## Multiple Scierosis Center

## launched at Hadassah

A treatment developed at Hadassah, still in the research stage, has been tested on 25 multiple sclerosis and ALS (Lou Gehrig's Disease) patients. Professor Dmitrius Karussis, a senior neurologist at Hadassah and the director of the new Multiple Sclerosis Center, working in collaboration with the University of Athens, and Professor Shimon Slavin, the former director of the Department of Bone Marrow Transplantation (BMT) and the BMT Laboratory at Hadassah, discovered that it is possible to remove stem cells from a patient's bone marrow, to isolate these cells under special conditions and to generate over 50 million cells within two months.

As part of this process, mesenchymal cells (mature stem cells) are extracted from the patient and transplanted by a lumbar injection in the spinal column (into the spinal fluid of the central nervous system), with each patient serving as his/her own donor. The transplanted cells are marked to track and verify that they reach the intended destination in the patient's body.

There are 3,000-4,000 multiple sclerosis patients in Israel and about a third of them are treated at Hadassah. Many patients also come to Hadassah from around the world. Multiple Sclerosis is an autoimmune inflammatory disease of the central nervous system in which the immune system attacks the myelin insulation of neurons. As a result, the nervous system is damaged at a number of levels, leading to functional deficiencies in a number of neurological systems: sensory, motor, balance, sphincteral, and vision. "The onset of the disease is usually between the ages of 20 to 40, and can continue for 30 or more years. Thus, the center we opened is important for treating the patient over the course of years," said Professor Tamir Ben-Hur, the director of the Department of Neurology at Hadassah.

The new Multiple Sclerosis Center at Hadassah provides innovative treatments and is operated by neurologists who are world leaders in research, as well as rehabilitation physicians and advisors in the fields of urology, ophthalmology and social work.

For more information, contact the department at 212-303-8207 or HadMedOrg@hadassah.org.