failure to rinse acid etchants

Trigeminal neuralgia, trigeminal neuropathic pain, and post-traumatic trigeminal neuropathic pain are challenging to treat, often requiring some trial and error, and a combination of therapies. Specialty care is often needed. Connect with the Facial Pain Association at www.FacePain.org to learn more.

How The Facial Pain Association Can Help Your Practice and Your Patients

- Accurate diagnosis is important to finding the right treatment. The FPA hosts a national conference each year (alternating years in-person and virtual) offering the opportunity to hear from the nation's leading experts on the treatment of facial pain. Join the FPA's email list for conference details and visit the FPA website for access to live webinars on relevant topics such as medications for pain management, microvascular decompression (MVD), rhizotomy, radiosurgery, motor cortex stimulation, complementary and alternative medicines (CAMs), the psychology of pain, emerging neuromodulatory approaches and more.
- Free continuing education credits for dental professionals are offered with complementary online seminars. Go to www.FacePain.org and click the "Healthcare Professionals" tab for more information on opportunities to earn free CME and CDE credit.
- Your patients can tell you that coping with facial pain is lonely, frightening, and daunting. The FPA offers group and one-on-one support through peer-led support groups and peer mentoring. Support groups can be accessed in all 50 states and abroad, as many are available on Zoom. Support group

members say that fellowship with people who understand their pain is a lifeline for them. Peer mentors are available to speak one-on-one to help with coping and questions.

- The FPA provides information about current research and supports research projects through community connection. This effort fosters the development of new solutions for the treatment of facial pain by leading universities and medical schools along with organizations in the pharmaceutical industry.
- The FPA recently launched the Facial Pain Registry, offering members of the facial pain community an important opportunity to share their experiences. The registry will serve as an international resource for researchers and medical professionals, helping to advance studies and drive new developments in the field.
- The FPA has released its second book in four years: *Facial Pain: Living Well with Neuropathic Facial Pain*. This book deals with diagnosis, treatments, the psychology of pain, and how to live your best life. It is a valuable resource for anyone living with neuropathic pain and is available through the website: www.FacePain.org.

