

OXIDATIVE STRESS AND SERUM MINERAL VALUES IN MULTIPLE SCLEROSIS PATIENTS WITH RESTLESS LEGS SYNDROME

SUMMARY

Multiple sclerosis (MS) is an autoimmune disease of the central nervous system (CNS) characterized by inflammation, demyelination and axon damage, as well as focal and multifocal plaques in which the cortex, white matter and deep gray matter can be retained. It is the most common inflammatory demyelinating disease of CNS and often occurs in young adults. Some of the MS, which is a chronic disease, is accompanied by attacks, while some of it is progressive.

A detailed history, physical examination, as well as laboratory and imaging methods are used to determine the presence and extent of the effect in multiple sclerosis. CNS damage in MS patients, which were estimated to be due to all the signs and symptoms, although frequently in the extremities, loss of strength, sensory symptoms, ataxia, bladder problems, fatigue, diplopia, visual symptoms such as blurred vision, dysarthria, memory-concentration-attention disorder, such as cognitive symptoms are observed.

The clinical types of MS are defined under three main headings as clinically isolated syndrome (CIS), relapsing (with attacks) MS and progressive (worsening) MS. CIS is defined as the first neurological picture that occurs with isolated optic neuropathy, medulla spinalis involvement, brainstem syndrome, relatively less often hemispheric involvement, giving clinical signs. MS with attacks (RRMS) is a type of MS in which acute attacks are observed and no worsening of the disease dec observed between attacks. Progressive MS is a type of clinical course in which disability is added throughout the course of the disease that continues with attacks and improvements.

In the studies conducted, it has been shown that multiple immune mechanisms are involved in the process of MS formation, axonal loss can occur as well as myelin loss, and degeneration and repair mechanisms are an active process in which simultaneous roles are played.

Restless legs syndrome (RLS), Willis-Ekbom disease, worsening in the evening and at night, the urge to move the legs while in a resting state with the need arise or sensory-motor, chronic, progressive movement disorder. Looking at the literature, HBS was first referred to as “Restless Legs Syndrome” in a review article prepared with a series of 175 cases. 17. It was observed by Sir Thomas Willis in the XIX century, but the definition of the syndrome was made by Ekbom in 1945 with clinical signs of ‘Restless Legs’.

Recently, free radicals and antioxidants, which are one of the most studied topics in recent years, are becoming more important. Under normal conditions, the body's metabolism is healthy, while antioxidants and free radicals are in balance. But when this balance changes in favor of free radicals, a predisposition to diseases caused by oxidative stress is observed.

Keywords: relapsing remitting multiple sclerosis, restless legs syndrome, oxidative stress, zinc, chlorine, sodium, potassium