

Important Updates: COVID-19 vaccinations | Recall on Philips Respironics medical devices

COVID-19: We are vaccinating patients ages 12+. Learn more:

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Philips Respironics issued a recall for some CPAP and BiLevel PAP devices and mechanical ventilators. [Learn more.](#)

Neurology and Neurosurgery

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Small Fiber Sensory Neuropathy

Small fiber sensory neuropathy (SFSN) is a disorder in which only the small sensory cutaneous nerves are affected. The majority of patients experience sensory disturbances that start in the feet and progress upwards. These patients have what is called a length-dependent SFSN. This type of SFSN is often due to diabetes or impaired glucose metabolism (i.e. early or pre-diabetic state) and may progress to typical diabetic polyneuropathy. However, in a significant percentage of patients, no underlying etiology is found and the patients have idiopathic SFSN. A small percentage of patients with SFSN experience sub-acute onset sensory disturbances diffusely over the whole body, including the trunk and sometimes even the face. These patients have non-length-dependent SFSN and almost all cases are idiopathic.

Symptoms

The symptoms of small fiber sensory neuropathy are primarily sensory in nature and include unusual sensations such as pins-and-needles, pricks, tingling and numbness. Some patients may experience burning pain or coldness and electric shock-like brief painful sensations. Since SFSN usually does not involve large sensory fibers that convey balance information to the brain or the motor nerve fibers that control muscles, these patients do not have balance problems or muscle weakness. In most patients, these symptoms start in the feet and progress upwards. In advanced cases, it may involve the hands.

Diagnosis

Diagnosis of SFSN is based on history, clinical examination and supporting laboratory investigations. Electromyography and nerve conduction studies are done to eliminate involvement of motor and large sensory nerve fibers. Skin biopsies are used to confirm loss of cutaneous nerve innervation. Nerve and muscle biopsies are rarely needed.

Treatment

Treatment of SFSN depends on the underlying etiology. If it is due to diabetes or pre-diabetic state, then optimum diabetic control and exercise and weight loss to reduce insulin resistance are needed. Painful sensory paresthesias can be treated with anti-seizure medications, antidepressants, or analgesics including opiate drugs. In severe painful conditions patients may be referred to the Blaustein Chronic Pain Clinic for a multidisciplinary approach to pain management.