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

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.
- Muscle spasms.
- Changes in bladder and bowel control.
- Slurred speech.
- Blindness.
- 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 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

- **Benign multiple sclerosis** (Minimal to no accumulated disability (symptoms), few attacks, usually with return to normal between attacks)
- **Relapsing-Remitting multiple sclerosis** (No new disability (symptoms) between attacks)
- **Secondary Progressive multiple sclerosis** (Evolving from relapsing-remitting disease, there is a progressive disability (symptoms) with or without attacks)
- **Primary Progressive multiple sclerosis** (Steady increase in disability (symptoms) without attacks)