# **Multiple Sclerosis and its Types: A Short Communication**

Gowthami Bainaboina\*

Department of Pharmaceutics, Chalapathi Institute of Pharmaceutical Sciences, Guntur, India

#### **Corresponding Author\***

Gowthami Bainaboina

Department of Pharmaceutics,

Chalapathi Institute of Pharmaceutical Sciences,

AP, India

E-mail: gowthamibainaboina@gmail.com

Tel: 8500024898

Copyright: 2021 Bainaboina G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 09 June 2021; Accepted 19 June 2021; Published 26 June 2021

## Introduction

Multiple sclerosis is a chronic disease which effects the central nervous system, especially the brain, spinal cord, and optic nerves. This can lead to many symptoms in the body.

Scientists do not know exactly what causes MS, but they believe it is an autoimmune disorder that affects the central nervous system (CNS). When a person has an autoimmune disease, the immune system attacks healthy tissue in the body, just as it might attack a virus or bacteria.

In the case of MS, the immune system attacks the myelin sheath that surrounds and protects the nerve fibers, which causes inflammation. Myelin also helps the nerves conduct electrical signals quickly and efficiently.

Multiple sclerosis means "scar tissue in multiple areas." When the myelin

sheath disappears or sustains damage in multiple areas, it leaves a scar, or sclerosis. Experts also call these areas plaques or lesions.

#### They mainly affect:

- The brain stem
- The cerebellum, which coordinates movement and controls balance
- The spinal cord
- The optic nerves
- · White matter in some regions of the brain

As more lesions develop, nerve fibers can break or may get damaged. As a result, the electrical impulses from the brain cannot not flow smoothly to the target nerve. This means that the body cannot carry out certain functions.

## Types of MS

There are four different types of MS:

Clinically isolated syndrome (CIS): It is a single, first episode, with symptoms lasting at least 24 hours. If another episode occurs at a future date, a doctor would diagnose relapse-remitting MS.

**Relapse-remitting MS (RRMS):** This is the most common form, affecting around 85% of people with MS. RRMS involves episodes of new or increasing symptoms, followed by periods of remission, during which symptoms go away partially or totally.

**Primary progressive MS (PPMS):** Symptoms worsen progressively, without early relapses or remissions. Some people may experience times of stability and periods when symptoms worsen and then get better. Around 15% of people with MS have PPMS.

**Secondary progressive MS (SPMS):** At first, people will experience episodes of relapse and remission, but then the disease will start to progress steadily.