**Definition:** Multiple sclerosis, or MS, is an autoimmune disorder of the nervous system characterized by progressive demyelination of the CNS due to immune function. Demyelination refers to the destruction of myelin, a substance composed of fat and protein that surrounds certain nerve fibers in the brain and spinal cord. Loss of myelin impairs the transmission of impulses along the nerve.

*It mainly affects young adults between the ages of 20 and 40, and affects women more than men.*

**Classification of MS:**
- Early Progressive MS
- Secondary Progressive MS
- Progressive – Recurrent MS

**Pathophysiology:**
Exacerbation of the disease and its recovery are among the features of MS. During the exacerbation of the disease, new symptoms appear and the previous symptoms become more acute. As the disease improves partially, the symptoms decrease or disappear. Relapse may be accompanied by periods of physical and mental stress.

**Clinical Symptoms:**
The signs and symptoms of MS are many and varied and indicate the location of the lesion (plaque) or a combination of lesions. Early symptoms include fatigue, depression, weakness, numbness, difficulty in coordinating, and imbalance and pain, blurred vision, diplopia, blind spots in the field of vision (scotoma) and complete blindness, paresthesia, sexual problems, disorders in Intestine and bladder, cognitive changes (memory loss and decreased concentration)

**Diagnostic evaluation:** The diagnosis of MS is based on the presence of multiple plaques in the central nervous system, which are detected by MRI.

**Goals of treatment:**
There is no cure for MS. All individual programs are just to relieve the patient's symptoms and continue to support him/ her, especially in people with cognitive changes that require to be more organized and supported.

**Treatment:**
MS drugs are divided into injectable and oral: These drugs reduce the frequency of relapses, as well as the duration of periods of disease exacerbation and the number and size of plaques visible on MRI. Interferon beta-1a (Rabif) -interferon beta-1b (betaferon) -methylprednisolone-mito xanthonase are some of the drugs used in this disease.

**Nursing measures:**
Nursing measures include training the patient on how to cope with the physiological, social, and psychological problems caused by chronic illness. Having a positive and hopeful attitude can be beneficial for the patient’s physical and mental adjustment. Assessing the patient's mobility and balance determine the risk of falls in the patient. Avoid hot weather, effective treatment of depression and anemia, physiotherapy program, rehabilitation and educational issues along with mental support of the patient, promoting physical activity, walking and deep breathing exercises, reducing spasms and contractors by using spa bags, swimming and using stationary bikes are helpful for these patients.

The patient is advised to use short rest periods, preferably lying down, alternately, and have activity and rest courses.

Severe fatigue can contribute to exacerbate factors. The patient is also encouraged to contact the National Association of MS Patients and benefit from their services.

If you have any questions or ambiguities, call the following number:

023-33437821, Internal ward of Kosar Hospital