

## **Multiple Sclerosis**

Multiple Sclerosis (MS) is a chronic or recurrent progressive disease of the central nervous system. Typical onset is between the ages of 20-50 years. The cause of MS in unknown but it may result from a combination of genetic, environmental and immunologic factors.

- First degree relatives of someone with MS face a small risk of developing MS themselves.
- MS is more frequent in areas that are distant from the equator.
- It has been speculated that a viral infection initiates the MS process, followed by an autoimmune responsein a genetically predisposed host, but this is not clear.

The pathological condition in MS is nerve demyelination (*loss of the protective covering around a nerve*). Symptoms develop as nerve conduction slows and then fails completely. The typical attack is relatively sudden in onset, persists for 3 to 12 weeks then clears. Psychiatric and cognitive disturbances are common in MS. Up to 20% of patients experience a major depression, which typically responds to traditional drug therapy. Memory and attention deficits also occur.

The following clinical presentations are very suggestive of MS:

- Optic neuritis (inflammation of the optic nerve): frequently the first manifestation of MS which can be diagnosed years later.
- Internuclear Ophthalmoplegia: weakness of the eye muscles.
- **Lhermitte's sign:** an electric or shock-like sensation going down the arms, back, or lower trunk when the neck is flexed.

Common tests done in evaluation of MS include: brain MRI, spinal tap to study the spinal fluid proteins and immunoglobins, and measurement of sensory nerve conduction (*called evoked response*). Classically, MS has a relapsing-remitting pattern. There are periods of remissions and exacerbations that occur at unpredictable intervals over a period of several years with initial episodes tending to resolve completely. It is the accumulated burden of multiple attacks that causes persistent symptoms. There is no cure for MS. Treatment is directed against the underlying disease process and toward alleviating symptoms. Common medications are steroids, interferon, and glaterimer acetate. Drugs to control bladder function, spasticity, and depression may be necessary. The course of the disease is remarkably variable, but overall, MS is a progressive disorder. The median time frame from onset to difficulty with ambulation is about 15 years. 15% have primary progressive disease from the onset; 30-50% start with relapsing-remitting pattern and then enter a secondarily progressive phase. The remaining 15% have "benign multiple sclerosis" which is slowly progressive with no disability 20 years after onset. Our underwriting guidelines absent other impairments are as follows:

Postpone while under treatment for an acute exacerbation or while under treatment with immune suppression. Suspected MS but with no test results to support the diagnosis (no current evidence of disease and no treatment recommended)

- Table C if within 2 years of the attack
- Table B if 3-4 years from the attack
- Non-rated after 4 years

Definite MS, at least 2 clinical events and/or with test results to support the diagnosis, OR anyone for which treatment has been recommended AND has minimal impairment, ambulatory, independent, and stable.

• Table G if within 2 years of the last attack

- Table E if 3-5 years form last attack
- Table C if 6-10 years from last attack
- Non-rated after 10 years last attack

If the degree of severity is more than minimal the rating will increase and decline is likely on the most severe cases. Progressive neurological decline in less than a decade would be declined. To get an idea of how client with a history of multiple sclerosis would be viewed in the underwriting process, feel free to use the *Ask "Rx" pert underwriter* on the reverse side for an informal quote.

1.Please list date of first diagnosis
2. Please indicate the number of episodes and date of last episode:
3. Is your client on any medications? yes, please give details
4. Please note current neurologic status and/or symptoms. normal minimal residual impairment (please specify)
moderate residual impairment (please specify)
severe residual impairment (please specify)
5. Please provide all MRI brain scan reports:
6. Has your client smoked cigarettes or any other tobacco products in the last 5 years?  Yes
7. Does your client have any other major health problems (ex: heart disease, etc.)? yes, please give details

