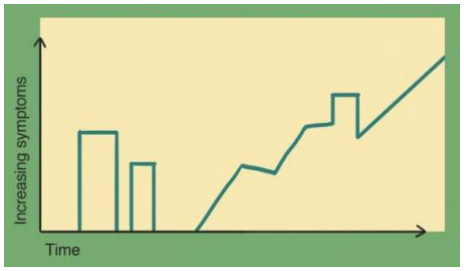
November 2022 Newsletter

When MS Begins Later in Life

MS doesn't discriminate when it comes to age. According to the National MS Society, most people are diagnosed between the ages of 20 and 50 years, however it can present outside of this age bracket. In rare cases, MS is diagnosed in childhood or later in life. When the onset of disease occurs at 50 years or older, it is called **late-onset MS** (LOMS).

Diagnosing MS can be difficult at any age but there are additional challenges as one gets older. There is evidence that LOMS is frequently misdiagnosed because its symptoms are often mistaken for signs of normal aging. A number of studies have looked at the symptoms and prevalence of LOMS. A recent review concluded approximately 5% of people with MS are diagnosed at ages above 50 years old, more often in woman than men. Authors state that more people with MS in this age bracket present with progressive forms of the disease and their first symptom is usually motor dysfunction. A 2014 study found LOMS occurs in 3.4% of people living with the disease, again, more often in women than men. Results show relapsing remitting and progressive MS are nearly equally common when the

disease starts later in life. A 2020 study compared early-onset MS (EOMS – onset before 18 years of age), adult-onset MS (AOMS – onset between 18 and 50 years of age) and LOMS. Data showed the key features of LOMS are motor dysfunction, sensory disturbances, and visual impairments. 25% of participants with LOMS transitioned from relapsing remitting MS to secondary progressive MS an average of 14 years after disease onset. Compared to individuals with EOMS and AOMS, those with LOMS had no relapses in the first two years and higher EDSS scores at disease onset.



There is evidence that MS progresses faster when it develops later in life. A 2016 study determined that people with LOMS reached an EDSS score of 6.0 significantly faster (6.5 years after disease onset, compared to 12.8 years for people with AOMS). Results showed the risk factors for a more aggressive disease course were being male and having spinal cord lesions at MS onset. On the other hand, LOMS isn't necessarily associated with a worse outcome. According to a 2006 study, even though participants with LOMS reached an EDSS score of 6.0 faster, they were much older when they reached that milestone (71 years old) compared to those with AOMS (58 years old). Advanced age may have been a confounding factor (discussed below). Investigators state that disease course (relapsing versus progressive) has a far greater implication for an individual's prognosis than a later age of onset.

LOMS and AOMS likely share the same causes, which are not yet fully understood. Scientists have determined that a variety of factors, or combination of factors, make an MS diagnosis more likely. For example, although MS is not a hereditary condition, people may inherit a susceptibility to developing it. Genetic risk factors, coupled with environmental factors like low vitamin D levels, smoking and obesity, increase the risk of developing the disease. Interestingly, researchers in Sweden compared the familial (hereditary) risk of EOMS and LOMS. They found no significant difference between the two. More research is needed to understand the exact causes of MS, how they work together and why some people develop the disease later than others.

It's important to note that normal aging can affect many aspects of living with MS. There is evidence that age affects a person's ability to recover from MS relapses (which is a critical factor in disease progression). This could be due to a complex process called immunosenescence, which is discussed in our July 2020 newsletter. In short, the immune system functions less effectively as a person gets older. Its repair capacity decreases and nerve degeneration often occurs, which can hasten the progression of MS over time. Another typical aspect of aging is the development of a chronic, low level of systemic inflammation (often referred to as inflammaging), which has a similar effect. People with MS often have other medical conditions and their incidence increases with age. Managing multiple health conditions poses a challenge to people with MS and their health care providers. Teasing out symptoms and determining which are due to MS and which are due to another health condition is often difficult. MS treatments may also interact with medications required for other illnesses. This has the potential to delay MS diagnosis, affect treatment and cause more rapid disease progression.

Treatment of LOMS includes the same approaches as AOMS, namely disease modifying therapies (DMTs), managing MS relapses and rehabilitation. Historically, MS clinical trials have had age restrictions that have limited the participation of older people with MS (resulting in missing important data). As a result, information about the efficacy and safety of MS DMTs in this population is limited. Research into the use of interferon β-1b medications (Betaseron, Extavia) has returned mixed results. A 2015 study showed these drugs do not significantly slow disease progression in people with MS over the age of 50. Subsequent research suggests they are an effective and well-tolerated treatment option for individuals with MS between the ages of 40 and 72. Research into the efficacy and safety of ocrelizumab (Ocrevus) in persons with progressive MS inclusive of people up to age 65 years is ongoing.

A prompt and accurate MS diagnosis is critically important at any age. Early treatment helps to prevent disease activity and the accumulation of disability. The distinctive features of LOMS should be taken into consideration when choosing a treatment plan, including existing comorbidities and any age-related symptoms. The available data regarding the effectiveness of DMTs in older people with MS remains sparse and further studies in this age

group are necessary. The core of ACP's mission is to facilitate research efforts into topics such as these, which have the potential to improve the health and quality of life for people living with MS throughout their lifetime.

READ MORE »

Want to learn more about aging with MS?
Revisit past newsletter articles on this important subject!


Aging Gracefully With MS


The Senior Moments of MS


Does MS Weaken With Age?


Is Menopause a Turning Point for Women with MS?


Too Old for MS Treatment?