



Trigeminal Neuralgia Association of Canada

September 2014 Newsletter

Support Group



Eastern Ontario Support Group

Our group consists of people from Kingston through to Cornwall and north to the hills of Gatineau! We are a group of people who enjoy coming together to encourage and support each other along the journey of TN. We share news on where we are at in our TN journeys and what paths we have travelled. Most of all we are always open and looking to welcome new members to our group.

Our group is open to individuals with TN as well as their friends and family. Our next meeting will be happening soon!

For more information and the time place of our next meeting please contact Jane at cmusicstudio@cogeco.ca or by calling 613.936.6977

Vancouver and Lower Mainland Support Group

A meeting is scheduled for Saturday, October 25, from 1.00 to 3.30 pm at the G.F. Strong Rehab Centre in Vancouver at 4255 Laurel Ave (Laurel at 26th one block east of Oak) in the Boardroom (Room 109, on the main floor just off the lobby and across from the cafeteria.) Friends, family and supporters are very welcome. If you have any questions please do not hesitate to call me: Ann Hopkins 1 604 741 0662, or email me at Annhopkins@dccnet.com. I will be coming in from Sechelt so hope that our erratic ferry service will be on time. See you there. Ann

Lethbridge Support Group

The Lethbridge Support Group meets every second Saturday of the month at 2:00 p.m. in Rm A, Lethbridge Senior Centre, 500 - 11th Street, S., Lethbridge, AB.

Coordinator: Marion Guzik, past president / founder TNAC
email mguzik@telus.net
Phone: 403-327-7668

London Support Group

Are you in the London, ON area?
We have a new support group serving Western Ontario.

Contact Name: Elizabeth Galbraith
Tel: 519.471.3439
energyworksunnaturally@bell.net
www.tnsupportlondon.ca



Toronto Support Group

New! We have new members in the Toronto area and are in the process of contacting people to see if there's enough interest and there are enough people to start a support group as one of our new members has come forward to be a Support Group Leader. If you're interested in joining a Toronto support group please get in touch with Ann Hopkins at email: annhopkins@dccnet.com or call 604 741 0662.



Edmonton Support Group

TNAC's Edmonton, AB support group held their first meeting in April. It was a small group that gathered for the first meeting but the group has now started and for those who came just knowing they are not alone is enough to bring this group together

and help it to grow. If you are in the Edmonton area and would like to connect with others living with TN please contact Kim Krause
donkim.krause@gmail.com



TREASURERS REPORT JOYA DICKSON

Again on behalf of the Executive committee a big thanks to all members for renewing your memberships and for all your kind donations big and small. We all know donations are tax deductible, if summer is a bad time for sending donations to TNAC then perhaps consider an alternate time, we are open 52 weeks of the year.

Susan Forster is patiently waiting for those late renewals, it appears members who were notified via e-mail may have mislaid Susan Forster's mailing address, please see Susan's address below or you can always find Susan's address on our web site, Susan is always happy to receive your payments.

Susan Forster our member at large who now processes receipts and prepares all the labelling and mailings of membership renewals is a remarkable & efficient lady, as well as having TN she also has MS and most of the time travels around White Rock in a wheelchair, she assures me she is careful when the law sets radar traps in her area.

For those members who have not renewed please mail cheques to Susan or visit: Pay Pal so that

you can continue to receive our very informative and well written newsletters.

Susan Forster
104-1322 Martin Street
White Rock BC V4B 3W5



International TN Awareness Day

October 7, 2014

October 7 is the second annual TN awareness day. This is a global movement to increase awareness of TN. The colour selected to represent the day is teal. The CN tower, BC Stadium, Niagara Falls, and the Canada Peace Bridge (Buffalo / Fort Erie) will all be lit Teal in honour of the event. Several members of TNAC are hosting events in their community or contacting their local newspaper, radio, or TV to cover the event and help share information on TN and the challenges of this disorder.

TNAC thanks everyone who is sharing information on TN on October 7th. If you would like to get involved please do! TNAC is always here to help you with information and we are pleased to be a referral source for additional information or as a place for people to direct their questions to.

One of the greatest challenges of trigeminal neuralgia is the feeling that you are alone and no one understands. Let's use October 7th to reach those across Canada who are not aware that there are others out there who journey with them and are available to support them and help them through!



A HAPPY TNAC MEMBER

Your roving Treasurer was holidaying on Vancouver Island in August and while travelling north in the Comox area my husband and I spent two wonderful hours visiting a long term supporter and member of TNAC. Pat Thomson & her husband have a show case garden, we talked so much that I forgot to take pictures of the exotic shrubs and only in the last minute was I able to take a shot of Pat as we were parting for our next destination.

Pat who is 82, on Sept 2 had her 3rd Rhizotomy performed by Dr. Honey at VGH, she has suffered with TN for many years however she has a wonderful attitude and she keeps me informed with her TN issues. Twice a year I look forward to her great newsy letters, Pat must have won prizes at school for the best hand writing. Keep those letters coming Pat you are a wonderful lady.

**JOYA Dickson , TREASURER
TNAC CANADA**





Food for Thought 'The Ketogenic Diet'

Cathy Graham
Translated by Jean Banville

***"The great thing then, in all education, is to make our nervous system our ally."
– William James 1842-1910***

Dietary treatment in neurological illnesses is not a new notion. The ketogenic diet for childhood epilepsy has been around since the 1920's. Children who suffered from epilepsy were put on the ketogenic diet as anti-seizure drugs were not yet available. The diet reduced the occurrences of **epileptic attacks** in children from 30 - 90%. When the anti-seizure medication was introduced, many abandoned the diet for the drug. Some children were sensitive to the medication and remained on the diet to control their seizures very effectively.

Doctors at the Mayo clinic state that taking in too many saturated fats stops the body's ability to repair damage to the nerves in the face.

There is a 2013 published PDF format paper in the Open Journal of Preventive Medicine titled "**Low saturated fat diet is effective in trigeminal**". The trial seems to have been successful using the ketogenic diet.

There is an excerpt written by the late Roy L. Swank who introduced his low-saturated fat diet in people with multiple sclerosis in 1948 which I find interesting. It is quite technical; I have done my best to rephrase the

information in a more understandable way.

If a diet which stabilizes the thin covering (sheath) of a nerve cell (neuronal), the nerve cell which processes and transmits information through electrical and chemical signals and also stabilizes the covering of the nerve fiber (axonal), which conducts impulses away from the nerve cell in those with epilepsy, then we might assume that the instabilities in trigeminal neuralgia and the effectiveness of anticonvulsants in TN patients provides a therapeutic justification for intervention by means of diet for TN as well.

Many of us with TN are on anticonvulsant medications (Lyrica, Neurontin, etc). Maybe some people cannot take the drugs due to their side effects. A low saturated diet may be an alternative. The diet is very restrictive and I would not recommend trying it on your own. You should consult your doctor beforehand and a dietician as well. There is also a modified Atkins diet which does not have nearly the amount of restrictions.

The basic aim of the diet is to switch the body's fundamental food source from carbohydrates to fats. Bread and sugar are your basic carbohydrates. The fat intake is increased greatly and carbohydrates decreased immensely. You may say 'more fat'? Well, it is more complicated than that...The three fuels our bodies (by weight) use are approximately 5-15% protein, 10-20% fat, and 65-85% carbohydrate. Any leftover "fuel" is stored as fat by the body, or eliminated. In the ketogenic diet it is also necessary to

control the total consumption of food. If the body has a surplus, it will dispose of the fats conversely in an attempt to get back to its preferred balance of nourishments. By inhibiting the total caloric intake, the body is forced to metabolize fat rather than carbohydrate.

In searching for ways to help deal with the intense pain of trigeminal neuralgia... A monitored low-saturated diet just might be worth considering... Food for Thought☺



Nourriture pour la pensée 'Le régime cétogène'

Cathy Graham
Traduit par Jean Banville

***"L'important pour notre éducation, est de faire de notre système nerveux un allié."
– William James Sidis 1842-1910***

Le traitement diététique des maladies neurologiques n'est pas nouveau. Le régime cétogène pour l'épilepsie de l'enfance existe depuis 1920. Les enfants de cette époque qui souffraient d'épilepsie ont été mis au régime cétogène, étant donné que les médicaments antiépileptiques n'étaient pas encore disponibles. Ce régime alimentaire réduit de 30 à 90% les fréquences de crises d'épilepsie chez les enfants. Lorsque ce médicament antiépileptique a été introduit, beaucoup ont abandonné la diète par la médication. Certains enfants étaient sensibles aux médicaments et sont restés sur le régime alimentaire pour contrôler leurs crises avec de très bons résultats.

Les médecins de la clinique Mayo affirment que; la prise d'un excès de graisses saturées, arrête la capacité du corps à réparer les dommages aux nerfs du visage.

Il existe un document PDF publié en 2013 dans l'Open Journal of Preventive Medicine intitulé 'un régime faible en graisses saturées est efficace pour le trijumeau'. L'expérimentation semble avoir eu beaucoup de succès en utilisant le régime cétogène.

Ce que je trouve intéressant c'est que dans un extrait écrit par le regretter Roy L. Swank; en 1948, il présente son régime pauvre en graisses saturées chez les personnes atteintes de sclérose en plaques. Le contenu est très technique; j'ai fait de mon mieux pour reformuler l'information d'une manière plus compréhensible.

Si un régime alimentaire peut stabiliser le revêtement mince (gaine) d'une cellule nerveuse (neurones), la cellule nerveuse qui traite et transmet des informations au moyen de signaux électriques et chimiques et également stabilise le revêtement de la fibre de nerf (axonale), qui effectue des impulsions à distance à partir de la cellule nerveuse chez les épileptiques, on pourrait conclure que les instabilités de la Névralgie du Trijumeau et l'efficacité des anticonvulsivants chez les patients de la NT pourraient aussi fournir une justification pour l'intervention thérapeutique par le biais d'une diète pour la NT.

Plusieurs d'entre nous avec la NT prennent des médicaments anticonvulsivant (Lyrica, Neurontin, etc). Peut-être que certaines personnes ne peuvent pas prendre

ces médicaments en raison de leurs effets secondaires. Une alimentation faible en gras saturés pourrait être une alternative. Ce genre de régime alimentaire peut être assez contraignant et je ne recommanderais pas de l'essayer sans l'aide d'un professionnel. Vous devriez consulter votre médecin au préalable et une diététicienne. Il y a aussi un régime révisée Atkins qui est similaire, mais avec moins de restrictions.

L'objectif de base pour cette diète serait de remplacer les glucides pour les lipides. Normalement, le pain et le sucre sont vos glucides de base. La consommation de lipides est considérablement augmenté et les hydrates de carbone à diminuer considérablement. Vous allez probablement dire 'plus de gras'? Eh bien, c'est plus compliqué que ça ... Les trois carburants (en poids) utilisés pour notre corps sont d'environ 5-15% de protéines, 10-20% de lipides, et 65-85% de glucides. Les restes de carburant seront stockés sous forme de graisse par le corps, ou bien éliminés. Dans le régime cétogène, la proportion de lipide est augmentée considérablement et la proportion d'hydrate de carbone est fortement diminuée. Il est également nécessaire de contrôler la consommation totale de nourriture. Si le corps reçoit un surplus, il créera des graisses dans une tentative de revenir à son équilibre préféré de nourritures. En inhibant l'apport total des calories ingéré, le corps est forcé de métaboliser les graisses plutôt que les glucides.

À travers notre recherche de solutions pour faire face à la douleur de la névralgie du trijumeau ... Un régime faible en gras saturés peut être une considération... Nourriture pour la pensée. ☺



Therapeutic effect of Botulinum toxin-A in 88 patients with Trigeminal Neuralgia with 14-month follow-up

We investigated the long-term effects and safety of botulinum toxin-A (BTX-A) for treating trigeminal neuralgia (TN). We also studied long-term maintenance of this therapeutic effect.

Methods: A visual analog scale (VAS) score, pain attack frequency per day, patient's overall response to treatment and side effects during 14-month follow-up were evaluated in 88 patients with TN receiving BTX-A.

The primary endpoints were pain severity (assessed by VAS) and pain attack frequency per day. The secondary endpoint was the patient's overall response to treatment, assessed using the Patient Global Impression of Change.

The influence of different doses (≤ 50 , 50-100 and ≥ 100 U) on the therapeutic effect was evaluated.

Results: Treatment was deemed "effective" within 1 month in 81 patients and at 2 months in 88 patients (100%). The shortest period of effective treatment was 3 months, and complete control of pain was observed in a maximum of 46 patients.

The therapeutic effect decreased gradually after 3 months, and the prevalence of effective treatment at 14 months was 38.6%, with complete control of pain seen in 22 patients (25%). There was no significant difference in the prevalence of

effective treatment between different dose groups at identical time points ($p > 0.05$).

Three patients showed swelling at injection sites and 10 patients showed facial asymmetry, both of which disappeared spontaneously without special treatment.

Conclusion: Local subcutaneous injection of BTX-A for TN treatment has considerable therapeutic effects lasting several months and is safe for this indication. At least one-quarter of patients maintained complete analgesia.

The maintenance period of the therapeutic effect may be related to the reduction in the VAS score after the first injection of BTX-A.

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Use of low level laser therapy in the treatment of persistent idiopathic orofacial pain and traumatic trigeminal neuropathy- a pilot study

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Methods: Twenty one patient was enrolled in this pilot study, there were 10 patients with persistent idiopathic facial pain (PIFP) and 11 patients with traumatic trigeminal neuropathy (TTN). Each patient was treated once daily in 10 sessions using a GaAlAs laser (830 nm, 3 W, 50 ms, 50 Hz which is equivalent to an energy density of 1.5 J/cm²). The outcome of LLLT was evaluated by means of a patient survey on the relief of symptoms (0=no improvement, 1=partial improvement, 2=complete improvement). Statistical analysis was performed by use of descriptive statistics and when needed by use of chi-square test. Values lower than 0.05 were considered as significant.

Results: Complete improvement of symptoms was seen in 70% of the patients with PIFP and in 36.4% of patients with TTN. LLLT showed no improvement in 10% with PIFP and 45.4% of patients with TTN.

Conclusion: It might be concluded that LLLT is beneficial in patients with persistent idiopathic orofacial pain and traumatic trigeminal neuropathy.

Keywords: Low level laser therapy, idiopathic orofacial pain, persistent idiopathic facial pain, traumatic trigeminal neuropathy

Introduction

Low level laser therapy (LLLT) is becoming more used due to its beneficial effects in various medical conditions but also due to the fact

that treatment with LLLT is painfree and has few contraindications [1]. The use of LLLT for peripheral nervous system regeneration is currently being investigated in order to achieve early functional nerve recovery. There are only few studies regarding the use of LLLT for nerve recovery in humans and rats. It seems that LLLT act analgesically since they improve endorphin release and therefore inhibit nociceptive signals and control pain mediators [2]. Low level lasers can also act analgesically by inhibiting pain signals which partially leads to the transient varicosities along the neurons which decrease impulse transmission. Cells are acidic in a lowered redox state, but after laser irradiation they become alkaline and afterwards they can act in an optimal way. It is well known that LLLT stimulate lymphocytes, activate mast cells, and increase production of adenosine triphosphate in the mitochondria and proliferation of various cell types therefore acting as anti-inflammatory [2]. Furthermore, LLLT stimulate microcirculation which results in the change of capillary hydrostatic pressure which in turn results in edema absorption and elimination of intermediary metabolites [2]. Rochkind et al., [3] reported that in patients with long-term peripheral nerve injury noninvasive

780-nm laser phototherapy can progressively improve nerve function, which leads to significant functional recovery. Gigo-Benato et al., [4] reported that 660 nm LLLT with low (10 J/cm²) or moderate (60 J/cm²) energy densities is able to accelerate neuromuscular recovery after nerve crush injury in rats. Peric [5] reported that LLLT (30 treatments during a period of 12 weeks) in

patients with diabetic polyneuropathy (control group was given only vitamin therapy) showed decrease in spatial perception threshold and increase in motor medianus conduction.

Ohtsuka et al., [6] treated patient with postherpetic neuralgia which manifested as burning pain in the right forehead with LLLT which resulted in the increased blood flow and relieve in neuralgia.

Persistent idiopathic orofacial pain (PIFP) is characterized by poorly localized pain and perceived as arising from muscles of the face and jaw. Symptoms wax and wane in intensity over days and weeks [7]. Traumatic trigeminal neuropathy is usually induced by oral surgical operations, particularly the removal of the impacted lower third molars, being more frequent in females. It can manifest itself with various degrees of sensory loss [8]. Considering the lack of information about the treatment of these conditions and the importance of using conservative therapeutic interventions in the treatment of orofacial pain, the aim of this study was to assess the effect of LLLT in patients

with painful orofacial conditions.

Methods

Subjects

Twenty one patients, 10 with persistent idiopathic facial pain (PIFP) and 11 with traumatic trigeminal neuropathy (TTN) were involved in this study. Diagnosis of PIFP was carried out according to criteria established the Headache Classification Subcommittee of the International Headache Society [9]: (1) Facial pain present daily for at least 1 month and persisting for all or most of the day. (2) The pain is deep and poorly localized of moderate or

severe intensity, but not unbearable. (3) The pain is confined at onset to a limited area on one side of the head. (4) The pain is without paroxysms, precipitation from trigger areas, autonomic symptoms, sensory loss, and other physical signs; but dysaesthesia may occur. Diagnosis of TTN was made upon these criteria: (1) sensory defect (paraesthesia) in the region innervated by maxillary or mandibular nerve following surgical procedure and (2) minimal duration of 3 months. Three experienced dentists who are also academic staff from the Department of Oral medicine, University of Zagreb in Croatia diagnosed the painful conditions.

The exclusion criteria were other orofacial pain conditions due to odontogenic causes, vascular conditions (migraine, etc) and inability of patient to understand the text of the informed consent. None of the patients had systemic diseases nor took meds that might affect their pain.

The study was approved by the Ethical Committee of the University of Zagreb in Croatia and from every patient informed consent according to Helsinki II declaration was obtained.

Laser procedure

Laser therapy was performed with a galium-aluminum- arsenide (GaAlAs) laser (BTL-5000, www.btl.com) with wavelength of 830 nm. Each session was performed on every working day and lasted for 3 min (total number of 10 days). Break was during the weekend.

There were two irradiation cycles during one session, according to the

manufacturer's recommendations for the treatment of trigeminal neuralgia. First cycle was A and consisted of 12 J/cm², duty factor 100%, cont.area 1.00 cm², max power 100 mW, duration 2 minutes and second cycle was 6 J/cm², duty factor 80%, 10 Hz, area 1 cm², max power

100 mW, duration 1 min and 15 sec. We did not use placebo as we thought that patients would suffer even more as they were not given any therapy and were already in much pain. In the case of PIFP laser was applied on the skin at the most painful surface area (1 cm²). In the case of TTN laser application area was on the lingual side of the mandible at the extraction site where the surgical injury occurred.

Evaluation and statistical analysis

Primary endpoint was patients' report on the relief of symptoms (0=no improvement, 1=partial improvement,

Statistical analysis was performed by use of descriptive

statistics (mean and standard deviation). Differences between the tested groups were assessed by chi-square test. Values lower than 0.05 were considered significant.

Results

Clinical characteristics of the patients are presented in **Table 1**. No significant differences in terms of age and gender were found between the two patient groups (PIFP vs. TTN, p=0.077; p=0.645).

Total resolution of symptoms was achieved in 70% of patients with PIFP and 36.4% of patients with

TTN. Partial resolution of symptoms was achieved in 20% of patients with PIFP and 18.2% of patients with TTN. Treatment showed no improvement in 10% of patients with PIFP and 45.4% of patients with TTN. No significant differences in outcome were found between the two groups ($p=0.302$).

Discussion and conclusion

Several maxillofacial interventions can induce nerve damage, especially on the inferior alveolar nerve which usually result in the paraesthesias, dysesthesias and painful orofacial conditions. Khullar et al., [10] reported that LLLT has beneficial effect on paraesthesias with lasers 4–6 J per point along the projection of the nerve. The same authors [10] also reported that GaAIs laser therapy (820 nm, 4×6 J per treatment, in a total number of 20 treatments) results in both subjective and objective improvement in mechanical sensory perception in long standing neurosensory deficit of the inferior alveolar nerve. Pinheiro et al., [11] used 632.8 nm, 670 nm and 830 nm diode lasers in patients with temporomandibular joint pain and trigeminal neuralgia. Most of the patients had 12 applications (twice a week) with an average dose of 1.8 J/cm². Most treatment consisted of a series of 12 applications (twice a week) and in 15 cases a second series was applied. Patients were treated with an average dose of 1.8 J/cm². One hundred fifty four out of 241 patients were asymptomatic at the end of the treatment, 50 improved considerably, and 37 were symptomatic. The results confirmed that LLLT is an effective tool and is beneficial for the treatment of many disorders in the maxillofacial region.

Miloro and Repasky [12] demonstrated that neurosensory recovery after bilateral sagittal split osteotomy can be significantly improved both in terms of time course and magnitude of return of function with the adjunctive use of LLLT. The authors used LLLT (4×6 J per treatment, along the distribution of the inferior alveolar nerve before surgery, 6 and 24 h after and on the 2nd, 3rd, 4th and 7th day).

Ozen et al., [13] treated four female patients after third molar surgery who had paraesthesia with LLLT (GaAIs laser, the irradiance used was 6 J per treatment site, applying 5 mW in continuous mode wave for 90 s in total of 20 treatments performed every second day) and concluded that LLLT

Boras et al. *Journal of Regenerative Medicine & Tissue Engineering* 2013,
<http://www.hoajonline.com/journals/pdf/2050-1218-2-5.pdf>



Lacosamide Good in

Trigeminal Neuralgia

By Ed Susman ,

NEW ORLEANS – The anti-epileptic agent lacosamide (Vimpat) appears to give relief to patients with refractory trigeminal neuralgia, researchers reported here.

Principal investigator Jeffrey Cohen, MD, an attending neurologist at Beth Israel Medical Center in New York City, looked at the drug in a pilot study of 11 patients – some of whom had failed to get relief even after surgical procedures.

Cohen, a member of the medical board of TNA--The Facial Pain Association, and neurology resident Shivang Joshi, MD, lead author, found that several patients achieved relief for more than a year with lacosamide and one achieved complete resolution of pain.

For seven of the 11 patients they had results from a Barrow Neurological Institute Pain scale, and five of those seven patients achieved some degree of pain relief, they reported in a poster presentation at the American Academy of Neurology meeting.

"Some of our patients had been in pain from trigeminal neuralgia for as long as 22 years, Joshi told *MedPage Today*."

"In this small case series of patients with refractory trigeminal neuralgia, a majority of the patients responded at least initially, despite multiple previous medication trials and surgical procedures in some, he said."

In addition to surgical treatments that still did not relieve pain, the patients had been treated with a variety of drugs: anesthetics, anti-epileptics, opioids, nonsteroidal anti-inflammatory drugs, triptans, tricyclic antidepressants, and other medications. "These were truly refractory patients," Joshi said.

The dosage of lacosamide was not standard, but averaged around 200 mg a day.

Four of the patients were able to take lacosamide as an add-on therapy without experiencing further adverse effects; five other patients

complained of dizziness; one patient reported fatigue and the other patient complained of constipation.

Image studies were performed in 10 patients, and these were negative in eight; two patients were observed to have meningiomas that could have caused the trigeminal nerve pain.

One 25-year-old man with right side trigeminal neuralgia did not receive any relief from treatment with lacosamide. An 80-year-old man and a 77-year-old man said that the treatment provided pain relief for two months; a 47-year-old woman reported 9 months of pain relief, and an 88-year-old woman reported 11 months of pain relief. The other six patients reported they have had relief of pain from 2 months to 12 months, and that relief is ongoing.

The median age of the patients in the study was 63; the mean duration of neuralgia was 10 years.

Shirin Issa, MD, assistant professor of neurology at the Montefiore Medical Center in Bronx, N.Y., told *MedPage Today* that lacosamide might be helpful for some of these patients who have no treatment options available. The use of lacosamide is attractive, she suggested, because the side effects are minimal. "We are interested in trying it in our patients," she said.

Cohen and Joshi believe their results deserve to be pursued in a larger study. "Lacosamide was well tolerated and should be considered as a treatment option in chronic trigeminal neuralgia," Joshi said. "The positive results in a small case series such as this justify designing a clinical trial to determine safety and

efficacy of lacosamide in trigeminal neuralgia."



Essential oils that may assist with Neuralgia:

Peppermint
Roman Chamomile
Frankincense
Lavender
Black Pepper
Helichrysum
Immortelle
Clove

Blend 2 tablespoons **Fractionated Coconut oil** and 15 drops of selected oil(s). Apply over area of pain and gently rub into skin. If pain is too great, use a dark glass spray bottle to apply and let skin absorb.

Massage Blend:

2 T. **Fractionated Coconut oil**,
3 drops **Roman Chamomile**
3 drops **Black Pepper**
1 drop **Clove**
3 drops **Lavender**
2 drops **Frankincense**
Apply 1-2 times daily.

Pain Blend:

3 drops Wintergreen
3 drops Clove
3 drops Peppermint
6 drops Helichrysum

2 T. **Fractionated Coconut Oil**
apply 1 – 3 times daily
Apply 2 drops **Helichrysum oil** before bed daily.



Donations

Did you dump a bucket of ice on your head? I didn't! I was asked to but in respect to my TN I politely declined. I followed this event though. This event, which went 'viral', raised around 100 million dollars for ALS.

TNAC is Canada's only registered non profit charity that supports research into the cause, treatment, and cure for Trigeminal Neuralgia. We are totally run by volunteers and none of us receive any financial compensation for the time we put into the management of TNAC. We simply want to try to reach out and help people across Canada dealing with TN. We are blessed to have several neurosurgeons across the country who also provide time to us to answer questions and provide assistance to us so that we can answer questions that are beyond our level of expertise. Again they provide their assistance at no charge. TNAC is aware of Canadian based research and proud to support it as best we can. But we long to do more to address TN and find answers that we know you want ... and need.

As we head into the Christmas season we hope you will consider TNAC as a charity of choice

If you have given to a charity this year, any charity, TNAC thanks you for supporting the many people across Canada who work to help Canadians.