The Facial Pain Association announced the John Alksne, MD Young Investigator Award at the opening session of the 11th National Conference held on the campus of The University of California San Diego on November 1, 2019. The award is intended for the support of the young investigator in the field of neurology, neurosurgery, dentistry, oral-maxillofacial surgery or plastic surgery who has submitted to FPA the best scientific paper on the topic of trigeminal neuropathic pain.

Dr. Jeffrey Brown, chair of the medical advisory board, presented Dr. Alksne with a plaque memorializing the award.

Neurological Surgery, PC, is providing funding for the award and efforts to advertise it in appropriate medical journals. NSPC is based in Rockville Centre, New York and was itself founded 50 years ago at the time that Dr. Alksne and Dr. Jannetta performed the landmark microvascular decompression of the trigeminal nerve.
IN THIS EDITION OF THE Q

Dr. Brown Addresses Patients’ Concerns Regarding MRI Procedures

Motor Cortex Stimulation Treatment for TN

Highlights from the Facial Pain Association’s 11th National Conference at UC San Diego

Q FEATURES

From the Chairman of the Board

The YPC on Preparing for Winter Weather Patient Profile

Memorial & Honorary Tributes FPA Professional Members

Join the Facial Pain Association in celebrating 30 years of patient support and advocacy in 2020
It is with great pleasure that I welcome Allison Feldman to the Facial Pain Association (FPA) as our new CEO. Allison joins us with a Master’s Degree in Public Administration, many years of nonprofit work, and most recently four years of experience as the CEO of a very similar organization to the FPA. Not surprisingly, she has hit the road running. She brings a great deal of energy, enthusiasm, new ideas and invaluable experience to our team. We thank John Koff, our departing CEO, for his leadership and outstanding service to our community for the past 13 years, and wish him the best in his retirement.

Thank you to everyone who joined us in San Diego at our National Conference. In addition to many of the country’s leading physicians and dentists that treat facial pain and all the participants, we were joined by Claire Patterson, the person who founded our organization 30 years ago.

If you were unable to make the National Conference, we hope to see you at future events. It’s a terrific way to learn about the many treatment options, get all your important questions answered, and meet leaders in the healthcare field dedicated to helping those of us with this challenging condition. And there’s more. In addition to all the information available at the conferences, there’s a sense of comfort in knowing that each of us is part of a community. A community of people with our condition, a community of people who support each of us, and a community of skilled and empathetic healthcare professionals dedicated to our wellbeing. It’s a reminder that we have a tough condition, but we are not alone.

To better serve our community, the FPA staff and board have embarked on updating our understanding of the needs of those we serve, the environment in which we operate, and where and how we should concentrate our resources to be most valuable. In other words, we are updating our strategic plan. Like similar organizations, we find ourselves in a position of having many important things to do and limited resources, so we need to choose carefully.

Speaking of resources, I want to thank everyone who contributed to the FPA this past year. Without your generosity, the FPA would not exist. And if making a contribution last year slipped your mind, we would love to get a great start on 2020. As you know, facial neuropathic pain is considered an “orphan condition” in the medical community because there are relatively few of us with this disorder. That not only presents a challenge like most dental and medical professionals are unable to provide a quick and accurate diagnosis (they likely haven’t seen someone else with our condition), it also presents a funding challenge for an organization like ours. There just aren’t that many of us to contribute. However, that also means each donation is even more important and more appreciated. Go to www.facepain.org to find the easiest way for you to donate.

Sincerely,

David Meyers, Chairman of the Board
The Facial Pain Association
John Wooden, the famous UCLA basketball coach once said, “things work out best for those who make the best of how things work out.” I would use this phrase to describe my friend and former colleague, John Koff, and the manner in which his stewardship and leadership has impacted the Facial Pain Association.

John was recruited in 2006 to bring business and financial expertise to salvage and maintain a distressed organization, for such was the state of the Association at that time. In fact, I invited John to attend a Board meeting before he accepted the job with us, so that he could assess whether he could help. However, I asked John to step outside while I discussed with the Board an immediate cash infusion if we were not to close our doors. As is self-evident today, the then Board provided the financial support so that the Association could continue its work and allow John the time to help right the ship and avoid future financial crises.

As is common among nonprofits, the Association depended exclusively upon charitable contributions. For a while we were able to supplement donations from patients and other Association supporters by securing some grants from drug companies and manufacturers of medical devices. However, the FDA subsequently forbade such entities from making such grants as it was seen as a way for them to improperly promote their products. This left us with a challenge and John set about ways for the Association to secure regular and dependable sources of earned income to supplement the generosity of Association members, patients and others. Using this approach, John has been able to provide the Association with stable sources of income but, as he has always said, you can't take anything for granted and agility learned from dealing with financial distress is something that should be at the forefront of planning for the future.

John would attend Board meetings but initially reserved his comments for me once a meeting concluded because John had a blunt way of speaking and did not wish to offend anyone to their face. John's comments were always insightful and I encouraged him to speak up during meetings, which allowed him to hone his skills in dealing with people to whom he answered but with whom he often disagreed. John liked to remind everyone that the Association was a business and should be run like one, the only difference between the Association and most other businesses being that the Association was a business run not for profit, a concept counter, at the time, to nonprofit management practice and to the notion of some board members.

John's role was not an easy one as he answered to successive Executive Directors who did not have or often appreciate his smarts. However, John persevered and, in 2011, I encouraged the Board to promote John to the role of CEO, a role he has played successfully ever since. About that time, the Board also agreed to create the Facial Pain Research Foundation as a division of the Association and John was charged with managing that relationship. In that role he successfully fostered the development of the Foundation in conjunction with its Trustees, ultimately leading to the Foundation becoming independent and to its managing its own affairs, a result for which the Foundation owes John a debt of gratitude.

John's successful elevation to the role of CEO and knowing that the finances of the Association were in good order allowed me the opportunity to recruit a successor Chairman, Jeff Boddington, to whom I will be forever thankful for accepting that role, thus allowing me to step down.

I regard as one of the highlights and pleasures of my tenure as Chairman the recruitment of John Koff and providing him with the Board assistance necessary to foster his success. No one should be in any doubt as to the impact that this man has had on the success of the Association, and all who look to the Association as the premier source of information and support for facial pain patients should join me in thanking him for his years of service to the Association, for bringing his smarts to our table, and for the resulting stability which has allowed the Association to maintain and expand its many services.

Torturing the words of John Wooden, John certainly made the best of how things work out, allowing things to work out best for the Association.

Bravo John, and Godspeed!

Roger Levy
Chairman of the Board, 1997-2013
Facial Pain Association
MRI for trigeminal neuropathic pain, what are the issues?

Advances in imaging technology allow us to accurately anticipate findings at surgery to treat trigeminal neuropathic pain. We routinely make use of MRI.

• What is an MRI?
• A magnetic resonance image does not involve any radiation, which is an advantage over CT scans. Computed tomography (CT) images are obtained from imaging devices that deliver radiation.

For 40 years and 450 million injections MRIs have been completed with gadolinium-based contrast agents (GBCAs).

Why use gadolinium?

Gadolinium by itself is not magnetic, but when a magnetic field is directed towards it by the MRI machine it becomes magnetic while the field is active. This is the “resonance” part of magnetic resonance imaging (MRI). This effect is called “paramagnetism.” When the magnetic field is applied by the MRI, spinning electrons in the outer rim of the element all align (resonate) their spin yielding a brief net attractive force that can be measured. If the GBCA is infused, then it travels where there is a concentration of blood vessels. Tumors, for example, need energy to grow larger, so they have abnormally higher vascularity and will show up on the MRI with gadolinium infusion. Arteries, especially will distinguish themselves more clearly.

Can particles of the element be deposited in the brain and remain there?

Maybe, but the evidence is that it remains within small blood vessel walls rather than brain tissue, and there is no research evidence that any damage is done to the brain tissue itself.

The Gadolinium used is attached (chelated) to other molecules, which makes it dissolvable (soluble) in water and easier for the kidneys to
rid the body of its presence. The most recent version of gadolinium chelation that is used (Gadovist) uses a form of chelation that surrounds the gadolinium molecule and makes it easier for the kidneys to flush it out.

The earlier version (Magnavist) was discovered to have a small risk of aggravating kidney dysfunction in patients who already have impaired function. If contrast is to be infused, all patients now are screened. This risk has essentially been eliminated by this move.

Is there scientific evidence that gadolinium left in the brain can cause injury?
No.

Do you really need to have gadolinium contrast to study the brain when looking for evidence of a vascular association with the trigeminal nerve?
No.

There are three software tweaks that can be made when performing an MRI that enhance our ability to distinguish between nerves and brain tissue, spinal fluid, and vessels. These are called by the acronyms FIESTA, CISS or VIBE. Excellent images are obtainable with studies done in this manner.

With the FIESTA technique gadolinium is not needed if there has not been a previous microvascular decompression. If an MVD has been done, it may be needed because of the unavoidable “blurring” of the nerve’s appearance after surgery and placement of Teflon.

So what is the best thing to do?
By all means, if the surgeon can image a cause for your trigeminal neuropathic pain and you need to have surgery to alleviate it, then let him get the best preoperative imaging possible. It will reduce or eliminate the need to “explore” for vessels during surgery. This should speed the operation and reduce risk of intraoperative complication.

• The risks of a microvascular decompression are low.
• The risk, if any, of GBCA infusion is much, much, much lower.
• Nothing is perfect, but this is the best we can do.

Now Marilyn really has something to smile about.

For over 40 years, Marilyn was treated for the excruciating pain of trigeminal neuralgia. When medication and surgery no longer provided relief, she and her neurosurgeon turned to Gamma Knife® at St. Joseph Medical Center in Tacoma.

To learn if Gamma Knife is a solution for you, call 1 (866) 254-3353 — and see Marilyn’s story at endtrigempain.com
Not all facial pain is trigeminal neuralgia. This is a common mantra of an experienced physician to their trainees. How to differentiate between trigeminal neuralgia, especially trigeminal neuralgia type II and trigeminal neuropathic pain, can be quite different. Trigeminal neuropathic pain (TNP) is a diagnosis made on history. It generally is burning and lacks the jolts of typical trigeminal neuralgia (TN). Further, people may have had trigeminal neuralgia in the past, but over time and with treatments may have developed TNP. An extreme case may be anesthesia dolorosa. TNP can also be caused due to injury to the nerve from TN treatment or from other surgeries/traumas. It may be due to stroke or secondary conditions such as shingles. The diagnosis is difficult and may be made over several visits. Treatments differ based on diagnosis. For TNP, current treatment includes medications (which may be distinct from those used for TN), Botulinum toxin injections, holistic care, and neuromodulation. All are geared at improving pain and quality of life.

Less invasive treatments like medications and injections are typically first recommended. If those techniques are unsuccessful, neuromodulation may then be recommended. Typically, the type of neuromodulation offered is based on least to most invasive, starting with peripheral nerve stimulation (PNS), spinal cord stimulation, motor cortex stimulation (MCS), and deep brain stimulation. Peripheral nerve stimulation is usually the starting point and has been successful in treating TNP [1]. A previous study showed that TNP patients who received PNS received at least 50% pain reduction even after 2 years [1, 2]. High cervical spinal cord stimulation is the next option though there is little reported in the literature for this indication. If those two methods are unsuccessful, motor cortex stimulation or DBS may be offered. It is essential to note that all of the above require off label use of an FDA approved device.

Motor cortex stimulation (MCS) involves the placement of electrodes on the primary motor cortex to stimulate pain controlling regions of the brain. Generally, a good candidate for neuromodulatory treatment is one who has a diagnosis of TNP, which cannot be managed using conservative treatments for about 6-12 months. The candidate should be willing to undergo a trial implantation to test the efficacy of the treatment and needs to understand that MCS is not a cure and will not completely abolish the pain. Once deemed a good candidate, patients are evaluated by a pain psychologist. An MRI with special functional MRI images are needed. For MCS to work, it must be placed in the correct area of the motor cortex which corresponds with facial sensation [3].
In initial studies, MCS was found to improve facial motor and sensory function by over 50% in 80% (8/10 patients) of participants [4]. Similarly, patients with 60-100% pain relief were able to completely stop all medication after MCS [4]. However, more recent studies have shown mixed results of MCS. A study conducted in 2014 looked at pain relief of TN patients with and without anesthesia dolorosa after receiving MCS. The study found that TN patients who also had anesthesia dolorosa received more pain relief from MCS compared to TN patients without anesthesia dolorosa [5]. However, other studies suggest that the success of MCS is more complicated. One study linked the success of MCS to the availability of pre-operative opioid-receptor availability [6]. The advent of future imaging techniques may improve patient selection [3].

Obviously, the idea of brain surgery is frightening. Having said that, the risks are relatively minor. Infection occurs in 3 to 5% of people. More troublesome side effects like brain bleeds are far less common. The most common complication is lack of meaningful long-lasting pain relief which may occur in 50% of patients. The next most common complication is seizures which may occur during programming as the motor cortex is being stimulated. The vast majority of adverse effects are related to programming and thus are reversible.


The days are getting shorter, and the air is getting crisp and cool. It’s a time for football games, shopping, and festive shenanigans. What do we do when some, if not all, these activities trigger our pain? The YPC understands this, and wants to share some of the ways we survive cold winter weather when facial pain surfaces.

Start by controlling what you can.
This begins with the basics. Make sure you are eating, drinking water, taking your meds on time, and getting rest. Use technology to your advantage and set reminders for yourself to do these tasks.

Plan ahead.
Organize a calendar or notebook to keep with you. Make lists if you’re going shopping. Try to bundle your appointments together. Keep a small emergency kit with you that has your next round of meds and a small heat pack or an extra scarf, so that if the day takes longer than you expected, you are prepared.

Be prepared.
Going out in the cold can be a chore. Make sure you have a warm coat with a hood, a face mask, a scarf, and a hat. Carry an umbrella with you to use as a windshield or a blanket to bundle up with. Don’t be afraid to ask someone to go with you - being that bundled up can be a vision hazard, having someone with you to be your eyes can help move you along safely and faster. Park as close as you can to the door. It may even be worth your while to talk with your neurologist about getting a handicap placard - remember, your safety is a top priority and that placard can save you a dangerous walk across a cold parking lot.

Sometimes the hardest thing to realize is that we can’t do things like we used to, such as getting the mail, going to the store, or going to see a friend during these nasty winter months. Be kind and patient with yourself. Not all days, or even all moments, are good ones. Take things one step at a time. Utilize the good times to celebrate small things and maybe get out and about. Remember that you can still enjoy yourself and your life even if the weather is disagreeing with you! Invite your friends and family over to spend time together inside - watch a movie and drink hot chocolate (if heat isn’t a trigger), have a game night, create crafts to gift people for the holidays (maybe even some teal ribbon ornaments). Think of all of the indoor things you can enjoy during this season. If the weather and your pain become too much, reach out to the facial pain community; we understand and are here to listen and help in any way we can.
Name: Ron Blair

Current age: 29

Where do you live? St. Louis, MO

How old were you when you first experienced facial pain? 23

How old were you when you were diagnosed? 24

What was your diagnosis? Trigeminal Neuralgia

What do you do for fun? I enjoy photography, being outdoors, watching TV/documentaries, listening to music, reading, blogging, and doing stuff for my three geckos

What has TN taught you? I know this sounds cliche, but having this has taught me what’s really important, to take time to smell the roses, and who my real friends are. That and you can’t plan out your whole future, sometimes life happens and plans change. Those are the lessons I wish I could give my pre-diagnosis self.

What treatments (non-surgical) have you tried? I currently take anticonvulsants, pain medication, and do infusions of magnesium and valproic acid. In the past I’ve tried nerve blocks, upper cervical chiropractic, and a magnitude of other medications that were not effective for me.

Have you had any surgical procedures?
- Left: Microvascular Decompression, Balloon Compression, and Partial Sensory Rhizotomy
- Right: Microvascular Decompression and Partial Sensory Rhizotomy

How does your facial pain change you?
Oh wow, it’s changed me a lot. It’s made me more of an introvert and homebody, made me give up hobbies (winter camping and hiking, cycling, and riding dirt bikes) that I used to enjoy, was the cause of my medical withdrawal from college, and cost me my career in healthcare. Not all of the changes are bad though: it really taught me what is important in life, taught me to value the little things, and without it I never would have discovered what my true passion is (disability rights advocacy).

What tips do you have for managing the cold, winter months with facial pain?
1. Know where your trigger zones are and protect them from the cold and wind
2. Find a mask that is protective, warm, and comfortable. Outdoor, sporting goods, or motorcycle shops are great places to look and try them on. Amazon or other online retailers will have a bigger selection if you want something specific
3. Be prepared for strange looks when in public. With everyone on edge with security/safety, I find it’s best to hang a little badge on mine that says, “I wear this mask because I have Trigeminal Neuralgia.” In my experience, this really helps
4. Whenever possible, get indoors and in the warmth.
5. Make sure to have whatever treatments you use available after being outdoors
6. Hot Hands heaters are good to put in a scarf around your face, just make sure to put something between them and your skin
7. Scarfs or neck gaiters are a great way to keep the cool air off of your lower face and neck
8. If you have pain in V1 and it’s triggered by the cold, getting goggles or glasses with foam between them and your face is a great way to protect that area, as are stocking hats or beanies (to protect your forehead)

These are just a few places to start, just like everyone’s symptoms are unique, so are what you’ll need to do to manage your triggers in the winter months!
Take-Home Messages from 11th FPA National Conference

By Caroline Helwick

See a Neurosurgeon

Treatment by a pain specialist may temporarily help but is not a long-term solution for managing the “complex entity” that is trigeminal neuropathic pain (TNP), said FPA Medical Advisory Board Chairman Jeffrey A. Brown, MD, of NSPC Brain and Spine Surgery, Lake Success, New York. He prefers to use this term, rather than TN, which he feels limits the understanding of facial pain.

“TNP is not a dental issue that needs more root canals. It’s not a medical issue that needs to be ‘zombified’ with medicine. Neuropathic facial pain is a super subspecialty of neurosurgery and needs to be evaluated from a neurosurgical standpoint,” he said. This especially pertains to surgical treatment with microvascular decompression (MVD). This operation should only be performed by surgeons with extensive experience with this procedure, he emphasized.

“Seeing a neurosurgeon does not mean you’ll be in the operating room the next day. But you will get an appropriate evaluation, which will put you in the right direction,” he told attendees.

Since MVD is not the right approach for all patients, the treating physician should also be competent in all accepted treatment modalities for facial pain, “not just the one they are ‘best’ in,” he added.

Be Sure of the Diagnosis

Approximately half the attendees raised their hands when asked whether they had undergone dental procedures to address their facial pain or had experienced pain after a dental intervention. According to the faculty, dental procedures do not, in and of themselves, cause facial pain, but they may trigger an underlying problem that was dormant. Evaluation for facial pain should not end in the dental chair, the faculty agreed.

Proper evaluation may actually uncover other causes of facial pain that would have been missed by physicians less accustomed to seeing these conditions, said Hossein Ansari, MD, a headache specialist at the University of California, San Diego. “While TN is the most well-known etiology of facial pain it is definitely not the most common,” he said.
At the conference, Dr. Ansari described patients in whom he diagnosed multiple sclerosis, post-herpetic neuralgia, migraines, and Sjogren’s syndrome after paying attention to concomitant signs and symptoms. He emphasized that physicians should evaluate the whole patient.

**Must Patients “Fail” Medication Before Surgery?**

According to Richard Zimmerman, MD, Professor of Neurosurgery at the Mayo Clinic, Scottsdale, Arizona, the American Academy of Neurology guidelines may, for the treatment of neuropathic facial pain, be “too conservative.” They restrict first-line recommendations to carbamazepine or oxcarbazepine, with other medications for second-line use and MVD relegated to patients failing medical treatment. “I’m not sure it’s the right thing for patients to be told they have to try this, then that, before surgery,” he said, echoing Dr. Brown that all patients need a surgical evaluation early on in their disease.

Dr. Brown added that no scientific studies have established the benefit of combining multiple medications, of using the more expensive extended-release formulations, of rubbing creams on the face, or of treating neuropathic (stabbing) pain with opioids, though opioids may address pain that has a nociceptive (dull, chronic) component. He added that the definition of “medication failure” is the lack of adequate relief from properly titrated doses of at least two anticonvulsants (used sequentially, not together), or the occurrence of intolerable side effects.

**Evaluation: The Right MRI is Critical**

In evaluating the patient with facial pain, it is critical to order an MRI—but standard MRIs are of no use for the patient with facial pain. In this regard, FIESTA and CISS MRI sequencing are essential software for visualizing vessels. The faculty agreed that MR angiography with attention to the source images can also help.
Even with the best MRIs, however, some lesions may be missed, since the test’s limit of resolution is 2 mm, Kenneth F. Casey, MD, Chief of Neurosurgery at Oakwood Southshore Hospital in Michigan, pointed out. “If the offending vessel is smaller than 2 mm, you may or may not see it.” He also emphasized that veins can cause compression along with arteries and should not be disregarded.

Dr. Brown added that visualization of offending vessels is operator-dependent, and neuroradiologists have been known to miss such lesions. “It’s not the power of the MRI—it’s the power of the physician interpreting it,” he commented.

“Negative MRI” and MVD: Still a Matter of Debate

Is a “negative” MRI truly negative? Since even the best MRIs may not always reveal nerve compression, should negative MRI findings preclude MVD in the TN patient who wants this surgery?

Mark E. Linskey, MD, Professor of Neurological Surgery at the University of California, Irvine, said the absence of lesions on an MRI does not stop him from operating on patients with classic TN symptoms. “I disagree with the idea that we don’t do an exploration without seeing vessels on MRI and I disagree that we see all the vessels on MRI,” he said. “MRI is used to rule out the other 5% of causes, but it’s a bad road map for going into battle. If the patient has classic, typical TN, one or more blood vessels will be there, whether you see them on MRI or not. It’s up to the neurosurgeon to find them by properly exploring the nerve.”

Dr. Casey, who co-authored “Striking Back,” a handbook for persons with TN, stated simply that he “operates on people and people’s stories, not pictures.”

Dr. Brown takes a more conservative approach, preferring to have the offending vessel (vein or artery) visible on optimized MRI. “There should not be exploratory neurosurgery. If the surgeon can’t see the problem on the image, then he or she should not be operating on that patient,” he maintained.
Ablative procedures damage the trigeminal nerve, but the nerve can heal over time, thus, the pain recurs. MVD works differently and has a lower risk for recurrence (<2% at 5 years in patients who respond). When adequately performed, MVD’s risk of recurrence diminishes with time whereas with ablative procedures the recurrence risk increases.

Medical Marijuana Helps

Jeffrey Fogel, MD, retired pediatrician and FPA board member, discussed the use of cannabis for pain relief. “This works for me,” said Dr. Fogel, who also suffers from TN.

The two main strains of the cannabis plant are Indica, which has a relaxing effect, and Sativa, which has a more energizing effect. He recommended trying different strains during the course of the day, depending on one’s need for productivity or relaxation.

The two main components are (-)-trans-Δ9-tetrahydrocannabinol (THC), which gives the “high,” and cannabidiol (CBD), which is not psychoactive and is more sedating. “CBD must be mixed with some THC to give an entourage synergistic effect for pain control,” he explained, adding that CBD alone, on the other hand, has not been proven superior to placebo for pain relief.

The optimal proportion of CBD to THC varies according to the individual, and finding the optimal ratio takes trial and error. “When patients say marijuana doesn’t work for them, that just means they have not found the right product for them,” he said.

For treating acute episodes, inhalation of cannabis (vaping or smoking) is recommended, as it has the fastest onset of action. Vaporization is considered safer than smoking (less toxic to the lungs), but this should be with an organically grown product, delivered via cartridge, rather than vaping pens with extracts (due to their uncertain safety). Sublingual delivery also works rapidly and can be used by patients with lung disorders. Oral delivery (via edibles, lollipops, etc) is effective but has a longer onset of action, erratic absorption and is hard to titrate to the optimal dosage; the same is true for transdermal patches. Creams and lotions are not absorbed and therefore do not work for neuropathic pain.

“Dosage needs to be individualized for each patient. Basically, you start slow and work up, and find the right CBD:THC ratio,” Dr. Fogel said. In states where medical cannabis is legal, pharmacists at dispensaries will work with individuals to find the right mix. He personally started treatment with a CBD:THC ratio of 20:1 and ultimately worked up to 1:1.


New and Emerging Treatments

Julie Pilitsis, MD, PhD, Professor of Neurosurgery and Chairman of Neuroscience and Experimental Therapeutics at Albany Medical College, New York, devotes much of her practice to helping patients with refractory pain. She described the new approaches she is using. She described novel neuromodulation approaches, including peripheral nerve stimulation systems that can deliver high-frequency
stimulation that is “tingle”-free; devices that are smaller (0.2 mm leads), wearable and wireless; and a transcranial magnet for motor cortex stimulation. The peripheral nerve stimulation system StimRelieve is being studied in a clinical trial; stimulators are placed under the skin but above the muscle and stimulate several facial nerve areas.

For persistent intractable pain, patients can consider the ‘destructive’ surgical options of nucleus caudalis dorsal root entry zone (DREZ) lesioning and its “miniaturized” and less invasive version, percutaneous trigeminal tractotomy, which can yield immediate pain relief.

While its application is still mostly in the spine, pulsed radiofrequency neuromodulation may eventually prove helpful for facial pain and is in clinical trials for this purpose; it introduces radiofrequency energy around nerves, altering how they function and transmit electrical impulses without destroying tissue. Also in development are “smart” forms of neuromodulation that will sense a patient’s autonomic responses and physiological changes, adjusting stimulation mechanisms of action. The calcitonin gene-related peptide (CGRP) blockers erenumab and rimegepant are approved or expected to be soon for migraine and would be off-label for TN. A phase 3 clinical trial will begin soon for the Nav1.7 sodium channel blocker vixotrigin.

**Final Thoughts**

Dr. Brown reminded attendees that the quest to find the right treatment may take some twists and turns but will, hopefully, arrive at the right destination. “The best treatment is one tailored to the nature of the patient’s pain, and his or her physical and emotional health, not age,” he said. “Find your own way. Never give up.”

---

**Disclosures:** Dr. Pilitsis has consulted for Boston Scientific, Nevro, TerSera and Abbott and serves as medical advisor for Aim Medical Robotics and Karuna. The other speakers had no relevant disclosures.
FPA’s Honorary and Memorial Tribute Fund

There are special people in our lives we treasure. Increasingly, FPA supporters are making gifts in honor or in memory of such people. These thoughtful gifts are acknowledged with a special letter of thanks, are tax-deductible, and support FPA’s growing initiatives on behalf of TN patients and families. We are delighted to share recent Memorial Tribute gifts received from September 2019–November 2019.

In Honor:

- Alexandra (Ally) Abramson
- Adele F. Abramson
- Gloria Allen
- Scopelitis Law Firm
- Jeff Bodington
- Marian Bar
- Helen Bodington
- Marshall Corson
- Lauren Corson
- Ashley Forman
- William Temple
- Dhun Gandhi
- Freddy Gandhi
- Tiffany Gorny-Gonzalez
- Ann Freeman
- Noreen Newman
- Linda Giacopelli
- Dr. Rob Parrish
- Mr. & Mrs. Joe L Christian, Jr
- Kelley Weeks
- Douglas Weeks
- Amerimed Inc: Emily A, Emily K, Emily H, Katie, Teri, Lisa, Sue, Cindy & Lenee
- Amy Wolf
- Stephanie Duke

Memorial Tributes:

- All with TN
- Ida R. Ashby
- Charles “Chuck” Everts
- Carol Kirkbride
- Connor Joos
- Robert J Joos, Jr
- Susan Davis Feehan
- Sheila Davis

A major gift made anonymously in recognition of the many years and fine work of John Koff on behalf of the Facial Pain Association.

Face Pain?

You’re in good hands.

Ramesh P. Babu, MD
Board Certified, Fellowship trained neurological surgeon with 25 years of clinical practice

Lenox Hill Hospital • 110 E. 36th Street, Suite 1A • New York, New York 10016
Office: 212-686-6799 • Fax: 646-454-9148 • Email: rameshpitti@yahoo.com
Thank you to all of our Professional & Signature Members 2019

Signature Members

AdventHealth Neuroscience Institute
   Christopher Baker, MD
   Donald Behrmann, MD, PhD
   Melvin Field, MD
   Ravi Gandhi, MD
   David Rosen, MD

Boston Gamma Knife Center at Tufts Medical Center
   Julian Wu, MD, FACS

Hoag Hospital Gamma Knife Center
   Christopher Duma, MD
   Ali Makki, MD

Jefferson Health
   David W. Andrews, MD, FACS
   James J. Evans, MD
   Robert H. Rossenwasser, MD, FACS
   Ashwini D. Sharan, MD
   Chengyuan Wu, MD

Mayfield Brain & Spine
   Steven C. Bailey, MD
   Vincent A. DiNapoli, MD, PhD
   George T. Mandybur, MD
   Ronald E. Warnick, MD

Mayo Clinic – Arizona
   Richard S. Zimmerman, MD
   Bernard R. Bendok, MD
   Chandan Krishna, MD

Mayo Clinic - Florida
   William P. Chesire, MD
   Ronald Reimer, MD
   Robert E. Wharen, MD

Mayo Clinic - Minnesota
   John L. D. Atkinson, MD
   Michael J. Link, MD
   Fredric B. Meyer, MD
   Bruce E. Pollock, MD

New Jersey Neuroscience Institute-JFK Medical Center
   Joseph C. Landolfi, DO

Northwell Health
   Mitchell Edward Levine, MD
   Amir Reza Dehdashti, MD, PhD
   Mark Bruce Eisenberg, MD
   Robert Gawley Kerr, MD, PhD
   Michael Schulder, MD, FAANS
   David B. Weintraub, MD

Seattle Neuroscience Institute
   David W. Newell, MD

South Sound Gamma Knife
   Marc Goldman, MD
   Ryan Halpin, MD
   Anthony Harris, MD, PhD
   Barbara Lazio, MD
   Michael McDonough, MD
   Huong Pham, MD
   Randy Sorum, MD
   Herbert Wang, MD

University of California, Irvine Medical Center
   Mark E. Linskey, MD
   Frank P.K. Hsu, MD, PhD
professional Members

- Douglas E. Anderson, MD
- Alan Appley, MD, FACS
- Garni Barkhoudarian, MD
- Samuel L. Barnett, MD
- George K. Bovis, MD
- Michael H. Brisman, MD, FACS
- Andrew P. Carlson, MD, MS
- Tapan Chaudhuri, MD, FACP
- James M. Chimento, MD
- Jonathan S. Citow, MD
- Aaron Cohen-Gadol, MD, MSc
- Alain C.J. De Lotbiniere, MD
- Paul W. Detwiler, MD
- Bradley Eli, DMD
- Chikezie Eseonu, MD
- David Estin, MD
- Melvin Field, MD
- Brian D. Fuselier, DDS
- Steven Giannotta, MD
- Jordan C. Grabel, MD

University of Virginia Gamma Knife
Jason Sheehan, MD, PhD
Zhiyuan Xu, MD

Valley Health System
William Cobb, MD
Anthony D’Ambrosio, MD
Chad DeYoung, MD
Thomas Kole, MD
Michael F. Wesson, MD

Weill Cornell Brain and Spine
Michael Kaplitt, MD, PhD
Jared Knopman, MD
Susan Pannullo
Philip E. Stieg, MD, PhD

For Professional Membership information please contact Amy Turner at aturner@tna-support.org

Weill Cornell Medicine
Brain & Spine Center

Advanced Treatment for Facial Pain
Expert, integrated care for patients with trigeminal neuralgia, addressing both your physical and emotional needs

Find out more at weillcornellbrainandspine.org/facial-pain-program or call one of our specialists to make an appointment.
Dr. Michael Brisman, Dr. Jeffrey Brown and Dr. Alan Mechanic perform all of the different procedures for trigeminal neuralgia, and are leaders in the field of facial pain surgery.

Dr. Brisman has served as Chief of Neurosurgery at NYU Winthrop Hospital, Mineola, NY, and is Co-Medical Director of the Long Island Gamma Knife® Center at South Nassau Communities Hospital in Oceanside, NY.

Dr. Brown is the chairman of the Medical Advisory Board of TNA-The Facial Pain Association. He serves as the Neurosurgery Director of the NYU Winthrop Hospital CyberKnife® Program in Mineola, NY.

Dr. Mechanic served as Chief of Neurosurgery at Huntington Hospital, in Huntington, NY, from 1996 to 2014. He is Chairman of the Nassau Surgical Society Section of Neurosurgery.