

MS AND TN

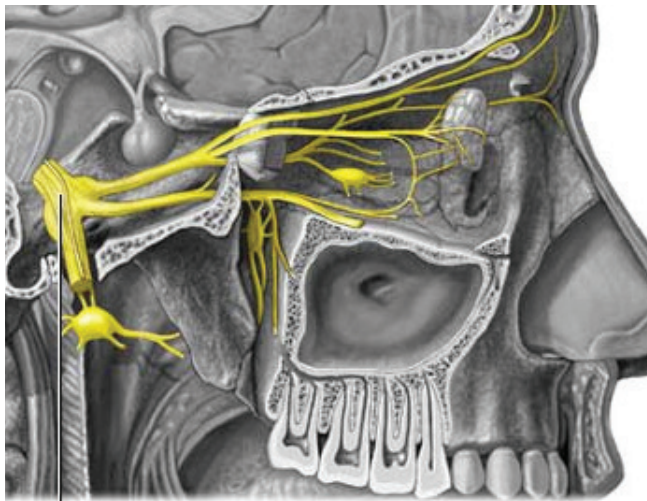


TIC TALK

Nervous System. It causes loss of the fatty myelin nerve covering that helps to conduct nerve signals. As a result, neurological deficits and problems occur, which sometimes resolve, and sometimes do not. If the demyelination affects the trigeminal nerve pathways, the patient may develop Trigeminal Neuralgia.

About 2% of people with Multiple Sclerosis (MS) will get Trigeminal Neuralgia (TN). As such, there is a significant overlap between these two diseases.

Multiple Sclerosis is an inflammatory demyelinating disease of the Central



Trigeminal nerve

WHAT IS TRIGEMINAL NEURALGIA?

Trigeminal Neuralgia is a condition in which patients experience intermittent attacks of sudden, sharp, severe, brief pains on one side of the face. The pains are frequently triggered by light touch to the face, and usually improve with certain anti-seizure medicines like tegretol (carbamazepine) or neurontin (gabapentin). They are often experienced as “electric shocks” or “stabbing” pains. The usual cause is a small blood vessel that contacts or compresses the trigeminal nerve near the exit point from

the brain (the nerve root). TN can also be caused by other masses or tumors that compress the trigeminal nerve root. TN can also be caused by multiple sclerosis.

PRESENTATION

Patients with TN and MS (TN/MS), usually already have a known diagnosis of MS when they develop facial pain. However, in rare cases, TN can be the first presenting sign of MS. TN/MS patients tend to develop TN at a younger age than TN patients in general. TN/MS patients are more likely to have TN on both sides of their faces, though rarely at the same time. TN/MS patients are often much sicker than traditional TN patients, because of the MS. As such, it is not uncommon, for example, for these patients to have weakness in their legs (paraparesis) or weakness in the arms and legs (quadriparesis).



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WORKUP

In addition to a standard history and physical exam, TN/MS patients are evaluated with a brain MRI. Usually, because of the diagnosis of MS, these patients have already had one or more MRI's. The MRI will often show disease consistent with MS. MS patients may have already had other diagnostic studies to confirm their diagnosis of MS, and may already be under treatment with one or more medicines to treat their MS.

TREATMENT

The treatment of TN in MS patients begins first with the same medications that would normally be given for TN. These include tegretol, trileptal, and gabapentin. If medicines fail to adequately control the pain, or are producing unacceptable side effects, a procedure can be considered. The procedures would be nerve injuring procedures, such as that performed with the needle in the cheek (rhizotomy) or the superfocused

radiation (radiosurgery / gamma knife). The MVD (microvascular decompression) in which a blood vessel is moved away from the nerve, is not performed in TN/MS patients, because the cause of the TN is not a blood vessel in these cases. The procedures (rhizotomy and radiosurgery) are relatively low risk, outpatient procedures, and can be safely repeated multiple times. However, it is usually best to wait at least 1 year between the first and second Gamma Knife procedure, and at least several years between the second and third Gamma Knife procedure.

OUTCOMES

TN/MS patients are somewhat more challenging to treat. They are sicker patients in general. The procedures are not always as effective and are more likely to need to be repeated to get an acceptable result. Also, the benefits of the nerve injuring procedures tend to wear off over time. Since the TN/MS patients are generally younger, they may need multiple procedures over their lives to treat the TN. That having been said, TN/MS patients who are not getting good relief from medicines, can usually get pain relief from one or more of the procedures (rhizotomy or radiosurgery).

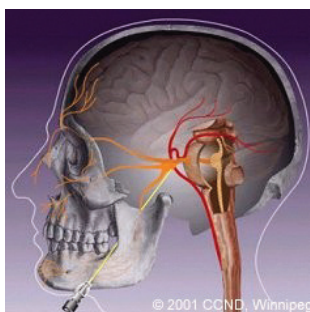


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Neurosurgeon

After receiving his undergraduate degree with high honors in Biology from Harvard University, 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. Dr. Brisman 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 and he has served as the Chief of Neurosurgery and Co-Director of the Neuroscience Institute at NYU Winthrop Hospital. In addition, Dr. Brisman has formerly served as President of both the Nassau County Medical Society and the New York State Neurosurgical Society.

DR. BRISMAN TREATS:

- Trigeminal Neuralgia
- Brain Tumors
- Pituitary Tumors
- Acoustic Neuromas
- Meningiomas
- Brain Metastases
- Gliomas
- Hemifacial Spasm
- Glossopharyngeal Neuralgia
- Skull Tumors
- Brain AVM's

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

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