



WESTERN NEUROPATHY ASSOCIATION

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HOW CAN I HAVE PAIN AND NUMBNESS?

Realief Neuropathy Centers, <https://realiefcenters.com/am-i-insane-i-have-pain-and-i-feel-like-im-going-numb/> retrieved July 16, 2022.

Peripheral neuropathy, when it is damage to the ends of the nerves, can pick and choose which nerve endings to damage. Your symptoms depend on which nerve endings are damaged.

Think of your peripheral nerves. They have a main cell body coming right off of the spinal cord. Inside they have many individual nerve fibers, like a coaxial cable is made up of many individual wires twined together.

Eventually these individual nerve “wires” end. Some end up and make a muscle fiber fire. Some make you cry like when you read your phone bill. Some tell your glands to squirt hormones into your bloodstream. And some tell you how soft the puppy’s ear that you are petting is.

The ends of the nerves are specialized and basically have one job each. One job! So, if a bunch of the nerves for feeling warmth are damaged, you will have a tough time feeling warmth. If they really get damaged, they can send the sensation of heat when they are not supposed to.

Fiber category	Size (microns)	Speed (meters/second)	Function
A α Group IA and IB afferents	15	80-100	Large motor axons Muscle stretch and tension sensory axons
A β Group II afferents	12-14	30-60	Touch, pressure, vibration and joint position sensory axons
A γ	8-10	15-30	Gamma efferent motor axons
A δ Group III afferents	6-8	10-15	Sharp pain, very light touch & temperature sensation
B	2-5	3-10	Sympathetic preganglionic motor axons
C Group IV afferents	<1	<1.5	Dull, aching, burning pain and temperature sensation

Table 1. Fiber types and functions (from largest to smallest).

Which particular nerve endings the neuropathy decides to damage, gives you your symptoms. Look at the chart above, second group, Fiber category A β , Group II afferents. These nerve fibers’ function is touch sensation. If they are damaged, you can get a numb-ish feeling. The bottom group, C Fibers, Group IV afferents, does burning pain. If they are damaged, you can get a burning type pain. If both groups are damaged, then that patient can have both numbness and burning pain.