UNDERSTANDING **MULTIPLE SCLEROSIS**

Body of nerve cell

Normal Nerve Cell

What Is Multiple Sclerosis?

Multiple sclerosis (MS) is an autoimmune disease, which means that the body's immune system attacks its own tissues. In MS, the immune system attacks the protective insulating layer known as the myelin sheath that surrounds the extensions of nerve cells in the brain and spinal cord. Myelin acts like an insulation on a wire. It allows the body to transmit "electrical signals" rapidly from one nerve cell to another and over a long distance. Over time, as myelin is replaced with scar tissue (sclerosis), the brain's ability to transmit signals to the rest of the body is disrupted. The result may be a decrease or a complete loss of control of many neurological functions.

Symptoms & Signs

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People with MS experience attacks of symptoms that can last from a few days to several
months. These attacks are followed by periods of remission, or symptom-free phases.
Early symptoms of MS may include:
• Feelings of tingling, burning, numbness, or pain.
• Double vision, blurry vision, or blindness.
• Weakness, dizziness, and fatigue.
During remission the patient may feel better, but there may be lingering stiffness,
weakness, numbness, and vision problems. However, the disabilities (symptoms) may be
more severe during relapse and include:
• Muscle spasms.
• Changes in bladder and bowel control.
• Slurred speech.
• Blindness.
• Sexual dysfunction.

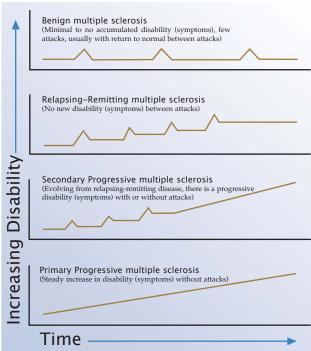
- Sexual dysfunction.
- Paralysis.Confusion and forgetfulness.

Most people with MS do not develop the most severe symptoms, and regain enough function to continue to lead a normal life.

Prevention & Management

Currently there is no cure or prevention for MS. However, several drugs exist that can help manage symptoms and reduce the frequency of attacks. Additional therapies for more prime Currently there is no cure or prevention for MS. However, several drugs exi help manage symptoms and reduce the frequency of attacks. Additional the managing symptoms include: • Avoidance of heat– some sufferers may experience temporary worsening of symptoms with heat. • Practice of healthy lifestyle to cope with fatigue and potential stress: • Getting enough rest. • Exercising regularly. • Eating a healthy, well-balanced diet with plenty of fiber. • Practicing relaxation techniques.

Types of Multiple Sclerosis



Enlarged View of Nerve Fiber

Axon part of nerve cell Myelin sheath of nerve cell

Nerve fiber from withir Central Nervous System

Normal myelin sheath around axon

Immune cells are involved in the destructive process of the myelin sheath

Myelin sheath damaged from multiple sclerosis

Exposed fiber

Nerve Cell Affected by MS