Peripheral Neuropathy

By Glenn Rexroad

I specialize in neuromuscular disorders. The term neuromuscular refers to the relationship between the nervous system and the musculoskeletal system. Specifically I am interested two areas, the communication that takes place back and forth between the Central Nervous System (CNS) and the musculoskeletal system and the anatomical relationship between the muscles, bones and nerves. By anatomical I am referring to the mechanical and structural relationship. Essentially, how nerves, bones and muscles share spaces in the body. I hope to be able to explain to you how the structural relationship between the CNS and the musculoskeletal system can lead to a diagnosis of Peripheral Neuropathy.

I began my research into peripheral neuropathy by looking it up in several medical dictionaries. I had expected to learn something, but was very disappointed as I read the definitions. Here's what I found out. The word peripheral indicates structures that are outside of the central nervous system which consists of the brain and spinal cord. Peripheral nerves are the nerves that exit the spine and supply our arms and legs.

The second word, neuropathy, simply means problems associated with the nervous system. I thought, that's it? That's all they have to say?

Peripheral neuropathy means problems with the nerves in the arms and legs. This diagnosis seems to me to be very vague and general and doesn't really tell us much about what is exactly going on with an individual with a diagnosis of Peripheral Neuropathy.

And like many diagnosis, it is merely a name for a list of symptoms, and nothing more.
There is no tangible thing called Peripheral Neuropathy. There is no Peripheral Neuropathy virus or bacteria. We must understand that we do not have a tangible thing called Peripheral Neuropathy.

I think that a great danger exists when people are given a label and think that they actually have some *thing*. I say danger because if we think that we have this thing called Peripheral Neuropathy, that somehow it exists in our bodies as an entity, it becomes permanent and there is no way for us to move forward toward any resolution of the condition.

At this point you might be thinking, but they did nerve conduction tests and it was very scientific. And it does seem very scientific, surely that is definitive and accurate. Well, there are many reasons why nerves are unable to conduct signals. All the nerve conduction test reveals to us is that the nerves are not conducting signals. It does not tell us why. And doctors don't look into why. This is very important because if the cause of an illness is unknown, then at best doctor's can only treat the symptoms. And if only the symptoms are treated, the results are unpredictable and the condition will continue its course. The key to determining a specific and successful treatment plan lies in looking at all of the possible causes of the symptoms, which include chemical, structural and emotional.

Further research led me to discover that there are only three true causes of Peripheral Neuropathy, recovering alcoholics, diabetes and leprosy. So, if you don't have any of these three things then the question is why were you given the diagnosis of Peripheral Neuropathy?
I'm not sure I have the answer to that question. I can only speculate as to why. Often the medical field is faced with the dilemma nailing down a diagnosis. One of the methods they utilize is the process of elimination. Eliminating what a person does not have until there is only one thing left, so they give them that diagnosis.
Interestingly, Taber's medical dictionary defines Diagnosis as the use of scientific and skillful methods to establish the cause and nature of a sick person's disease. This is done by evaluating the history of the

disease process, the signs and symptoms present, lab tests, and special tests like X-rays and EKG. Stedman's medical dictionary defines Diagnosis as the determination of the nature of a disease. Here we have two similar but yet different definitions. One longer and one very short. This is why I own several medical dictionaries. Let me read the second definition again. Diagnosis- the determination of the nature of a disease. The word that interests me in this definition is the word determination. To determine means to reach a decision about something after thought and investigation; to decide upon. So a diagnosis is something that an educated person, a doctor, decides upon. And when we choose to go to another doctor, we are going for a second opinion. If the second doctor is giving us their opinion wouldn't that imply that the first doctor's diagnosis is an opinion? Webster's new world college dictionary defines opinion as a belief not based on absolute certainty or positive knowledge but on what seems to be true, valid or probable to one's own mind.

So where are we going with all of this? I hope that I have established the concept that a diagnosis is a doctor's educated opinion. And that not all opinions are based on definitive facts. They are not always definite truths. Now some diagnoses are definite truths. If the x-ray revealed a broken bone for instance, that's pretty definite. If the lab work revealed a certain virus or bacteria, then yes that is definite. But as I said earlier there is no Peripheral Neuropathy virus or bacteria. So, since not all disease processes have tests to reveal definite facts doctors are faced with having to draw conclusions and form opinions from the information that they can gather. And it is not their fault that their diagnoses are not always accurate. After all, MD's are considered biochemical experts. They look at everything through biochemistry when they diagnose. And they are trained to treat by prescribing medications. This is not a bad thing; surely medications do help us deal with the uncomfortable symptoms to help us feel better. But treating any condition only with medications can be limiting. Medications rarely return the body to optimum health. And here's why, not all conditions have a biochemical cause. Therefore, a healing resolution cannot be achieved through a biochemical treatment. I see medications as a way to help us deal with the uncomfortable symptoms so we can have the energy to pursue efforts to regain our health and well being. And I encourage everyone I meet to take responsibility for their own health and well being.

Let's look at some of the fundamentals of good health.

As human beings we are more than just biochemical in nature. Medical science over the last 20 to 30 year has finally started to recognize that our thoughts and emotions play a vital roll in our health. Headaches, high blood pressure, stomach ulcers, and a lowered immune system are just as few examples of conditions that are directly linked to emotional stress. And there are many more examples. So when people think that they have PN and that it is tangible, that it exists as any entity in their bodies, they stay locked in the disease. I suggest reading the books by Louis Hay (You can heal your life) and Carolynn Myss (why people don't heal). These are wonderful books dealing with the thought process and the emotions that go along with those thoughts and how that affects our health and well being. I highly recommend both of these books to everyone.

Also, as human beings we have this wonderful structure component of bones and muscles called anatomy. There are many anatomical structural reasons why nerves are unable to conduct signals. I find it interesting that the symptoms of Peripheral Neuropathy are very much the same as the symptoms that define neuromuscular pain and dysfunction.

One of the symptoms is described as numbness. True numbness is the lack of sensory signals going to the brain. Like when you have a shot of Novocain at the dentist. However when people say that they feel numbness they are usually referring to tingling and prickling sensations. One of the other symptoms is muscle fatigue or weakness. However, it is not the muscles that are weak. It is weak signals from the brain to the muscles that lead to a weak contraction of the muscle. And yet another symptom is muscle twitching or restless leg syndrome. All of these symptoms are described in the books by **Dr. Janet Travell and Dr. David Simons "Myofascial Pain and Dysfunction, the trigger point manual Volume I and II".** In their books they describe all of these symptoms as originating from muscles causing nerve compression and nerve entrapment. Nerve compression is described as a muscle pulling on a bone and

causing it to compress a nerve. Nerve entrapment is described as a muscle contracting and squeezing the nerve.
Interesting isn't it? It's like parking your car tire on a garden hose; the water can't get through. If there is pressure on a nerve, the signal can't get through properly.
There are actually two things going on here. One, nerve signals are not able to go through to the brain and signals are bounced back out into the periphery. Just like hitting your funny bone in the elbow. Nerves can get excited by pressure anywhere along their path. Signals can't pass through and the nerve can get excited sending signals to the wrong area or not at all.

So the big question is where does this happen? All over the body. There are anatomical places all over the body where nerves, bones and muscles share spaces.
SLIDE of NECK
Nerves often pass right through muscles. So any time muscles hold too much contraction they can press against nerves or press bones against nerves exciting the nervous system. Also, muscles hold an excess of tonus or contraction can actually send too much overwhelming signals into the CNS causing excitation in brain waves.
SLIDE of EEG
The most common place that nerve compression occurs is in the neck. This is caused by the lack of the proper normal curvature of the top seven cervical vertebras.
SLIDE of X- Ray and MRI
DR. William Ruch " Atlas of common subluxations of the human spine and pelvis"
So, if compression exists in the neck, and considering that 90% of the nerves in the body pass through the neck, a lot of nerves can be affected. This explains why there are so many symptoms throughout the body.
Dr.'s Dvorak and Dvorak in their book "Manual Medicine" performed ten thousand saline injections into people's necks reproducing compression at varying levels. What they discovered was that you can produce any of these sensations throughout the entire body simply by compressing a particular level of the cervical spine (the neck). And I could go on quoting the endless amounts of research that I have found. The research to substantiate this theory is out there. The problem is they have no idea how to treat and correction the problem. Chiropractic therapy has not been very successful in restoring the curve of the neck because they do not take into account that muscles move bones and therefore the problem is muscular in nature. Most chiropractic charts that show the lose of the cervical curve, known as military neck, also have a disclaimer at the bottom of the chart that reads "chiropractic treatments are not given for the purpose of restoring the curve but for treating symptoms only". And you know how I feel about treating symptoms only.
Therefore, I have spent the last 20 years studying and developing techniques in order to correct this problem. Why do you think I have devoted my life to this research? I think you already know. With my multiple traumas I have had this problem. Every head injury no mater how small transmits the kinetic force into the spine and jams it. Falling on your but jams the spine. And this problem exists to varying different degrees in every client I see.

In summary, with Peripheral Neuropathy the proper neurological signals are not getting through to the brain. And noxious stimulation especially in the form of pain, originating from whatever reason, left untreated (rest is not a absolute treatment), will overwhelm the Central Nervous System with noxious stimulation and lead to a decrease in function to all of the systems of the body.

By restoring the proper curvature and mobility of the vertebra of the neck, thereby alleviating the nerve compression in the neck, the nerve signals can get through to the brain. With this accomplished the Central Nervous System can begin to heal and people can expect to become pain and dysfunction free, to have an increase of energy, and to return to a normal lifestyle.

We need to recognize that the body is a self-maintaining, self-correcting mechanism. Health is lost

when something is interfering with the body's ability to cope and adapt to the different environmental stresses. When efforts are directed toward the cause of the dysfunction, and the correct therapy is applied, the body is able to regain and maintain health and well being. Health is eating well, moving well, and thinking well.