



WESTERN NEUROPATHY ASSOCIATION

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Issue 05
Volume 20

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A newsletter for members of Western Neuropathy Association (WNA)

RESEARCH INSIGHTS: THE GUT'S ROLE IN NEUROPATHIC PAIN

Rhodes, C. (2021). Research Insights: The Gut's Role in Neuropathic Pain. *Practical Pain Management*, 21(6).

Research presented at the American Academy of Neurology (AAN) annual meeting over a decade ago first showed that individuals with inflammatory bowel disease (IBD) were about four times more likely to develop neuromuscular conditions, including carpal tunnel syndrome and small fiber neuropathy, and six times more likely to have sensorimotor polyneuropathy. Since then, investigations have confirmed that the bidirectional communication between the gut and brain involves immune, neural, endocrine, and metabolic routes, and that the microbiota-gut-brain axis is the nexus of interactions among them.

Dysregulated communication causing imbalances in the microbiota-gut-brain axis may be a factor in overall gastrointestinal (GI) functional disorders and recently has been implicated in Alzheimer's disease, Parkinson's disease, depression, and chronic pain.

Neuropathic Pain and The Gut Microbiota

A key thread through many of these disorders is the central nervous system (CNS) and neuropathic pain. Neuropathic pain is the abnormal perception of pain caused by a lesion or disease of the somatosensory nervous system. It has a worldwide prevalence of 6.9% to 10%. Despite its clinical significance, neuropathic pain is not adequately represented in the current version of the International Classification of Diseases and Related Health Problems (ICD-10). However, the International Association for the Study of Pain (IASP) recently proposed a classification for ICD-11 that differentiates neuropathic pain of peripheral and central origin.

New IASP Neuropathic Pain Categories

In this reclassification – which took effect January 2022, peripheral neuropathic pain is categorized as including:

- trigeminal neuralgia
- peripheral nerve injury
- painful polyneuropathy
- postherpetic neuralgia

- painful radiculopathy

Central neuropathic pain includes pain caused by a spinal cord or brain injury, poststroke pain, or pain associated with multiple sclerosis (MS).

As the intersection of immune, neural, endocrine, and metabolic signaling pathways, the gut microbiota has become an intense focus of research, wrote Binbin Lin, MD, of Zhejiang University in Hangzhou, China, in a recently published review of the role of gut microbiota in neuropathic pain. Emerging research shows the microbiota facilitates the formation of complex networks and thus is a pivotal modulator in the occurrence and development of neuropathic pain.

From the Gut to the CNS: Mechanisms and Pathways

The mechanisms underlying neuropathic pain remain unclear, and pharmacologic agents recommended as first-line treatments are often unsatisfactory because the underlying causes of the pain cannot always be established. An understanding of the pathophysiology is needed to develop more effective therapeutic strategies. Gut microbiota have been shown to play a crucial role in abdominal pain, opioid tolerance, headache, inflammatory pain, chemotherapy-induced peripheral neuropathy (CIPN), and neuropathic pain. Research shows that bacteria can activate nociceptors directly, and viral and fungal pathogens can alter pain sensitivity by activating immune cells.

The gut microbiota regulates several metabolic and neurological signaling pathways between the gut and the CNS that are associated with neuropathic pain. In an animal study using a classic chronic constriction injury (CCI) model of peripheral nerve injury-induced NP and 16S rDNA and metabolomics sequencing, Peng Chen, MD, of Guizhou University of Traditional Chinese Medicine, Guiyang, China, and his team investigated a possible mechanism

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Katherine Stenzel
Editor

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NEUROPATHY SUPPORT GROUPS – JUNE SCHEDULE

*Sharing a fear makes it smaller,
Sharing a success makes it bigger,
Sharing a problem makes it easier to bear.*

In-Person Support Group Meetings

June 1 (Wednesday)

Santa Rosa CA Support Group

11:30am - 12:30pm PST, Santa Rosa Recreation and Parks, 415 Steele Lane
Contact: Judy Leandro (707) 480-3740

June 4 (Saturday)

Houston TX Support Group – Quarterly Meeting

1:00pmCST – 3:00pm CST, Memorial Drive United Methodist Church
12955 Memorial Drive, Houston, TX 77079, Room DS100, enter at back (south) of building
Contact: Katherine Stenzel at klstenzel@hotmail.com

June 6 (Monday)

Auburn CA Support Group

11:00 am PST, Woodside Village Mobile Home Park, 12155 Luther Road
Contact: Sharlene McCord (530) 878-8392, Kathy Clemens (916) 580-9449, kaclemens@earthlink.net

Other Support Groups are actively deciding how to reform after the break during Covid-19

Virtual Support Group Meetings (nationwide)

June 11 (2nd Saturday)

11:00am-1:00pm PST/1:00pm-3:00pm CST; Host – Katherine Stenzel
Meeting ID: 893 4117 5040 Passcode: 123557

June 15 (3rd Wednesday)

10:00am-11:30am PST/12:00pm - 1:30pm CST; Host – Glenn Ribotsky
Meeting ID: 863 2548 2422 Passcode: 609857

June 25 (4th Saturday – Open Discussion)

11:00am-1:00pm PST/1:00pm - 3:00pm CST; Host – John Phillips
Meeting ID: 818 9099 1051 Passcode: 227946

First time to attend a Virtual (Zoom) meeting? Here's how to join from a web browser.

Google Chrome

1. Open the Chrome browser.
2. Go to **join.zoom.us**.
3. Enter your meeting ID, then enter the password.
4. Click **Join**.
 - If this is your first time joining from Google Chrome, you will be asked to open the Zoom desktop client to join the meeting.
 - (Optional) Select the **Always open these types of links in the associated app** check box to skip this step in the future.
 - In the pop-up window, click **Open Zoom Meetings (PC)** or **Open zoom.us (Mac)**.

Safari, Microsoft Edge or Internet Explorer

1. Open browser.
2. Go to **join.zoom.us**.
3. Enter your meeting ID followed by the password.
4. Click **Join**.

Contact Katherine Stenzel at klstenzel@hotmail.com if you have a question.

EDITOR'S NOTE Katherine Stenzel, Editor, WNA Board Director

When I write up articles to include in the newsletter, I do have my favorites. Those are the ones that focus on joy, bring a smile to my face, and hopefully brings a smile to you – my reader. Such is the case with the article on pets and mental health on page 5. Everything is positive about the article, from the statistic that almost all pets are considered a member of the family to the use of therapy dogs. And all you have to do to have your body and mind benefit from the (mostly) dogs and cats is to hold them in your arms, snuggle in their fur, and stroke their body. Even thinking about this as I write is relaxing. Read the article to see how a clinical trial has confirmed that dogs can lower pain levels in ten minutes.

Deciding which articles to include depends on their usefulness. Understanding pain and the reason certain types of drugs are used for treatment is the reason for the page 7 article on pain as an invisible illness. I particularly like the concept of using the term “pain management” as it describes a continuing process.

How many times have you had to apply a number to your pain level? How can one number possibly describe a continuous and changing experience? I never knew there were other pain scales to use for expressing this condition. Read on page 6 for two that consider pain in the context of it's affect on our quality of daily living.

At a recent virtual support group meeting, one member asked about the group's opinions on microbiota and neuropathy – if there is a connection. I had no idea if there was a link so I researched the concept. The front page article gives a lengthy but comprehensive explanation of the research to date on the relationship.

Happy Reading! And as always send your comments and suggestions to klstenzel@hotmail.com

...Katherine

JUNE WEBINAR - NABOSO NEUROPATHY PILOT

Join WNA on June 30, 2022, when Dr. Spichal, Podiatrist and Human Movement Specialist with Naboso®, will discuss their Neuropathy Pilot and her company's products for sensory awareness. Naboso Neuro Insoles increase foot perception which translates to improved balance, stability and movement confidence.

The pilot includes 40 subjects, all diagnosed with varying types of neuropathy, wearing the Naboso Neuro Insoles every day for at least 30 minutes for a total of 6 weeks.

After just 1 week of wearing the Naboso Neuro Insoles the subjects reported:

- 92% reported increase in foot awareness despite having prior numbness
- 76% reported increase in stability when walking with Naboso Insoles

Pilot participants testimony:

There is a change when I take off the shoes with the insoles and just walk around barefoot. I am still more aware of my feet. – Pilot Participant, Diabetic Neuropathy

I've observed increased foot awareness and definitely there is less foot tingling. I've also noticed there is less stiffness of the foot. – Pilot Participant, Chemo-Induced Neuropathy

Watch your email for registration information.

Reference

2021, Mar 29. Naboso® *Neuropathy Pilot |92% Increase in Foot Awareness.* Naboso®. <https://www.naboso.com/blogs/the-barefoot-advantage/naboso-neuropathy-pilot-92-increase-in-foot-awareness>

Help With Health Care Challenges

If the number is not in your area, call the one listed and ask for the right number.

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through which the gut microbiota mediates neuropathic pain. They found that:

- CCI-induced neuropathic pain results in obvious hyperalgesia (*Editor – Abnormally heightened sensitivity to pain*).
- CCI significantly alters the gut microbiota composition and Firmicutes/Bacteroidetes (F/B) ratio to levels indicative of dysbiosis (*Editor – disruption to the microbiota homeostasis caused by an imbalance in the microflora*) and neuropathic pain. Increases in the F/B ratio were previously found to be associated with nervous system diseases such as stroke, cognitive impairments, and sleep deprivation, and other bacteria within the Firmicutes phylum have been implicated in other neurological and psychiatric disorders.
- CCI alters metabolism in the serum and spinal cord. Differentially expressed metabolites that regulate lipid metabolism, inflammation, amino acid metabolism, and energy production were identified in serum and spinal cord samples.

The function and specific mechanisms of the gut microbiota are extremely sophisticated, concluded Dr. Chen. “These results, which provide new information on the potential roles of the gut microbiota and related metabolites in neuropathic pain, are important, though preliminary, and must be confirmed in patient studies,” he wrote.

Gut-Based Therapeutic Strategies for Neuropathic Pain

In his review, Dr. Lin noted that current therapies for neuropathic pain can be complex and provide inadequate pain relief for certain patients. He provided a potential therapeutic strategy for alleviating neuropathic pain that may be simpler and result in fewer complications. Targeting the gut microbiota as a therapeutic strategy for neuropathic pain encompasses several components:

- **Probiotics and antibiotics.** As living bacteria, probiotics can help improve digestion, enhance immunity, and alleviate pain associated with intestinal dysfunction. They may also inhibit immune signaling transmission associated with neuropathic pain. Probiotics and antibiotics may change the activity of gut microbiota via different mechanisms, but some antibiotics may lead to hyperalgesia. More preclinical and clinical work is needed to investigate the role of probiotics and antibiotics in neuropathic pain treatment based on gut microbiota.
- **Low FODMAPs diet.** A diet low in fermentable oligosaccharides, disaccharides, monosaccharides, and polyols (FODMAPs) – short-chain carbohydrates that are resistant to digestion – may protect the intestinal barrier and reduce gut mucosal inflammation by regulating the level of lipopolysaccharides (LPS) and decreasing the production of short-chain fatty acids (SCFAs) in the gut. Studies have shown the effectiveness of a low-FODMAP diet on alleviating the visceral pain of IBS through potential gut microbiota-related pathways, and this is likely to be an emerging approach for the treatment of neuropathic pain. (*Editor – for information on Low-FODMAP Diet check out the*

Cleveland Clinic at <https://clevelandclinic.org/low-foodmap-diet/> and John Hopkins at <https://www.hopkinsmedicine.org/health/wellness-and-prevention/fodmap-diet-what-you-need-to-know>)

- **Vitamin D Supplementation.** Vitamin D deficiency results in decreased calcium absorption and induces gastric stasis leading to increased gut permeability. The resulting release of endotoxins such as LPS into the bloodstream stimulates the production of inflammatory cytokines within the CNS, increasing the risk for diabetic neuropathy progression and possibly multiple sclerosis initiation. In addition to impacting the gut barrier, vitamin D may change the composition of gut microbiota communities. Supplementation of vitamin D3 was shown to reduce pathogenic microbes while increasing the volume of bacteria in the gut. Animal studies have shown that vitamin D can attenuate neuropathic pain, but the mechanism remains uncertain.
- **Emotional management.** Depression and anxiety play a role in the occurrence and development of neuropathic pain, and gut microbiota are closely correlated with brain function. Studies have shown that depression induced by early life stress can alter the gut microbiota and that modulation of the microbiota affects behaviors related to depression as well as anxiety. The gut microbiota, therefore, may be a therapeutic target for psychiatry, as manipulating the microbiota may help relieve neuropathic pain by controlling its comorbidities.
- **Fecal microbiota transplantation (FMT).** FMT involves transferring the gut microbiota from healthy individuals to patients in order to reconstruct their intestinal microflora, and it has been effective for the treatment of ulcerative colitis and recurrent *Clostridium difficile* infection, although some abdominal discomfort and illness may occur. The transplanted healthy flora may induce the growth of anti-inflammatory mediators, thereby counteracting pro-inflammatory mediators.

Of note, one published case on FMT, included a woman with type 2 diabetes and diabetic neuropathy. After two rounds of FMT, the patient experienced reduced limb pain and paresthesia (*Editor – burning or pricking sensation*) along with improvements in her fasting blood glucose and glycosylated hemoglobin levels.

In Summary

Most of the research conducted on gut microbiota and neuropathic diseases thus far has been preclinical. However, targeting gut microbiota has become a rapidly growing therapeutic approach for a wide range of diseases including neuropathic pain. Given how far the data connecting the gut to the CNS have progressed since the AAN pointed to IBD over a decade ago, the pain management community is hopeful that solid new strategies for treating neuropathic pain will be here soon.

PETS, MENTAL HEALTH AND PAIN

The bonds between humans and animals are powerful.¹ And the positive correlation between pets and mental health is undeniable. According to a 2015 Harris poll, 95 percent of pet owners think of their animal as a member of the family. And that's true no matter how old we are. Children, adolescents, adults, and seniors all find joy in their pets. Pets and mental health go hand in hand.

Furthermore, research validates the benefits of pets for mental health. The mental health benefits of owning a dog or cat have been proven by many scientific studies. Animals help with depression, anxiety, and stress. In addition, they provide companionship and ease loneliness. Moreover, pets bring us joy and unconditional love.

Early Research on Pets and Mental Health

The first research on pets and mental health was published 30 years ago. Psychologist Alan Beck of Purdue University and psychiatrist Aaron Katcher of the University of Pennsylvania conducted the study. They measured what happens to the body when a person pets a friendly dog. Here's what they found:

- Blood pressure went down
- Heart rate slowed
- Breathing became more regular
- Muscle tension relaxed

These are all signs of reduced stress and physical evidence of the mental health benefits of pets.

The Power of Animal-Assisted Therapy

Since then, scientists have discovered much more about the connection between pets and mental health. As a result, animal-assisted therapy programs have become an important part of mental health treatment. Moreover, individuals benefit from owning mental health animals, such as an emotional support dog.

Interacting with Pets Lowers Our Stress Hormones

Studies around pets and mental health show that petting and playing with animals reduces levels of cortisol, the stress hormone. And these benefits can occur after just five minutes of interacting with a pet.

Playing with a dog or cat also raises our levels of serotonin and dopamine. These are hormones that calm and relax the nervous system. Playing also increases the release of oxytocin—another chemical in the body that reduces stress naturally.

When we smile and laugh at our pets' cute behavior, that helps stimulate the release of these "happiness hormones." And the sensory act of stroking a pet lowers blood pressure and reduces stress.

'Pawsitive' Impact of Therapy Dogs

To measure the impact of therapy dogs in reducing pain, an 18-month clinical trial (NCT04727749) was conducted at the Royal University Hospital Emergency Department (ED) in Saskatchewan.² This ED has the longest wait times in Saskatchewan which can increase patients' anxiety and negatively impact their pain. The goal of the study was to determine if a therapy dog could change the patients' perception of pain and its intensity, and facilitate relaxation. The intervention was examined for its impact on the patients' sensory pain (i.e., physical pain severity), affective pain (i.e., emotion pain unpleasantness) and anxiety.

The researchers found that spending just ten minutes with therapy dogs improved hospital patients' overall well-being.³ Compared to patients who hadn't spent time with therapy dogs, those who did reported significantly lower levels of anxiety and depression following the visit. Patients who experienced the therapy dog visits also reported increased well-being compared to those who did not, as well as significantly lower pain ratings. "These findings suggest that the therapy dog intervention had a positive effect on reducing participant pain and offers a clearer understanding of the potential value of therapy dogs in the emergency department," the researchers write.

For dog lovers everywhere, this new work provides tangible proof of a treatment for pain that many have long known works.

References

¹Unknown. (June 2018). *10 Ways Pets Support Mental Health*. Newport Academy. <https://www.newportacademy.com/resources/well-being/pets-and-mental-health/>

²Carey, B., et al. (March 2022). *Outcomes Of A Controlled Trial With Visiting Therapy Dog Teams On Pain In Adults In An Emergency Department*. PLOS ONE, 17(3): e0262599. doi: 10.1371/journal.pone.0262599

³Yarlagadda, T. (March 2022). *Just 10 Minutes With A Therapy Dog May Have Profound Health Benefits – Study*. Inverse Science. <https://www.inverse.com/science/do-therapy-dogs-work>

DISCOUNTS FOR WNA MEMBERS

The following companies or individuals have agreed to give WNA a discount to WNA members. Give them a call or visit. If you choose to purchase the service or wares of any on this list, pull out your WNA Membership Card and claim the discount.

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Most doctors of patients with painful diabetic peripheral neuropathy assess pain using visual analog scales, numerical rating scales, or similar measures. While such scales are commonly used, they do not provide insight into the effect of pain on patients' functioning and well-being. Other scales that assess pain interference (Brief Pain Inventory–Diabetic Peripheral Neuropathy) or effects on quality of life (Norfolk Quality of Life–Diabetic Neuropathy) may provide more relevant information to assess the need for treatment and success of such treatment.

Brief Pain Inventory

The Brief Pain Inventory (BPI) evaluates a patient's pain experience through a number of different scales. There are line drawings of the front and back of a human body on which patients mark the location of their pain. Patients are asked to list the treatments or medications that they are using and how much relief they have provided in the past 24 hours. In addition, patients fill out 11 different Numerical Rating Scale (NRS) that ask about pain intensity (present as well as least, most, and average for the past 24 hours) and the effect of the pain on their ability to function during various activities of daily living. A Pain Severity Score and Pain Interference Score are calculated based on the patient's answers.

The benefits of the BPI are that it has been validated and shown to be reliable in a number of different pain states. It is an excellent tool to use for monitoring the effect of pain or treatment of pain, or both, in terms of a patient's functional ability or disability over time.¹

Norfolk Quality of Life

The Norfolk QOL-DN is a 47-item, self-administered questionnaire designed to measure the relationship between symptomatic Diabetic Neuropathy (DN) and Quality of Life (QOL) from the perspective of the patient. It is composed of two parts: questions related to symptoms experienced by the patient and questions related to the impact of the patient's neuropathy on activities of daily life. An analysis performed on the Norfolk QOL-DN separates the questions into five domains: activities of daily living, symptoms, small fiber neuropathy, large fiber neuropathy, and autonomic neuropathy.²

- For items 1–7, respondents were asked to score the presence of seven symptoms (numbness, tingling/pins and needles, electric shocks, superficial pain, deep pain, weakness, other symptoms) in their feet, legs, hands, and/or arms during the past 4 weeks. These symptoms relate specifically to nerve fiber function.
- Items 8–11 pertain to duration of symptoms, nature of symptoms (e.g., worse at night), and medications.

- For items 12–15, respondents are asked to indicate yes/no to a diagnosis of neuropathy or the existence of complications of small fiber neuropathy (e.g., gangrene).
- For items 16–37, respondents are asked to refer to the past 4 weeks and indicate on a 5-point scale the extent to which physical problems related to neuropathy have presented a problem when performing ADL (e.g., bathing). Of these items, four items pertain to small fiber neuropathy (e.g., unable to tell hot water from cold with hands), seven items pertain to large fiber neuropathy (felt unsteady on feet), and six items pertain to autonomic neuropathy (e.g., problem with vomiting) including sexual dysfunction. Items 38–46 represent generic health status items (e.g., pain interfere with normal work) and are not nerve fiber specific. Respondents indicate health status on a 5-point scale with higher scores indicating poorer health status. Item 47 asks respondents to indicate number of pain medications used (past and present).³

While both of these pain measurement scales are based on diabetic neuropathy, in general the questions are applicable for most peripheral neuropathies. The intent is to provide a better understanding of the pain's effect on daily life as opposed to a single number for pain measurement that is generalized to a single point in time.

Continuing with the WNA's focus on individual advocacy, these are provided as additional information to discuss with healthcare providers and caretakers, and as personal logs of pain progression.

To download these questionnaires, go to the WNA website, pnhelp.org, click on Resources at the top, then click on View Documents. They are listed under Member-Produced Documents.

References

- ¹Correll, D. J. (2007). The Measurement of Pain: Objectifying The Subjective. *Pain Management*. <https://www.sciencedirect.com/topics/medicine-and-dentistry/brief-pain-inventory>
- ²Boyd, A., et al. (2011). Quality Of Life And Objective Measures Of Diabetic Neuropathy In A Prospective Placebo-Controlled Trial Of Ruboxistaurin And Topiramate. *Journal Of Diabetes Science And Technology*, 5(3), 714–722. doi: 10.1177/193229681100500326
- ³Vinik, E.J. et al. (2005). The Development And Validation Of The Norfolk Qol-Dn, A New Measure Of Patients' Perception Of The Effects Of Diabetes And Diabetic Neuropathy. *Diabetes Technology & Therapeutics*, 7(3):497-508. doi: 10.1089/dia.2005.7.497.

NEUROPATHIC PAIN - THE 'INVISIBLE ILLNESS'

by Dr. Steve Allen, Consultant in Chronic Pain Management, Oxford University Hospitals Trust

What is pain?

All of us have experienced pain. For most that will have been related to some sort of injury or operation. This is called acute or nociceptive pain. As the affected tissues heal, so the pain will go away. Conventional painkillers and anti-inflammatory drugs may help and speed up this process. Chronic pain is not simply acute pain but lasting longer - it is a very different clinical and physiological problem.

We now know that the continual pain can actually increase the sensitivity of the pain receptors and can even radically change the way in which the brain and spinal cord process that pain input. For some people, even acute pain from an area of the body unrelated to the site of their ongoing chronic pain can be increased in severity. These processes are termed 'peripheral and central sensitization'.

Neuropathic pain is a consequence of damage to the myelin that surrounds nerves in the central nervous system. Very commonly the pain is not due to physical damage to the nerve but as a result of a physiological change within it. This means that even when the initial cause is treated or removed, the nerve remains permanently changed and the resulting painful symptoms can become a long-term problem. Once present, neuropathic pain is invariably chronic.

Paroxysmal pain is short unpredictable bursts of severe shooting pain, normally neuropathic in nature. This pain can either be 'spontaneous', where the nerves fire off for no apparent reason, or 'evoked', where a physical movement or stimulus causes the nerve to fire off.

Why is a part of my body numb but painful as well?

Damaged nerves prevent sensory information from reaching the relevant area of the brain. The brain thus thinks that this area of the body is numb. However, many of these same pathways are also made hypersensitive so that the nerve itself can fire off impulses and start the pain impulse to the brain from the area of damage. The result is that the brain perceives pain from an area that it also perceives to be numb -

known as anesthesia dolorosa. In addition, hypersensitive nerves can mean that normally nonpainful stimuli (such as lightly brushing the skin) can be perceived as severe pain - called allodynia.

Why am I being given antidepressants when I am not depressed?

Clinical depression is associated with insufficient levels of two chemicals in the brain - serotonin and noradrenaline. Antidepressants raise the levels of these chemicals, which lifts mood and reduces depression. The same chemicals are involved in parts of the brain and spinal cord that deal with pain - the Descending Inhibitory Pain Pathways. Thus for many people, there is a crossover of effects - not only can these drugs act as antidepressants but can reduce pain as well.

Why am I being given anticonvulsant drugs when I don't have epilepsy?

In simple terms, people with epilepsy have a hypersensitive focus of nerves in their brain which fire off and cause a seizure. Anticonvulsant drugs reduce the sensitivity of these nerves, preventing them from spontaneously firing off. The oversensitive nerves causing neuropathic pain can similarly be treated. Gabapentin and pregabalin are the most common drugs used.

Treatment or management?

We can rarely cure chronic pain - the best we can often do is to reduce it. As many people expect result of treatment is a cure, most chronic pain specialists now use the term management. It may take time to find the right combination of treatment and dosage to best manage the pain. Optimal therapy always demands understanding, time and patience.

Reference

Allen, S. (August 2012). Neuropathic Pain - The 'Invisible Illness'. *Multiple Sclerosis Trust*. <https://mstrust.org.uk/news/views-and-comments/neuropathic-pain-invisible-illness>

DISCOUNTS FOR WNA MEMBERS

Continued from page 5

Neuropathy Support Formula/Nerve Renew (1-888-840-7142) is a supplement that a number of people are taking and reporting it has helped them. The company gives members of WNA a discount and free shipping. The 30-day supply is \$40 (normally \$49.97). It can be auto-shipped monthly for the same. A 3-month supply via auto-ship is \$95.00. They also have a Nerve Repair Optimizer that is available for \$20 with free shipping. Marsha, the manager, said that if anyone wants more information about the product, they can call and ask for her. If she is not readily available, leave your number and she will call you back. They now have Nerve Renew Fast Acting Cream at \$20 for WNA members. It reportedly takes the edge off numbness.

Building Better Balance DVD, Developing Spine Health - The DVDs are \$30 each. The price of a full set (4 DVDs) is \$100 (that's a 20% discount). You can order the DVDs by going to the website www.building-better-balance.com. Shipping is free. You can also order the DVDs over the phone using a credit card. Call (707) 318-4476 and leave a message" Vanessa Kettler, Balance and Fall Prevention www.building-better-balance.com (707) 318-4476

Additional Discounts

Do you know a business that might offer our members a discount? Tell them that they will be listed each month in our newsletter and on our website so our members will know of their generosity and patronize their business. Call 888-556-3356 or email admin@WNAinfo.org.

We'll mail an agreement form to the business, and once we have it, we'll add them to this list.



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WNA June Webinar NABOSO NEUROPATHY PILOT

June 30, 2022

See page 3 for more info.

MAYO CLINIC RADIO – PERIPHERAL NEUROPATHY PODCAST

<https://www.youtube.com/watch?v=bnd5scg7Fik>

While Mayo Clinic Radio stopped their broadcasts at the end of 2020, the archived episodes are available to hear through any podcast app on your smart phone or on your computer via YouTube at www.newsnetwork.mayoclinic.org/podcast/mayo-clinic-radio/. The two hosts have friendly conversations with specialists on emerging treatments, health headlines and everyday wellness, and I especially found the one on Peripheral Neuropathy easy to understand. The Mayo neurologist, Dr. Mauermann, discussed how they diagnose a patient's neuropathy, which was much more intensive than what my neurologist did. Her talk on treatments focused on topical, oral, and acupuncture as an alternative therapy. The podcast is short at 8 and a half minutes but packed in a lot of information. For those with family that don't understand the severity of the condition, hearing this directly from a Mayo Clinic doctor may help their understanding.



Western Neuropathy Association (WNA)

A California public benefit, nonprofit,
tax-exempt corporation.

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Our mission is to provide support, information and referral to people with neuropathy and to those who care about them, to inform and connect with the health care community, and to support research.

Dues - \$30 a year

All contributions and dues are tax-deductible.

We are supported by dues-paying members, contributions by members and friends, and occasionally, small grants and fundraisers.

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