Research and Recent Advancements on Multiple Sclerosis

Abstract

Multiple sclerosis (MS) is a chronic inflammatory disease of the central nervous system (CNS) of presumed autoimmune origin which develops in a genetic susceptible individual triggered by additional environmental factors. In this review we'll provide an update of basic pathogenic concepts. In addition, we'll discuss newly evolving concepts in MS pathogenesis like pathogenic heterogeneity, importance of axonal loss and therefore the role of CD8+ T lymphocytes in tissue injury.

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Introduction

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Symptoms of Multiple Sclerosis

It is an autoimmune disease principally affecting the central nervous system (brain and spinal cord) that cause nerve sheath demyelination followed by axon damage and consequently paralysis. On the other hand, in the young adults MS is a major important cause of disability of a neurological origin. In MS depression is the most observed psychiatric disorder. In MS Central and peripheral auditory disturbances are constantly appeared. On the other side, the typical optic neuritis is generally the presenting symptom of MS. Other symptoms associated with MS are sleep disorder, exhaustion, and pain interfering are among. MS symptoms depend on the specific nerve attack in the central nervous system and may lead finally to loss of sensitivity in sensation such as muscle weakness, weak reflexes, muscle spasm, difficult in move; miss-coordination and unbalance with others; problem in speech, optic problem, feeling tired, acute or chronic pain, and bladder and bowel difficulties. Depression is always associated with MS due to variable mood of MS patients. Thinking and emotional problems are also observed in MS. There are many factors increasing MS disease symptoms e.g. viral infections such as cold, influenza, and gastrointestinal problems. Females are more sensitive to MS than males especially during 3 months after baby birth. Other factors do not effect on MS to be found such as vaccination, breast feeding, and physical status. The expanded disability status scale is a well-known test of MS-associated disability, in addition to, other clinical investigations. Stress also is a main cause of MS.