Welcome!

Living Well with Peripheral Neuropathy: Managing the Symptoms of PN

Wednesday, March 4, 2020

We will begin our presentation shortly.
Before We Begin

This presentation is being recorded. The recording link will be emailed to you so you can view it again later.

Submit your questions anytime. We will answer them in the Q&A session at the end of the presentation.

If you are having trouble with the audio using your computer, you can dial in by phone (check your email for dial-in instructions).
The Foundation for Peripheral Neuropathy
Patient Education Webinar Series

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Living Well With Neuropathy

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Neuropathy

• One of the most prevalent neurologic conditions encountered by physicians of all specialties

• Prevalence:
  • 2.4% in the general population
  • 8% over age 55
AUDIENCE POLL:

*How is your neuropathy symptom control recently?*

1. Bad, I have a lot of problems
2. OK, but it could be better
3. Very good
“Never let the things you cannot do prevent you from doing the things you can.”

~Coach John Wooden
AUDIENCE QUESTION:

What are potential symptoms of peripheral neuropathy?

1. Weakness
2. Pain
3. Numbness
4. Imbalance
5. Any or all of the above
Peripheral Nerve Anatomy
& Neuropathy Symptoms

- Motor
  - Weakness
  - Balance

- Sensory
  - Numbness
  - Pain
  - Balance

https://www.physio-pedia.com/images/6/63/FG14_06b.jpg
Peripheral Nerve Anatomy: Autonomic Nervous System

- Autonomic symptoms frequently underreported
  - Cardiovascular (orthostatic hypotension)
  - GI (constipation, nausea or diarrhea)
  - Urogenital (neurogenic bladder or erectile dysfunction)
  - Secretomotor (sweating)
The Importance of Symptom Management

- Commonly, patients are left with lingering symptoms from the pretreatment neurogenic injury.
- In cases where neuropathy is idiopathic or untreatable, management is entirely symptomatic.
- Comorbid depression, anxiety, and sleep disturbances are common.
### Pharmacologic Neuropathic Pain Treatment: Tier 1

<table>
<thead>
<tr>
<th>Anticonvulsants</th>
<th>Antidepressants</th>
<th>Topicals</th>
</tr>
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<tbody>
<tr>
<td>gabapentin</td>
<td>duloxetine</td>
<td>lidocaine (5%) patch</td>
</tr>
<tr>
<td>pregabalin</td>
<td>amitriptyline</td>
<td>capsaicin (8%) patch</td>
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</table>

Other topicals: gabapentin and phenytoin (10% creams), ketamine

Mayo Clin Proc. 2015;90(7):940-951
Pharmacologic Neuropathic Pain Treatment: Tiers 2 and 3

Tier 2: venlafaxine, tramadol

Tier 3: tapentalol, opioids
AAN Position Statement: Opioids

The AAN supports the appropriate treatment of pain for neurologic patients living with pain. Pain disorders have a significant impact on a large number of patients. The mechanisms and treatment options for chronic pain are poorly understood and vastly understudied. There is insufficient evidence that opioids are effective for the treatment of chronic pain, particularly neuropathic pain, and clear evidence that they often worsen migraine. Further, there is limited research available on non-opioid therapies for pain. It may be acceptable to consider opioids for weakness, pain, or other symptoms at the end of life as part of a palliative care treatment plan. However, the risks of opioid therapy for most chronic conditions outweigh the benefits.
Small, short-duration studies show safety and efficacy of short-term, low-dose cannabis vaporization and oral mucosal delivery for treatment of neuropathic pain.
AAN Position Statement: Medicinal Cannabis and Neuropathic Pain

The AAN recommends that each product and formulation of cannabis used in treating medical conditions demonstrate safety and efficacy via scientific study similar to the process required by the Food and Drug Administration (FDA) for the approval of any drug. Many cannabis preparations that had some evidence for efficacy in studies are not available in the United States, and the studies were conducted in Europe using standardized preparations. It is not appropriate to extrapolate the results of trials of standardized preparations to other non-standardized, non-regulated medical marijuana products which may be commercially available in states with laws supporting the use of medical marijuana. Efficacy of a non-standardized product is not equal to that of standardized products that are studied in clinical trials. Additionally, most currently available medical marijuana products are not regulated by any agency and may not contain the ingredients identified by labeling, making quality control impossible and raising further safety questions.
Beyond Drugs:

Non-Pharmacological Management of Neuropathy Symptoms
Lifestyle: Nutrition and Exercise

Nutrition and Exercise for Diabetic Neuropathy

• Maintaining close to normal glucose may reduce the incidence of diabetic neuropathy by up to 64%
  • Eating whole foods, low-fat, high-fiber, plant-based diet
  • Exercise: walking 30 minutes 3-7 days/week

Yoga

• A variety of trials have shown benefits including: improvements in diabetes, reduced BMI, reduced lipid concentrations, reduced BP, increased energy and improved well-being.
• One study showed some improvement in nerve conduction velocities after doing 30-40 minutes of daily yoga for 40 days in diabetic neuropathy patients.
Lifestyle: Nutrition and Exercise

Tai Chi

• Regular practice for months can improve walking, balance, strength, foot sensation, diabetic control and nerve conduction velocities.

• Tai Chi is also a safe form of exercise for patients with peripheral neuropathy.
Mind-Body Therapy

- Biofeedback may help improve diabetes control, muscle tension and anxiety
- Importance of working with somebody familiar with teaching biofeedback techniques
  - Treatments may include guided imagery sessions or relaxation techniques.
  - Patients wear a device that monitors and shows them their BP, pulse and other measurements to reinforce how emotion, pain and stress influences their body.
Integrative Therapy use in Peripheral Neuropathy Patients

2004 survey of 180 outpatients with peripheral neuropathy:

43% used complementary and alternative medicine, most frequently for pain control

- 35% megavitamins
- 30% magnets
- 30% acupuncture
- 22% herbal remedies
- 21% chiropractic manipulation

27% thought their neuropathy improved
Acupuncture and electro-acupuncture stimulate endorphins and help alleviate pain. Full physiologic mechanisms are not known.

- A number of studies have shown improved pain, improved nerve conduction velocities.
- Some patients were able to reduce or stop their pain medications.
Bioelectromagnetics

- Magnetic fields can penetrate up to 20mm and appear to target pain receptors in the skin.

- RCT found that some patients with diabetic neuropathy who wore magnetic sole shoes for 4 months had significant reductions in burning, numbness, tingling and pain. ("magsteps")
Botanical Medicine

- Turmeric
- Geranium Oil
- Evening Primrose Oil
- Acetyl-L-carnitine
- Alpha-lipoic acid: antioxidant, trials show reduced neuropathic symptoms
- Vitamins B1 & B12
- Fish Oil

Caveats

• Lack of standardization of these modalities & botanicals
• Small studies
• Potential toxicity (Vitamin B6)
• Some procedure-based treatments are user dependent
• Expense
The importance of physician-patient communication

1. The problem: “I can do nothing for you”

2. The solution: communication, continuity of care

Boissy et al.: Physician Communication Training Improves
Resources for Patients

- THE EXERCISE CURE
  - Prevent, improve, or solve almost any health problem!
  - A Doctor’s ALL-NATURAL, NO-PILL Prescription for Better Health & Longer Life
  - Jordan D. Metzl, MD
  - (30 Marathons & 11 Ironman)
  - with Andrew Heffernan, CSCS

- Exercise & Physical Activity
  - Your Everyday Guide from the National Institute on Aging

Go4Life
Resources for Patients

Peripheral Neuropathy
What It Is and What You Can Do to Feel Better
Janice F. Wiesman, MD

the FOUNDATION for PERIPHERAL NEUROPATHY
Thank You
Thank You!

Questions?
Thank You for Watching!

Did you like this webinar? A recording will be uploaded on our website at www.foundationforpn.org shortly. Stay tuned.

Do you like us? Please consider supporting us so that we can continue to fulfill our mission of improving the lives of people living with Peripheral Neuropathy. You can give securely online, via mail or via phone. Every dollar matters!

Can we help with anything else? Call 847-883-9942 or email info@tffpn.org. You may also mail inquiries and donations to The Foundation for Peripheral Neuropathy at 485 Half Day Road, Suite 350, Buffalo Grove, Illinois 60089.