

# Multiple Sclerosis and Therapeutic Riding

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Multiple Sclerosis (MS) is an illness diagnosed in over 350,000 persons in the U.S. today. Even now, much is to be learned about this still mysterious neurological illness. In brief, what is known about MS is that it is signified by more than one (multiple) areas of inflammation and scarring of the myelin in the brain and spinal cord. Myelin is the tissue that covers and protects our nerve fibers. When this occurs, nerve "communication" is disrupted. Thus, a person with MS experiences varying degrees of neurological impairment depending on the location and extent of the scarring.

The cause of multiple sclerosis is not yet known. However, it is increasingly thought that a virus may provoke the illness, but researchers still question this idea. Genes and an imbalance in the immune system may also influence an individual to the illness.

There is no one group of people who "get" MS. Considered a lifelong disorder, trends show that MS often strikes between the ages of 30 and 50, and mostly women. MS is not considered a fatal, contagious or directly hereditary illness, although a susceptibility to MS may be inherited.

MS is often characterized by a pattern of exacerbations and remissions. Some people experience only very mild symptoms with difficult, but non-disabling symptoms. More common are severe attacks followed by periods of recovery. Still others progress to a serious stage in which they may need a wheelchair. Symptoms include fatigue, which can be overwhelming though a person may appear well. In addition, loss of coordination, muscle weakness, spasticity, numbness, slurred speech, and visual difficulties often occur. Most acute symptoms, but least occurring, may be paralysis, muscle cramps, bladder or bowel problems and sexual dysfunction.

*Information courtesy of the MS Foundation, [www.icanect.net/msf](http://www.icanect.net/msf)*

## **Medical Considerations for Therapeutic Riding**

*By Liz Baker, PT, Medical Committee Chairman*

Multiple Sclerosis is one of a growing number of diseases that has a dual identity in therapeutic riding: it can be both an indication for riding, and a precaution or contraindication. This duality, an apparent contradiction, is created by the type of symptoms and problems caused by the disease; its signs and symptoms can be improved by therapeutic riding, worsened by riding, or even preclude riding altogether. In general, however, people with MS are often good candidates for riding, and this activity can help retain functional ability on and off the horse.

MS causes progressive destruction of myelin, that substance in the nervous system that facilitates the back and forth transmission of nerve impulses. Its symptoms are quite varied since the demyelination occurs in a sporadic pattern. As with a computer virus, problems are caused without necessarily a specific pattern, and it takes time to actually diagnose the disease. The rider's symptoms and function are dependent on where the demyelination has occurred, how severe it is, whether the nervous system has managed to partially re-myelinate the nerve, and how well nerve impulses are transmitted. The symptoms may be transient, or may last for hours or weeks; they can be bizarre and vary from day to day.

In most people, visual problems and tingling sensations (paresthesias) are the first indications of a problem. Other typical changes include:

- ocular disturbances: double vision, blurred vision, and others;
- muscle problems: weakness, paralysis, spasticity, tremors, lack of coordination;
- urinary disturbances: incontinence, frequency, urgency, and frequent infections;

- emotional lability: mood swings, irritability, euphoria, depression.

Other effects include abnormal sensations, poorly articulated speech, and difficulty swallowing.

A prime characteristic of MS is the occurrence of "exacerbations", i.e., acute episodes wherein the disease is very active and worsening; and "remissions", when the disease is fairly quiet and no increase in symptoms is occurring. The person with MS also is very subject to fatigue, stress, and heat; these all cause temporary worsening of symptoms.

Therapeutic horseback riding is usually a very appropriate activity for a person with MS who is either able to stand and/or walk, or a person who has at least some degree of sitting balance. Riding can help maintain trunk, pelvic and hip motion and flexibility that is compromised by inactivity and spasticity; it can maintain or improve sitting balance and coordinated movement. It may not be appropriate for the person with no ability to sit without support. It is also not appropriate if it clearly worsens any of the rider's symptoms, such as leg spasticity or tremors, and causes a decrease in the ability to function off the horse. Riding is more of a precaution if the symptoms can be improved by a carefully chosen horse and program. It is most clearly contraindicated during an acute exacerbation of MS; the rider can usually inform the operating center that he will be unable to ride if this is the case. During an exacerbation, treatment usually includes bedrest, prevention of fatigue, comfort measures such as massage, and various medications; riding is best deferred until the rider is back to baseline and their function has stabilized. However, after an acute exacerbation, riding can be an important part of a rehabilitation program; once the exacerbation is over, if more function has been lost, riding can help to regain it.

Generally speaking, most potential riders with MS should have a physical therapy screening or evaluation by the operating center therapist prior to their acceptance into the program. The PT should also provide direct treatment, if needed, or consultation; in particular, a re-evaluation after an acute exacerbation will be needed, even if the rider has ridden at the center for some time. The therapist should assess functional ability off and on the horse, and with the therapeutic riding instructor, recommend an appropriate horse and program. A hippotherapy program may be initially advisable to maximize the rider's mobility and balance; or, a team approach by the PT and the instructor can be used, particularly if the rider retains a higher level of function off the horse, such as independent walking ability. The rider can often provide valuable insight as to how to best transfer on and off the horse. During the session, the instructor and/or therapist should include a careful warm-up focused on relaxing the rider's spastic leg muscles, and allowing time for the rider to begin to move with the horse at the pelvis and hips--the "following seat". Riding skills can then be introduced as desired. Avoid excessively stressing or fatiguing the rider, who is easily fatigued to begin with. Keep in mind that the rider with MS has a chronic disease with which he will live for years. Laying the groundwork of good posture, relaxation and sitting balance on the horse, is a way of keeping function off the horse. The instructor and therapist must recognize that the rider may not know this, but will appreciate learning it, as he will want to remain as independent as possible, for as long as possible.

The rider with MS is likely to be somewhat more fatigued than others after the ride, even if he does not appear aware of this. Immediately walking or driving a car away after the ride can negate the beneficial effects of the session. Instead, make it a habit to have the rider transfer from the horse into a comfortable chair at the end of the ride. The rider should sit for 10-20 minutes before leaving the center. If the weather is chilly, provide a blanket to the rider as he rests. This helps retain body heat, energy and the muscle relaxation that has been achieved in the session. The instructor or therapist should explain this to the rider beforehand, and make it clear that it is a normal part of that rider's session, further enhancing the beneficial effects of the horse.

In Engel's "Therapeutic Riding Programs: Instruction and Rehabilitation" (1992), other helpful hints are provided, such as: (paraphrased, pp. 231-232)

- Encourage symmetrical, balanced posture
- Provide the rider with support as needed through sidehelpers
- Ask the rider how he is doing today, and plan accordingly
- Watch for skin irritation or pressure sores due to poor sensation and circulation in areas which contact the horse/saddle; use seatsavers or similar pads as needed
- Keep riding stimulating to the rider's intellect, as most people with MS have normal intelligence and may develop higher level riding skills

Occasionally, a rider with MS may appear euphoric, or begin to lack good judgment where physical abilities are concerned. It is helpful for the instructor to establish clear, concrete short term goals, setting new objectives as old ones are reached. However, as noted, many riders with MS can develop good riding skills. Should riding become too fatiguing or difficult, therapeutic driving may be an appropriate alternative; driving can also be considered if the potential participant does not have sufficient sitting balance to make riding safe. Using backriding as a way of making riding possible for the person with MS and poor sitting balance is probably inadvisable, unless used as a therapy technique on a short-term basis, as outlined in the NARHA Backriding Standards.

Generally speaking, centers will find that working with riders with MS is a very rewarding and productive experience. In return, these riders are often great advocates of therapeutic riding, sincerely enjoying and appreciating our efforts, recognizing the horse itself as a caring therapist and best friend.