



## Support Group Leader Training – Training Resource – Section 2 - 1

### Subject: Medication Summary

#### Trigeminal Neuralgia Treatments and Medications

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Anyone who has lived through a root canal knows there are few experiences more excruciating than facial pain. People with trigeminal neuralgia—damage to the nerve that communicates facial sensations to the brain—live with the constant threat of brief, stabbing facial pain that can strike anytime. Fortunately, healthcare professionals have an arsenal of medications and surgical techniques that can reduce or eliminate pain for many patients, making a normal life possible.

#### Trigeminal neuralgia medications

There are only three “proven” drugs used to treat trigeminal neuralgia: [carbamazepine](#), [oxcarbazepine](#), and [baclofen](#). They do not work for everyone, and many patients may not be able to endure the side effects. If that happens, a neurologist may prescribe other drugs that have worked in some patients. Except for carbamazepine, all are prescribed off-label, and doses can vary greatly from patient to patient.

#### Anticonvulsants

The only drug solidly proven to provide pain relief for trigeminal neuralgia is carbamazepine, an anti-epileptic drug (AED) normally prescribed to patients who have seizures. Also called anticonvulsants, drugs like carbamazepine prevent seizures by blocking repetitive excitatory electrical signals that travel down the length of nerves. Carbamazepine, however, can produce serious side effects and may gradually lose effectiveness over time. A neurologist may then prescribe a similar anticonvulsant called oxcarbazepine. Other anticonvulsants, such as [lamotrigine](#), [topiramate](#), or [valproic acid](#), may also be tried if first-line therapy doesn't work.

For trigeminal neuralgia, [gabapentin](#), and [pregabalin](#), drugs commonly prescribed for nerve pain, are often the second-line therapy of choice. They can provide effective pain relief with fewer side effects than other anticonvulsants. As a last resort, a neurologist may prescribe [clonazepam](#), an anticonvulsant that works much the same way as gabapentin. It can control trigeminal nerve pain in some patients but has serious side effects including sedation and dependence.

The problem with anticonvulsants is that they have to be swallowed, but some patients may be in too much pain to swallow a pill. In those cases, a neurologist or emergency room physician may use intravenous anticonvulsants such as [phenytoin](#), fosphenytoin, or [levetiracetam](#) to provide immediate pain relief.

### [Baclofen](#)

Baclofen is a skeletal muscle relaxant that is primarily used to treat moderate to severe back pain. However, it doesn't relieve trigeminal neuralgia as a muscle relaxant. Instead, baclofen reduces a chemical, called Substance P, in the central nervous system that's essential to transmitting pain signals. Baclofen is a proven therapy for trigeminal neuralgia, but other muscle relaxants are not. It is often prescribed to enhance the effects of carbamazepine to allow for lower doses and fewer side effects.

### [Botulinum toxin injection](#)

Botulinum toxin A, better known as Botox, paralyzes nerves. A small amount is injected near the roots of the upper jaw and lower jaw branches of the trigeminal nerve. The goal is to neutralize the pain fibers while preserving the other nerve fibers. Studies have shown that most people with trigeminal neuralgia experience significant pain relief for weeks or months after a botulinum toxin injection, so some neurologists will use it as an alternative to surgery.

### [Other medications](#)

Aside from carbamazepine, oxcarbazepine, and baclofen, the American Academy of Neurology (AAN) considers all other trigeminal treatments as "unproven." To avoid surgery, neurologists may try additional classes of drugs including antidepressants ([sumatriptan](#) or [amitriptyline](#)) and anaesthetics ([capsaicin](#)).

### What is the best medication for trigeminal neuralgia?

While only a few drugs are proven effective for trigeminal neuralgia, neurologists rely on a number of drugs because not all medications work for everyone. Patients may need to try several different medications, so there is no “best” medication for trigeminal neuralgia.

#### Best medications for trigeminal neuralgia

| Drug Name   | Drug Class      | Administration Route | Standard Dosage  | Common Side Effects                |
|---|-----------------|----------------------|--|------------------------------------|
| <a href="#">Tegretol</a> ( <a href="#">carbamazepine</a> )  | Anticonvulsant  | Oral                 | 100mg to 200mg twice daily and titrated to effect with a maximum total dose of 1200mg per day in divided doses | Sedation, dizziness, nausea        |
| <a href="#">Trileptal</a> ( <a href="#">oxcarbazepine</a> ) | Anticonvulsant  | Oral                 | 150mg twice daily titrated to effect with a maximum total dose of 1800mg per day in divided doses              | Dizziness, sleepiness, fatigue     |
| <a href="#">Lioresal</a> ( <a href="#">baclofen</a> )       | Muscle relaxant | Oral                 | 10mg once daily titrated to effect with a maximum total dose of 80mg per day in three to four divided dose     | Drowsiness, dizziness, weakness    |
| <a href="#">Lamictal</a> ( <a href="#">lamotrigine</a> )    | Anticonvulsant  | Oral                 | 25mg twice daily titrated to effect with a maximum total dose of 400mg per day in 2 divided doses              | Dizziness, headache, double vision |

|   |                |                      |   |  |
|---|----------------|----------------------|---|--|
| <a href="#">Dilantin (phenytoin)</a>      | Anticonvulsant | Intravenous infusion | Dosing dependent upon weight  | Injection site reactions, dizziness, drowsiness      |
| <a href="#">Neurontin (gabapentin)</a>    | Anticonvulsant | Oral                 | 300mg once daily titrated to effect with a maximum daily dose of 1800mg per day | Headache, eye problems, coordination problems        |
| <a href="#">Botox</a> (botulinum toxin A) | Neurotoxin     | Injection            | 25 to 75 units (varies)   | Pain, temporary facial imbalance, temporary swelling |