Sensory neuronopathy and Sjögren’s syndrome

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Sensory neuronopathy and Sjögren's syndrome are two distinct health conditions that are closely linked. There is a high proportion of patients that are affected by both conditions, suggesting that there may be some association in their pathophysiology, or one may be causative of the other.

In most cases, the symptoms of sensory neuronopathy present prior to the symptoms of Sjögren's syndrome, although this does not necessarily correlate to the order in which the conditions begin in the body.

Overview of Sensory Neuropathy

Sensory neuropathy, also known as ganglionopathy, is a health condition involving the degradation of the neurons in peripheral nervous system. In particular, the dorsal root ganglia are affected in the pathology of this condition.

This can result in distinct symptoms, such as the inability to control voluntary muscle movement as usual and an abnormal gait.

Overview of Sjögren's syndrome

Sjögren's syndrome is an uncommon systemic autoimmune disease that affects approximately 1% of the population. The characteristic symptoms of the syndrome include dry eyes and dry mouth, among other varied signs and symptoms.

Damage to the peripheral nervous system has been observed in many patients with Sjögren's syndrome, estimated to be up to 50% of patients with the syndrome. There are several different conditions of the peripheral nervous system that are related to Sjögren's syndrome, one of which is sensory neuropathy.

Symptoms and Presentation

In most cases, the initial symptoms of sensory neuropathy and recognised before the symptoms of Sjögren's syndrome. For this reason, a neurologist is often involved in the diagnosis of the concurrent form of the conditions, approximately 3-5 years after the initial diagnosis.

Patients will typically notice signs of changes in voluntary muscle movement and an abnormal gait at first, which are characteristic of sensory neuropathy. Some time afterwards, other symptoms linked to Sjögren's syndrome present, such as dry mouth and dry eyes.

For patients with Sjögren's syndrome-related sensory neuropathy, the disturbances to the sensory system are usually unilateral and asymmetric. The limbs are affected to the greatest extent, particularly the arms, but the trunk and face may also be involved.

Most individuals with sensory neuropathy and Sjögren's syndrome are elderly, with the mean age of onset at 64.9 years.

Pathological Association

The high prevalence of Sjögren's syndrome-associated sensory neuropathy suggests a link in the pathology of the conditions. Some medical researchers have indicated that Sjögren's syndrome may, in fact, be involved with causing sensory neuronopathy.

While only 21% of patients with both conditions had antibodies for Sjögren's syndrome at the initial consultation, 43% developed positive serology tests over the following seven years. These findings alone show the need to consider the involvement of the syndrome during the diagnostic process of neurological disorders, such as sensory neuronopathy.

Other Associated Diseases

Sjögren's syndrome is not the only health condition linked to sensory neuronopathy and may bot be the underlying cause of the condition for all patients that exhibit signs of the syndrome.

For this reason, it is important to consider all possible causes for the condition and to evaluate the individual's overall health status. This involves screening for:

- Diabetes mellitus
- Vitamin B12 deficiency
- Monoclonal gammopathy

Other characteristic points may also have a role to play, including chronic overconsumption of alcohol, positive HIV, amyloidosis and paraneoplastic syndromes.

References

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- http://neuromuscular.wustl.edu/antibody/sneuron.html
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Further Reading

- Sensory Neuronopathy - Sensory Ganglionopathy
- Neuronopathy and neuropathy: What's the difference?

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