

# MULTIPLE SCLEROSIS – GUIDELINES FOR TREATMENT AND REHABILITATION

## DEFINITION

Multiple sclerosis (MS) is an autoimmune disorder with a suspected genetic predisposition, which in combination with certain environmental factors, leads to an autoimmune reaction, resulting in inflammatory demyelination in the central nervous system (CNS). The conduct of impulses in the CNS is damaged, leading to a neurological deficit.

## CAUSES

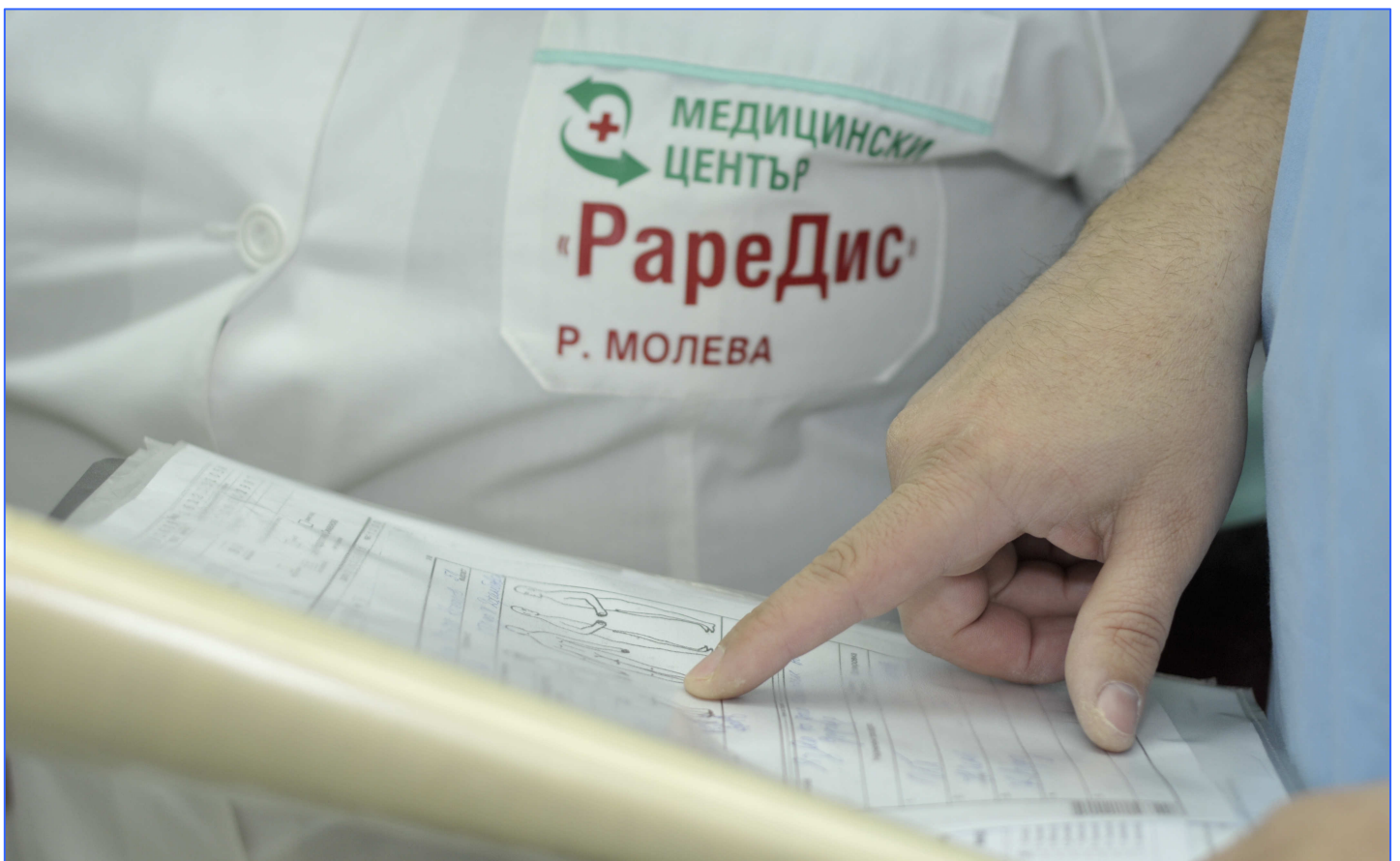
Activation mainly of T-lymphocytes and macrophages, inflammatory demyelination.

## ESTABLISHED THERAPY

The therapy varies according to the form of the disease and whether MS is in relapse or remission.

The relapse treatment is to restore as far as possible the neurological symptoms which have occurred at this time and, of course, a large part of efforts is aimed at the rehabilitation process of the patient and his family.

There are several therapeutic approaches that are currently in use. Their indications are strictly specified. Depending on the format of the course of MS, beta-interferon  $\beta$ -1a and  $\beta$ -1b, glatiramer acetate and the chemotherapeutic mitoxantrone are all used. Recently, a sphingosine 1-phosphate receptor modulator (SIPR), the first drug for per oral use with a unique mechanism of action has been approved. It acts as a functional antagonist of the receptor and prevents the release of certain subpopulations of lymphocytes from the lymph nodes, thereby reducing the autoreactive lymphocytes in the CNS.



## **REHABILITATION**

The multidisciplinary team is of key role in the treatment of MS patients and the response to the psychological problems and social exclusion is of great importance the successful rehabilitation.

The neurorehabilitation stands on one of the top positions in the MS therapy. It aims to reduce the cognitive deficit, its impact on everyday life and to encourage the patient to successfully deal with the psychological effects of the disease – mood changes, depression and anxiety, reducing the stress and increasing the self-determination to manage the condition. It is only possible and efficient when an experienced psychologist is standing behind each patient and his family and competently consulting them. The comparative analyses show that patients receiving such therapy have better results when testing the memory functions and mobility.

MS is a disease that affects people of working age and their visual rehabilitation is a significant problem. Many patients lose their jobs, others retire due to illness. Training of these patients to use their residual visual capacity and appropriate professional prequalification would also help them reevaluating their everyday lives. That's why the inclusion of specialized centres for visual rehabilitation and professional prequalification is not only therapeutic, but also a social commitment of the multidisciplinary team.

In most of the time patient recovers from the relapsing effects and the medical rehabilitation is a leading tool in this process. Various factors that can be applied and rehabilitation programme is strictly individualized according to the personal functional deficit. Few centres work efficiently and individually with these patients, because the needed time for daily procedures is about 3-4 hours and under the current healthcare regulations is very unprofitable and unattractive to the medical institutions in Bulgaria. A possible solution is to create specialized centres for rehabilitation of people with rare diseases, within the university hospitals with an adequate funding provided by the National Health Insurance Fund.

## **REFERENCES**

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***To get further information on MS, as well as on the opportunities for medical rehabilitation and patients' training, please contact Medical Centre "RareDis".***

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