



## PACIFIC FACIAL PAIN CENTER AT PACIFIC NEUROSCIENCE INSTITUTE

Our neurology and neurosurgical team experts bring compassion and experience in the diagnosis and innovative treatment of facial pain syndromes, including trigeminal neuralgia, hemifacial spasm and glossopharyngeal neuralgia, to safely and effectively provide lasting relief and quality of life for these complex conditions.

**PATIENT-CENTERED FOCUS:** We provide a personalized and comprehensive approach to achieve a proper diagnosis, treatment and long-term management for our patients.

**MULTIDISCIPLINARY APPROACH:** A highly specialized team with expertise in neurology, neurosurgery, otology and radiation oncology work on your behalf.

**TECHNOLOGY:** State-of-the-art operating suite offering minimally invasive, endoscopic approaches and advanced treatment options dedicated to neurosciences.

**CONSISTENT QUALITY CARE:** Our physicians practice at the Pacific Neuroscience Institute located at award-winning hospitals Providence Saint John's Health Center in Santa Monica, and Providence Little Company of Mary Medical Center Torrance.

**PHYSICIAN EDUCATION:** Regular symposia in facial pain disorders management and restorative neurosurgical techniques.

### DIAGNOSIS & TREATMENT

Trigeminal neuralgia has been described as one of the most intense pains one can experience. For patients with trigeminal neuralgia and other facial pain or neuronal disorders, our expert team thoroughly reviews symptoms and uses leading-edge diagnostic tools to determine a correct diagnosis. A patient-specific treatment algorithm is developed collaboratively, incorporating medical, procedural and/or surgical treatment options. Medication therapy is the most common therapy prescribed, though minimally invasive surgery or stereotactic radiosurgery may be necessary for more definitive pain or symptom relief.

### DISORDERS WE TREAT

- Facial Pain Syndromes
  - Trigeminal Neuralgia
  - Atypical Facial Pain
  - Glossopharyngeal Neuralgia
  - Otic Neuralgia
- Hemifacial Spasm
- Refractory Meniere's Syndrome
- Intractable Vertigo

### INTERNATIONAL PATIENTS

For patients living outside the USA, our physicians can provide a prompt review of imaging and other tests. We can suggest a recommendation about the optimal treatment options with no charge for such initial evaluations and preliminary reviews.

For an appointment or second opinion:

➔ [310-582-7450](tel:3105827450)

➔ [PacificFacialPain.org](http://PacificFacialPain.org)

**PACIFIC  
NEUROSCIENCE  
INSTITUTE**®

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Health Center**  
+ PROVIDENCE Health & Services

**JOHN WAYNE  
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at Providence Saint John's Health Center

**PROVIDENCE**  
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Medical Center  
Torrance



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## MICROVASCULAR DECOMPRESSION SURGERY (MVD)

For eligible patients with facial disorders such as trigeminal or glossopharyngeal neuroalgia, hemifacial spasm or intractable vertigo, minimally-invasive microvascular decompression surgery (MVD) is intended to address the root cause of the pain or symptoms. This approach involves a keyhole retromastoid craniotomy made through a small incision behind the ear. Through this opening and using a high-definition endoscope or microscope, small pads of Teflon are placed between the nerve and vessel to “decompress” the nerve and allow it to function normally. With this technique there is little or no need for brain retraction or nerve manipulation. In most cases this is a highly effective therapy that restores quality of life to the patient.

## ADDITIONAL TREATMENT OPTIONS

In addition, trigeminal neuralgia can be treated with stereotactic radiosurgery to the trigeminal nerve. This technique targets the nerve as it exits the brainstem and has shown reasonable efficacy in patients with classic trigeminal neuralgia. Ablative or percutaneous therapies such as radiofrequency ablation, balloon nerve compression and glycerol rhizotomy are designed to ablate or selectively destroy specific fibers of the trigeminal nerve. Atypical facial pain can also benefit from these therapies. In very select patients, deep brain stimulation may be considered as a treatment option for refractory facial pain.



**GARNI BARKHOUDARIAN,  
MD, FAANS**  
DIRECTOR  
PACIFIC FACIAL PAIN CENTER

Garni Barkhoudarian, MD, is a board-certified, fellowship-trained neurosurgeon with a focus on minimally invasive endoscopic surgery. Dr. Barkhoudarian has particular expertise in trigeminal neuralgia, hemifacial spasm and other facial pain syndromes. For virtually all procedures, he applies the keyhole concept of minimizing collateral damage to the brain using advanced neuroimaging and neuro-navigation techniques along with endoscopy to improve targeting and lesion visualization. [pacificneuro.org/barkhoudarian](http://pacificneuro.org/barkhoudarian)



**MARISSA CHANG, MD**  
CO-DIRECTOR  
PACIFIC FACIAL PAIN CENTER

Dr. Chang, MD, is a board certified and fellowship-trained facial pain neurologist with expertise in Headache, Interventional Pain, and Orofacial Pain. She sees a wide spectrum of facial pain syndromes and combines the best of evidence-based and state-of-the-art medicine to compassionately treat her patients. An award-winning speaker, she has lectured extensively on the pathophysiology and treatment of all forms of headache and facial pain. [pacificneuro.org/chang](http://pacificneuro.org/chang)

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