DigiCare® Monograph Series

Understanding NEUROPATHY

Fibromyalgia, Peripheral & Diabetic Neuropathy, Restless Legs, Chronic Numbness/Burning, etc.

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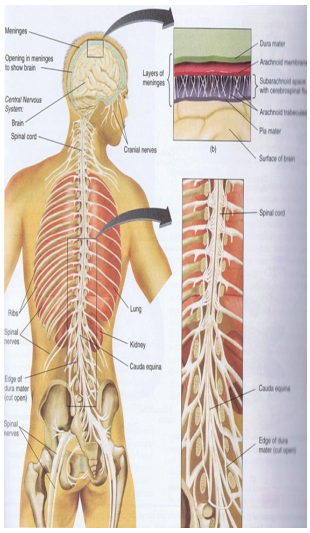
Introduction: The mission of the human nervous system is to maintain homeostasis, facilitating distribution of hormones, nutrients, oxygen, hydration, bicarbonate, and other vital resources for glandular and muscular control. The main actors in this dynamic task are mitochondria, ATP, DNA, cytokines, neurons, axons, dendrites, synapses, myelin, adult stem cells, and astroglia. Finely tuned with incredible intelligence and self-healing properties, the nervous system is too often prevented from doing its needed work when interrupted by crippling surgeries and/or long-term use of addictive opioid, psychotropic, steroid, anti-inflammatory and neuroleptic medications. Each of these only make matters worse over time, not better. To tell you how far off we are today on neuropathies in the larger scheme of things, the US (with only 4% of the world's population) consumes up to 82-84% of the world's medical grade opium. What's worse, underlying causes are ignored in favor of masking symptomatic behaviors causing neuropathic sufferers in the US to rarely improve in the long-term. Here, it is our purpose to create a greater understanding of the more than 100 recognized forms of neuropathy, and how they can be overcome. For a healthy body has a fully functioning nervous system that maintains homeostasis and wellness throughout an entire lifetime. **(Note: This publication is not exhaustive or comprehensive. For guidance in individual cases, one should seek the advice of a qualified health professional).**

Manifestations of Neuropathy

Pain of neuropathy is like a lot of things in life, difficult to describe but you know it when you experience it. Yet it is unwise to ignore it, for it might be the only messenger that will alert both sufferer and your body that serious trouble is just around the corner. Following are some of the warning signals that neuropathic pain sends to foster our attention:

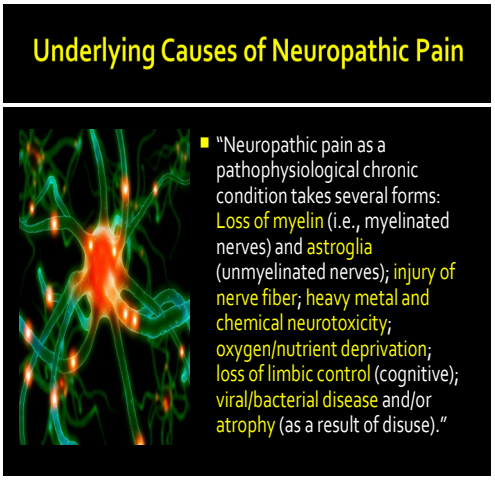


- Numbness, pain, burning, tingling
- Difficulty walking, loss of balance
- Muscle weakness, cramps, paralysis
- Parkinson's disease, essential tremors, seizures
- Blurred vision, loss of vision
- Hearing loss, tinnitus, hyperacousis, loudness growth abnormalities
- Loss of sense of taste/smell
- Loss of dexterity, tactile sensation
- Idiopathic digestive disorders
- Sleeplessness, loss of autonomic control, myoclonal jerking
- Loss (or elevation) of blood pressure, tachycardia, dizziness
- Loss of memory, chronic depression, cognitive dysfunction

There are two messenger pathways for neurological information, ***Afferent Neural Pathways***, which carry auditory, visual, tactile, olfactory, and gustatory information *toward* the brain, and ***Efferent Neural Pathways*** which transmit motor commands away *from* the brain in elaborate and dynamic pathways for responses to sensory stimuli (i.e., speech, reflexes, changes of blood pressure, heart rate, blood volume, breathing, digestion, etc.). The efferent pathway is the one charged to give us pain messengers. The degree of pain is usually in proportion to the proportion of efferent neurons in a given part of the body. However, both pathways serve us in detecting threats and give us information so that we can act immediately on those threats. Alternate and integrative pathways, and involuntary ***Reflex Arcs*** provide us immune response, and immediate protection from injury, including "fight or flight". To set healing into motion these reflex arcs provide us with vascular variations, adult stem cell production, and mitochondrial remediation. Myoclonic jerks of the legs, for instance, are often distortions of the reflex arcs as the brain switches gears from wake-to-sleep states. Myoclonic and Occupational Overuse Syndrome (OOS) behaviors are interactions between learned responses to stress and peripheral motor activity suggesting the need for neuromuscular retraining. Not all messengers are perceived as pain per se (ie, tinnitus, myoclonic jerks, nervous ticks, tachycardia, memory loss, etc.), but they are aggravating just the same.

Classification

Classification of neuropathies delineates time-line and severity: ***Acute*** (immediate, debilitating), ***Sub-acute*** (recurring, less debilitating), and ***Chronic*** (duration of at least 3-6 months, varying levels of pain and debilitation).



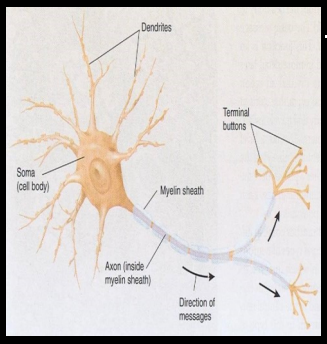
Neuropathy is classified by *Site of Lesion*: ***Cranial*** (twelve cranial nerves of the brain), ***Peripheral*** (involving shoulders, hands, arms, legs, feet, hips), ***Autonomic*** (heart, lungs, liver, pancreas, and other involuntary organs, and spinal nerves), and ***Focal*** (involving a single part of the body).

To learn how neuropathies develop, we will review the known primary Causes and Contributors:

- **Diabetes mellitus type two** (DMII) tops the list of causal conditions because it is so pervasive. Most sufferers of long-term DMII can count on experiencing a wide range of neuropathies over time, particularly blindness, hearing loss, and peripheral neuropathy if all they do in response to immunological pain messengers is just take insulin-inspiring medications. For instance, amputations of feet and legs of treated diabetics are on the rise today, because little else is being done to address the real drivers of their health condition(s).
- **Stenosis or other types of nerve compression, as well as accumulated trauma/degeneration,** arise from a lifetime of injuries and illnesses, some going back to before birth. Most are corrected without surgery, but when surgery *is* necessary, post-surgical complications may include *heterotopic ossification* of soft tissues, which can further damage or restrict the flexibility needed for connective tissues of the nervous system to function. This can cause vasculitis, blocking circulatory and immunological processes, and may also contribute to neuropathy.
- **Organic nutrition deficiencies** contribute to neuropathies, especially deficiencies in the B-complex and essential minerals. A diet of microwaved, synthetically fortified, degerminated, genetically modified, refined food is almost a guarantee of eventually suffering from neuropathies and other degenerative conditions.
- **Medication & recreational drug-induced neuropathies** are skyrocketing according to the CDC in the US, which we have attributed to over-

Neuropathic Overlay: Loss of Myelin

- The Myelin Sheath is the nerve's "electrical insulation"
- Excessive blood sugar & insulin levels, as well as disease, heavy metals, injury, etc. destroy myelin
- When myelin wears off, nerves "short-circuit", bringing dysfunction, pain, numbness, burning, loss of motor control
- B12 Methyl w/ Folic Acid can regrow myelin over a 60 day period, but only in cellular pH of 7.45 and Oxygen 98-100%



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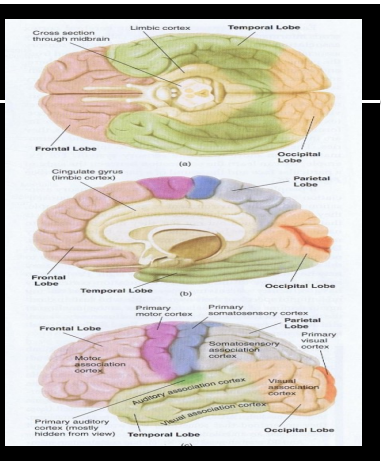
Other Pathways

- Many of our brain neurons are unmyelinated
- They are protected by astroglia, a type of floating myelin that responds to neurons under attack
- This type of myelin can degenerate by similar causes as standard myelin.
- Glial deficiencies cause inflammation, seizures, coma, memory loss, etc.



prescribed medications in lieu of getting to actual underlying causes. The list of neuropathy-inspiring medications is long. Ironically, acid reflux (GERD) medications are prominent in bringing about neuropathies from loss of myelin and astroglia. Long-term use of SSRI/SNRI anti-depressants, nerve block medications, cardiovascular, Alzheimer's, and other meds also contribute to neuropathy. As legal and illegal drug, alcohol, and caffeine use rise so do neuropathies and neurodegenerative conditions and all the problems they bring.

- **Heavy metal accumulations, food additives, and environmental toxins.** Lead stores in the bones and tissues over a lifetime and is a major contributor to neuropathies of all kinds. Even brief exposure to mercury found in commercially grown fish, fish oil supplements, broken fluorescent bulbs and dental fillings cause varying degrees of neurological damage. Pesticides, herbicides, fluoride, chlorine, and perchlorates are all neurodegenerative, while artificial food coloring, preservatives, hormones, and synthetic sweeteners that dominate the US food supply are neurotoxins especially problematic for children.
- **Acidosis** is a general condition that is inspired by microwaving food ("DNA effect"), chronic semi-dehydration, high caffeine intake, GMO high fructose corn syrup (HFCS), stress, inflammatory disease, and unhealed injuries all contribute mightily to the development of acidosis, and in turn, can lead to neuropathy.
- **Vaccine adjuvants**, despite self-serving research says, does cause significant developmental problems in infants and young children, and neurodegenerative challenges for older adults. The rush to have newborns immunized before immune systems can handle it should be avoided entirely. Otherwise, ever increasing incidences of learning and developmental disorders in American children will continue to negatively impact individuals and families needlessly.
- **Infectious Disease**, including Guillain-Barre Syndrome, Shingles, Poliovirus, Rubella, Lupus, Hepatitis, HIV, Meningitis, etc. all cause or contribute to neuropathy (sensory and autonomic neuropathies).
- **Genetic Disorders** (Friedrich's Ataxia, Charcot-Marie-Tooth Disease), Hereditary Neuropathy with Liability to Pressure Palsies, etc.) also deserve listing, albeit in this researcher's opinion the vast majority of genetically inspired disease would not even occur without the other offenders listed in the foregoing.

Lasting Remediation and Treatment

Diet: Stop microwaving, eat at least 50% of your diet in fresh fruits and vegetables, avoid GMO high fructose corn syrup, as well as artificial sweeteners, and use Extra Virgin Olive Oil, avoid Canola Oil.
Targeted Nutrition: Deficiencies that contribute to neuropathy include certain organic vitamins and ionic minerals. Avoid synthetic vitamins and inert minerals.
Hydration: Drink ionized, alkalized water. Reduce caffeine.
Heavy Metals: Chelate accumulated lead, aluminum, formaldehyde, mercury, arsenic, aluminum, etc. in the fastest, safest manner possible.
Toxins, Medications: As biomarkers improve and with your doctor's guidance, wean off of all medications as biomarkers improve. Avoid tobacco, alcohol, recreational drugs completely.
Spinal and Accumulated Injuries: Many injuries happened during childhood. Recreational injuries debilitate as much as industrial ones. All injuries need fixed. All of them. As the spine & injuries heal, most neuropathies begin to resolve. Deep cold laser [DCL], far infra-red [FiR], Medical Massage [MM], AromaTouch® [AT], neuromuscular retraining [NMR], chiropractics, dentistry, etc. are the pinnacle non-surgical therapies that bring lasting results with regrowth and repair of cartilage, bone, skin, and neural and vascular tissues. These rebuild your body for years to come and at a fraction of the cost of conventional approaches.
Resolve Subclinical Infections: Usually found in the jaw and teeth, ears, lungs, artificial joints, feet, and intestines. These are the main drivers of inflammation in the body and need resolved.

Specific treatment programs for neuropathic pain are customized for individual needs under the SIRCLE® Program, and involve a wide array of health professionals and community resources. The goal, as ever, is true healing and relief from pain.

Resources for Further Study

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