Part Two



Procedures:

- 1. **Acupuncture:** Some people find that this can be helpful, although multiple treatments are usually required.
- 2. Nerve Blocks: Sometimes people may experience some relief from various "nerve blocks". These are usually injections of numbing medicines, like lidocaine, sometimes mixed with steroids. If these do help, they are often short lived. They may need to be repeated, and it is possible, that sometimes these injections can "break the pain cycle". Sometimes, a nerve block may also convey useful information for treating the pain, that is, does the pain respond to temporarily blocking a particular nerve. This may be useful information in terms of other future treatments.
- 3. Botox injections: Botulinum toxin, when used in very tiny doses, in a very superficial manner, can cause temporary weakness of various muscles. Because some neuropathic pain is mediated by subtle muscle spasm or tension, Botox may therefore help with some chronic pain syndromes. It may have to be repeated every few months, as the effects are not permanent. Also, Botox may act to relieve chronic pain in other ways that aren't fully understood. Regardless, this is a low risk intervention that can help with certain craniofacial pain syndromes. It can take 1-2 weeks to give pain relief.
- 4. Peripheral neuro-stimularors: These are very small soft wire electrodes that can be placed under the skin in the superficial tissues to stimulate various peripheral nerves, such as the supraorbital nerve (the sensory nerve above the eye), the infraorbital nerve (the sensory nerve below the eye), and the occipital nerves (the sensory nerves in the back of the head). The implant takes only a few minutes to place, and is then attached to an external power supply and regulator for a few days that allows the patient to adjust the settings to see if the electrode is helping.

- If it does help, an electrode can then be placed on a more permanent basis and attached to a battery that is internalized under the collarbone, like a pacemaker battery. This is a minimally invasive procedure that can help some people with chronic severe neuropathic face pain. Patients who are candidates for this procedure have pain that has lasted at least 6 months and have failed multiple other treatments.
- stimulators that are place epidurally, just above the spinal cord. They are more commonly used for chronic pain in the legs or arms, but can be used for refractory face pain as well. For such a treatment, the stimulator is placed at the very top of the cervical spinal cord (as the very top of the spinal cord does contain trigeminal fibers that supply the face). First a trial stimulation would be performed, and if successful, a permanent implant could be placed. Again, this procedure would only be considered after other treatments had failed. This is also a procedure that we offer.

6. Hyperbaric Oxygen Therapy (HBOT):

This treatment involves exposing patients to high levels of oxygen under increased pressure in special chambers. The treatments usually are done over several weeks. The higher oxygen levels are thought to enhance healing of tissues and may have a role in treating chronic pain conditions. It is unclear whether certain patients with refractory facial pain might benefit from this or not.

7. Ketamine Injections: Ketamine is an anesthetic. When administered in low infusion doses it may help to reduce the pain associated with some chronic facial pain syndromes. Several outpatient treatments are required. There may be a role for this treatment in patients who have chronic facial pain.

Conclusions:

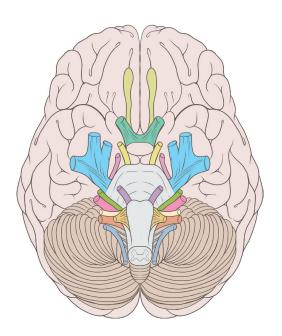
There are many options for treating neuropathic facial pain. These mostly involve medicines and non-surgical treatments. For refractory patients, there are some procedures that may offer relief. Treating physicians must be very patient and willing to try a host of treatments for these often difficult to manage cases. The best chance of success comes with a willingness to try different treatments, including multiple medicines at different doses, and treatments in different combinations. Multimodality efforts (using multiple treatments options) are usually more likely to succeed.

Treatments that we offer for specific facial pain syndromes:

- Comprehensive management of Trigeminal Neuralgia
- Comprehensive management of Glossopharyngeal Neuralgia

Treatments that we offer for other types of chronic neuropathic facial pain:

- Medicines
- Peripheral Nerve Stimulators
- Spinal Cord Stimulators



Facial Pain Syndromes can be complex and challenging to manage, and our role in the diagnosis and management of these disorders is complementary to the role of other specialists, including family practice doctors, internists, neurologists, ophthalmologists, otolaryngologists, pain management doctors, dentists, physiatrists, psychiatrists, and psychologists.



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After receiving
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degree with high
honors in Biology
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Dr. Brisman obtained
his medical degree from

Columbia College of Physicians and Surgeons. He then completed a General Surgery internship and Neurological Surgery residency at the Mount Sinai Medical Center in New York City where he was appointed Chief Resident in his final year of residency.

Board certified by the American Board of Neurological Surgeons and a Fellow of the American College of Surgeons, Dr. Brisman specializes in the treatment of Trigeminal Neuralgia and Brain Tumors. He serves as the Co-Medical Director of the Long Island Gamma Knife Center at Mount Sinai South Nassau Hospital in Oceanside and has served as the Chief of Neurosurgery at NYU-Winthrop Hospital in Mineola. In



addition, Dr. Brisman has also served as the President of both the Nassau County Medical Society and the New York State Neurosurgical Society.

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Dr. Brisman Treats:

- Trigeminal Neuralgia
- Gliomas
- Brain Tumors
- Brain AVMS
- Pituitary Tumors
- Hemifacial Spasm
- Meningiomas
- Glossopharyngeal Neuralgia
- Acoustic Neuromas
- Skull Tumors
- Brain Metastases
- Chiari Malformation

Dr. Brisman is proficient in the use of minimally invasive neurosurgical procedures including:

- Stereotactic Radiosurgery
- Gamma Knife®
- CyberKnife®
- Novalis Tx®
- Microvascular Decompression
- Neuroendoscopy
- Transsphenoidal Surgery
- Stereotactic-guided Craniotomy
- Percutaneous Trigeminal Rhizotomy