

# Multiple Sclerosis

Leslie Agius BPharm

President, Multiple Sclerosis Society of Malta

Email: [lagus@onvol.net](mailto:lagus@onvol.net)

**Multiple Sclerosis (MS) is a condition about which one does not very often hear in Malta. This is understandable due to the low incidence of the disease in our islands, an incidence which is significantly lower than that of nearby Sicilian towns such as Enna, Agrigento, Acireale and Caltanissetta and, indeed, of the rest of Europe. Yet MS is the most common non-traumatic neurological disease in young adults in the world and afflicts some 2.5 million persons worldwide.**

Until the advent of Magnetic Resonance Imaging (MRI), diagnosis of MS was very difficult and several cases of misdiagnosis are recorded. In a study of MS in Malta carried out in 1978 by Drs Dean and Elian, 14 persons with MS were identified. A second survey in 1999 by the same doctors, in conjunction with Maltese consultant neurologists, showed a significant increase but the prevalence in Malta remains very low. According to the records of the Multiple Sclerosis Society of Malta the current number of confirmed cases hovers around the figure of 100

As yet there is neither a cure for, nor a certainty as to the causes of MS which is an inflammatory demyelinating condition in which the myelin is attacked by the body's immune system itself. Myelin, the fatty substance insulating the nerve fibres, ensures that messages from the brain are transmitted speedily and efficiently to the rest of the body. In MS, the loss of myelin causes a disruption in the ability of nerves to conduct electrical impulses to and from the brain with the result that the different parts of the body fail to react to stimuli from the brain. The sites where myelin is lost appear as hardened scar areas (plaques) and they appear at different times and in different areas of the brain and spinal cord. Researchers do not know what triggers the immune system to attack myelin; one theory is that a dormant virus in the body (e.g. measles or herpes) may act as a trigger by activating the white blood cells, which

enter the brain by rendering vulnerable the brain's defence mechanisms. Once inside the brain these cells activate other elements of the immune system in such a way that they attack and destroy myelin. The most common symptoms of MS are blurred vision, numbness or tingling of the limbs, fatigue and problems with coordination. There are four types of MS: relapsing – remitting (25%); secondary (20%); progressive (approx. 40%) and primary progressive (15%). The course of MS is unpredictable. Some people are minimally affected while others have rapid progress to total disability, with most people fitting between the two extremes.

There is considerable research all over the world about causes of and cures for MS. In their report following the 1999 survey, Dean and Elian suggested that the reason for the low prevalence of MS in Malta could be explained by environmental factors and, more importantly, by a different genetic make up of the Maltese people to the rest of Europe. Indeed, Dean and Elian suggest that Malta offers a unique opportunity for researchers to ascertain the relative importance of genetic and environmental factors responsible for MS.

Researchers come up with possible cures on a regular basis; goat serum, statins and cannabis have been indicated in recent months. More recently a major milestone was reached through the identification of 80 genes involved in MS. This is a significant step forward in building a

complete inventory of genes involved in MS. The completion in 2006 of the MS Whole Genome Scan will lead to a comprehensive catalogue of potential MS drug targets, thus providing the basis for the future development of innovative MS therapies. The understanding of the disease's genetics will enhance the possibility of identifying proteins that can be used either as targets for drug development or directly as therapeutics. In addition, the knowledge of genetics in MS provides a basis for the better designing of safer and more effective drugs and for enabling physicians to address unmet needs and potentially match treatments to individual patients.

In Malta, the Multiple Sclerosis Society was set up in October 1997 at a meeting at St. Philip's hospital. The Society organizes monthly meetings for its members and their families and organizes a number of social events so that members have the chance to interact. Several members are wheelchair bound and have very limited opportunities for socializing. The Society provides physiotherapy services held at home at a subsidized rate; this service has proved very useful and there is increasing demand for it. Equally successful and popular are the group psychotherapy sessions held at the Hospice Movement, which has become the Society's regular meeting place. Ideally, the Society wishes to offer psychotherapy on an individual basis but its limited funds preclude it from embarking on this step as yet. The Society constantly offers advice to members, visits members who are house-bound, and acts as a lobby with government. It is very active on the international front with a seat on the Executive Committee of the MS International Federation and a very active participation in the activities of the European MS Platform (EMSP). The 2003 EMSP annual congress was held in Malta and the Maltese association is regularly invited to participate in seminars and workshops of the Platform. Last year EMSP provided the services of a Polish volunteer for a whole year to instruct members of the society on how to use computers.

Multiple Sclerosis Society Malta  
PO Box 209  
Valletta CMR 01, Malta  
Email: [lagus@onvol.net](mailto:lagus@onvol.net)  
Tel: +356 2132 0612