Multiple Sclerosis and MuSmate
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Introduction

Multiple Sclerosis is an autoimmune disease that causes damage to the central nervous system. The myelin sheath is an outer layer of a neuron that acts as an insulator. In MS, the inflammation of the myelin sheath causes the body’s own immune system to attack it. Symptoms of Multiple Sclerosis include: loss of balance, muscle spasms, loss of feeling, and harsh pains.  These symptoms, or episodes, can occur at any time and tend to worsen as more episodes occur.

The MuSmate was designed by Ken Armitage whose wife couldn’t walk more than 60 meters at a time. This device allowed his wife to walk down the street to the store to get some tea. The MuSmate consists of a shoe harness, a chest harness, and the elastic bands that allow the user to walk.

Research

A clinical trial was conducted before the public release of this product. In this assessment sixteen people who frequently visited the local MS therapy center. Each individual was able to walk eleven yards with or without a walking stick as an aid. The patients were timed walking this distance with and without the new MuSmate Walking Aid. The average walking speed of the group over the 11 yards without the MuSmate was 0.98 miles per hour. With the MuSmate the average speed increased 0.45 miles per hour. That’s almost a 46% increase in speed.

The Product

The MuSmate can be used on one and two legs. This helps relieve the patient of their crutches or canes. It also helps keep muscle tissue in use and active. The elastic tension of the MuSmate can be strengthened or weakened with ease.

The MuSmate is remarkably inexpensive. It only costs 110 Euro (150.8 USD) for one leg and for both legs it costs 190 Euro (256 USD). There are also replacement parts and full sets that can be purchased on their webpage ranging from 10 Euro to the price of the product itself.

Advantages/Disadvantages

Advantages:
- Low Cost
- Easy to use
- Lightweight
- Comfortable
- Helps maintain healthy leg muscle tissue
- Comes in many colors!

Disadvantages:
- Only for specific patients
- Not a cure for Multiple Sclerosis
- Limited leg movement

Work Cited: