

Erratum

482 Pain

Handbook of Neurosurgery--8th Edition by Mark S. Greenberg

We regret the error that appeared on page 482. The below highlighted Drug info header was incorrectly listed as: Carbamazepine (Tegretol®). The correct Drug info is as highlighted and listed below: Oxcarbazepine (Trileptal®)

R 100 mg PO BID, increase by 200 mg/d up to maximum of 1200 mg/d divided TID. **Supplied:** See supply information (p.450).

Drug info: Oxcarbazepine (Trileptal®)

Rapidly metabolized to carbamazepine, similar efficacy, often tolerated at higher doses than carbamazepine. **Side effects** : symptomatic hyponatremia.

R for trigeminal neuralgia: 300 mg PO BID, increase by 600 mg/d q week. Usual dose: 450–1200 mg. Maximum of 2400 mg/d. **Supplied** : 150, 300, 600 mg tablets; 500 mg/5-ml suspension.

Drug info: Baclofen (Lioresal®)

2nd DOC (not as effective as carbamazepine, but fewer side-effects). Caution: teratogenic in rats. Avoid abrupt withdrawal (can cause hallucinations and seizures). May be more effective if used in conjunction with low dose carbamazepine.

R Start low, 5 mg PO TID, increase q 3 d by 5 mg/dose; not to exceed 20 mg QID (80 mg/d); use smallest effective dose.

Drug info: Gabapentin (Neurontin®)

An anticonvulsant, may act synergistically with carbamazepine and baclofen. **Side effects** : include ataxia, sedation and rash.

R start with 100 mg po BID, titrate to 5–7 mg/kg/day (3600 mg/d max).

Miscellaneous drugs

Also possibly effective:

1. phenytoin (Dilantin®): may be useful IV in patients in too much pain to open their mouths to take carbamazepine orally
2. capsaicin (Zostrix®): 1 gm applied TID for several days resulted in remission of symptoms in 10 of 12 patients (4 relapsed in < 4 mos, but remained pain free for 1 yr after 2nd course)²⁹
3. clonazepam (Klonopin®) (p.454): works in 25%
4. lamotrigine (Lamictal®)
5. amitriptyline (Elavil®): more commonly used for atypical facial pain
6. botulinum toxin (Botox®): reduces transmission of CGRP producing a direct effect on the sensory nerve fibers

Surgical therapy for trigeminal neuralgia

Indications for surgery

Reserved for cases refractory to medical management, or when side effects of medications exceed risks and drawbacks of surgery.

Surgical options

1. peripheral trigeminal nerve branch procedures to block or ablate the division involved with pain, or can be used to block the trigger³⁰:
 - a) means of blocking
 - local blocks (phenol, alcohol)
 - neurectomy of trigeminal branch involved
 - b) nerve branches:
 - V1 (ophthalmic division) at the supraorbital, supratrochlear, or infraorbital nerves
 - V2 (maxillary division) at the foramen rotundum
 - V3 (mandibular division) block at the foramen ovale, or neurectomy of inferior dental nerve