Overview of Multiple Sclerosis

Multiple sclerosis (MS) is a disease of the nervous system. It affects the brain, eyes and spinal cord with each person having different symptoms and a different course. Each person’s symptoms depend on which parts of the nervous system are involved.

The name “sclerosis” means hardening in Greek. Many diseases have “sclerosis” in their name, for example atherosclerosis or hardening of the arteries (athero means artery). In MS, sclerosis refers to multiple areas of hardening in the brain that are caused by scars from the disease.

These scars occur when the body attacks the brain. This attack is carried out by the immune system. When cells from the immune system rush into an area it is called inflammation. The inflammation causes damage to the brain and causes symptoms that vary depending on what area of the brain is being attacked. As the inflammation subsides, the immune cells leave, decreasing inflammation and improving symptoms. However, damage to the brain remains. Though the body attempts to repair this damage, the repair may not be complete and symptoms may persist. This may cause longstanding or permanent symptoms.

In MS, attacks may recur many times. This can lead to the accumulation of more damage, leading to disability. The symptoms that occur vary depending on what parts of the brain, spinal cord or eyes are involved, and how many areas sustain damage. Likewise, the time course varies depending on how often attacks occur. The symptoms and disability vary greatly between patients, ranging from some patients who never get symptoms to others with more severe disability.

Fortunately, much has been learned about multiple sclerosis and the role of the immune system. This has led to treatments that are able to decrease the number of attacks and lessen disability.

Other pages in this section of our website will teach you more about the disease.