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Rapid-Acting, As-Needed Medications for Trigeminally-Mediated Pain

Drug Type	Compound	Formulation and Dose	Comments and Links to Rxlist.com and Wikipedia or Journal Article
Sodium channel blocker	Carbamazepine	Chewable ¹ 50-200 mg (100 mg tablet Rx)	Can be repeated 5-10 min later, up to 400 mg/attack total. Longstanding first line experience.
			Tegretol (Carbamazepine): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)
			Carbamazepine - Wikipedia
Sodium channel blocker	Oxcarbazepine	Liquid 50-200 mg (variable doses possible with liquid)	See chewable carbamazepine. Can also be used as "swish and spit," exclusively intra-oral effect with minimal systemic absorption, chewable carbamazepine alternative. Trileptal (Oxcarbazepine): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)
			Oxcarbazepine - Wikipedia
Benzodiazepine	Clonazepam ²	Orally dissolving tablet 0.125 mg -0.25 mg	Can be repeated up to 1 mg total (soft limit). Balance with mild sedation (which will not kick in at lower dose because of the trigeminal pain attack). Other benzodiazepines are not analgesic. Longstanding first line experience. Synergistic combination with carbamazepine.
			Klonopin (Clonazepam): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)
			Clonazepam - Wikipedia
Gabapentinoids	Gabapentin	Liquid 100-300 mg	Alternative if carbamazepine/oxcarbazepine works poorly or if patient has known gabapentin/pregabalin response to maintenance medication Neurontin (gabapentin) for Seizures and Nerve Pain: Uses, Dosage, Side Effects, Interactions, Warnings (rxlist.com).
			Gabapentin - Wikipedia
NMDA-receptor blocker	Ketamine ²	Nasal spray 10-15 mg/puff (100-150 mg /mL)	2-4 puffs per nostril; can be used bilaterally (on both sides) depending on laterality of the pain and on laterality of effect. Soft limit 100-200 mg/ attack and 200-400 mg/day. Dose limiting effects are psychotropic effects (feeling weird; higher doses can be hallucinogenic (which many patients have tolerated when facing trigeminal pain attacks.) Some patients are very responsive to lower doses. Most need higher doses. Nasal irritation can be overcome by pretreatment with 1% lidocaine liquid or jelly. One of the most rapid onset medications against trigeminal pain. Newer approach, possibly promising. Ketamine Hydrochloride (Ketamine HCI): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)
			Ketamine - Wikipedia
Gabapentinoids NMDA-receptor	Gabapentin	tablet 0.125 mg -0.25 mg Liquid 100-300 mg Nasal spray 10-15 mg/puff	Balance with mild sedation (which will not kick in at lower dose because of the trigeminal pain attack). Other benzodiazepines are not analgesic. Longstanding first line experience. Synergistic combination with carbamazepine. Klonopin (Clonazepam): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com) Clonazepam - Wikipedia Alternative if carbamazepine/oxcarbazepine works poorly or if patient has known gabapentin/pregabalin response to maintenance medication Neurontin (gabapentin) for Seizures and Nerve Pain: Uses, Dosage, Side Effects, Interactions, Warnings (rxlist.com). Gabapentin - Wikipedia 2-4 puffs per nostril; can be used bilaterally (on both sides) depending on laterality of the pain and on laterality of effect. Soft limit 100-200 mg/ attack and 200-400 mg/day. Dose limiting effects are psychotropic effects (feeling weird; higher doses can be hallucinogenic (which many patients have tolerated when facing trigeminal pain attacks.) Some patients are very responsive to lower doses. Most need higher doses. Nasal irritation can be overcome by pretreatment with 1% lidocaine liquid or jelly. One of the most rapid onset medications against trigeminal pain. Newer approach, possibly promising. Ketamine Hydrochloride (Ketamine HCI): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)

NMDA-receptor blocker	S-ketamine ^{2,3} ES-ketamine ^{2,3}	nasal spray 28 mg/ puff	Spravato Rx-medicine (controlled substance, high insurance hurdle). If patients use this, medication for mood disorder is recommended. Spravato (Esketamine Nasal Spray): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com) Esketamine - Wikipedia
- gepant (CGRP receptor blocker)	Rimegepant ³	75 mg orally- dissolving	1 tablet - can repeat with sufficient supply. Patients need to have a sufficient supply of tablets to engage in repeat applications as-needed. Since it is officially covered over the migraine indication, there will be limits of monthly supply, such as 4 or max 8 tablets that patients can have per month. Patients need to "budget" with what they have so they have enough until the next refill. This is an important practical consideration that can cause stress. Newer approach, with limited experience: some patients experienced a high-impact beneficial response, for most it is a suitable combination to carbamazepine and/or clonazepam. Nurtec ODT (Rimegepant Orally Disintegrating Tablets, for Sublingual or Oral Use): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com) Rimegepant - Wikipedia
-Gepant (CGRP receptor blocker)	Zavegepant ³	10 mg nasal spray	1 puff; can have second. Very recent approach, possible equi-effective to Rimegepant No practical experience. Possibly use Rimegepant for 3rd branch pain, Zavegepant for 2nd and 1st branch pain. Both -gepants suitable for trigeminal pain that facilitates migraine (or cluster headache.) Zavzpret (Zavegepant Nasal Spray): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)
Sodium channel blocker	Lidocaine	1-2% jelly, spray	Intra-oral use for 3rd branch triggered trigeminal pain. Nasal spray for 2nd branch triggered pain. Add-on to carbamazepine/clonazepam Pre-medication for nasal ketamine in case ketamine has nasally irritant properties which would defeat its powerful action on the trigeminal system. https://www.webmd.com/drugs/2/drug-10414-252/lidocaine-hcl-mucous-membrane/lidocaine-jelly-mucous-membrane/details Lidocaine - Wikipedia
Oxytocin	Oxytocin ¹	nasal spray 24IU/ puff (240IU/mL)	2 puffs per nostril, bilateral (both sides.) Limited experience; however: great safety, adjunct to any partially effective as-needed rapid-onset medication. Pitocin (Oxytocin Injection): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com) Oxytocin (medication) - Wikipedia

¹ Requires formulation by a compounding pharmacy

Disclaimer: The information contained in this list is not intended to be individual medical advice, diagnosis, or treatment or to induce the reader to seek care with any specific physician. Always seek the advice of your physician or other qualified health care provider with any questions you may have regarding a medical condition or treatment, before undertaking a new health care treatment, and never disregard professional medical advice or delay in seeking it because of something you have read in this list.

² Controlled substance

³ Insurance approval hurdles/expensive