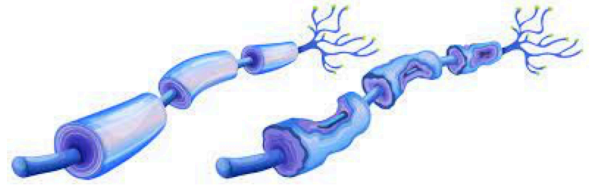


Peripheral neuropathy



What is peripheral neuropathy?

- Peripheral nervous system bring the outer information from the skin into spinal cord and brain. The integrated information may further transmit from the brain and spinal cord to control the movement. Peripheral neuropathy is a group of disorders resulted from the damage to the peripheral nerves. These disorders often lead to weakness, sensory impairment, and pain in the hands and feet, and variably accompanied with abnormal autonomic function, including bowel or bladder dysfunction.

What are the causes of peripheral neuropathy?

- The causes of peripheral neuropathy may include: genetic causes, dysmetabolism, acquired inflammation, malnutrition, trauma, or exposure to toxins..etc. The most common causes of peripheral neuropathy is diabetes polyneuropathy.

How about the treatments for peripheral neuropathy?

- Patients with peripheral neuropathy often experience abnormal sensations (paresthesia) such as tingling, burning, or electrical pain. Allodynia and hypersensitivity are also common features of peripheral neuropathy. Symptoms of peripheral neuropathy may improve with proper medical treatment or disease controlling. There would be a favorable outcome with timely diagnosis and treatment, especially if the causes were related to treatable diseases (such as inflammatory demyelinating neuropathy).

What are the patterns of peripheral neuropathy

- According to the area/region that the nerve(s) is damaged, the pattern of peripheral neuropathy can be categorized into mononeuropathy affecting a single nerve, multifocal neuropathy affecting two or more nerves in different regions, or polyneuropathy spreading diffusely and symmetrically in the extremities.
- Carpal tunnel syndrome is the most common mononeuropathy.
- Most patients with peripheral neuropathy have polyneuropathy, such as diabetes polyneuropathy.

What are the modalities of peripheral nervous systems?

- Sensory nerves: transmit information into and from brain and spinal cord. These sensation may involve pain, touch, temperature, and vibration...
- Motor nerves: conduct motor information to control movement resulted from muscle contraction/relaxation
- Autonomic nerves: control vital functions such as blood pressure, heart rate, respiration, digestion, and bladder function

What are the symptoms/signs in peripheral neuropathy?

- Sensory symptoms such as:
 1. Abnormally feeling as wearing gloves and socks
 2. Tingling, burning, or electrical paresthesia in the feet or hands
 3. Extremely sensitive to pain, pressing or touching
 4. Allodynia defined as felling pain during non-painful stimuli (such as when wearing clothes or brushing hair)
 5. Unsteadiness, poor coordination and falls
- Motor symptoms such as:
 1. Muscle weakness
 2. Muscle atrophy
 3. Involuntary shaking/tremor

- Autonomic symptoms such as:
 1. Gastrointestinal issues including digestive problems or constipation
 2. Bladder issue including urinary frequency or incontinence
 3. Erectile dysfunction
 4. Intolerance to heat
 5. Excessive sweating
 6. Fluctuation of blood pressure

Should I see a doctor?

- Please call for medical service immediately if you have unusual weakness, muscle atrophy, sensory impairment, tingling or burning pain in your hands or feet. As early diagnosis and treatment may contribute to better disease controlling and prevent further damage, please do not hesitate to visit a neurologist specialized in diagnosis and treatment of peripheral nervous system disorders.

How to evaluate if I have peripheral neuropathy?

- Electrodiagnostic technology is a well-established and less invasive procedure to assess the function of peripheral nervous system. You may be provided the nerve conduction studies or electromyography after detail neurological examination by a neurology specialist.