

## **Electrostimulation of the Nervous System for Patients with Demyelinating and Degenerative Diseases of the Nervous System and Vascular Diseases of the Extremities**

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### **Key Words**

- Dorsal column stimulation
  - Demyelinating disease
  - Multiple sclerosis
  - Vascular disease
  - Spinocerebellar ataxia
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### **Abstract**

The results of electrostimulation of the spinal cord for symptoms other than that of pain are recorded in this publication. 50% of patients with multiple sclerosis, primary lateral sclerosis and hereditary spinocerebellar disorders were observed to have enduring favourable changes in neurological function during the 15 to 27 months they have been followed. The patients who were the least severely disabled had the greatest amount of increased function and were benefitted the most by the stimulation. Those who had the fewest neurological pathways affected make the most rapid progress. For example, the patient with only an ataxic or spastic gait was observed to improve faster than the patient with an ataxic and a spastic gait. The long-term effect of electrostimulation of the spinal cord on patients with these diseases is unknown at the present time. The purpose of the stimulation is to increase neurological function so that the patient can live a better life style. It is not thought that the electrical current is responsible for a 'cure' of the basic disease process. Electrostimulation of the posterior spinal roots and spinal cord, while not new, has not been used extensively for the treatment of patients with arterial disease. The patients who have responded the most dramatically to electrostimulation are those with vasospastic disorders. A larger percentage of patients showed a greater response to implanted stimulation than to transcutaneous stimulation. Electrostimulation of the nervous system is not designed to replace Standard therapeutic measures of treatment of patients with vascular disease but to supplement them.