Too Old for MS Treatment?

As people with MS get older, their MS symptoms are likely to change. The disease is often diagnosed when people are in their twenties and thirties and it typically follows a pattern, moving through different types or stages over the years. Everyone with MS is different. How quickly an individual’s disease progresses and the symptoms they experience won’t necessarily be the same as someone else’s. A recent study suggests the number of relapses a person with MS may experience decreases with age. Because MS disease modifying therapies (DMTs) primarily target relapses, the need to continue these medications may also decrease as an individual with MS ages. This has become a hot topic in MS research as most of these medications carry significant risk. If relapses and the damage they cause reduce with age, these risks may not be necessary or warranted.

Selecting the right MS therapy depends on careful consideration of many factors. Many of the DMTs carry significant health risks, some of which are common and easy to manage, while others occur less frequently and may be more serious. In addition to health risks, there is also emotional and financial liability to consider. According to a recent study
conducted by the National MS Society, the high cost of DMTs and the process required for insurance approvals often worsens MS symptoms and causes emotional distress for people living with MS. These added burdens may not be necessary if, after a certain age, treatment with these medications doesn’t improve health and quality of life.

To assess the clinical severity of MS among the older people with MS as well as the effect of DMTs on this population, researchers at Brigham and Women’s Hospital in Boston recently identified 195 participants in the CLIMB study (Comprehensive Longitudinal Investigations in MS) who were 65 or older and had more than 5 clinical visits after that age. The research team reviewed clinical data from these participants including comorbidities, DMT use, adverse drug reactions, disability scores, and MRI results. Results showed older study participants with MS had fewer relapses. They also found a large proportion of participants were untreated. For participants who were taking treatment, the adverse drug reaction rate was lower among those who were taking the newer oral DMTs and infusion therapies than among those being treated with first-generation therapies (interferon beta and glatiramer acetate). Most side effects were mild, very few were considered severe, and none led to fatalities. The most common type was injection-related symptoms. This study suggests that while DMTs may have side effects, their use is safe in old age.

Researchers at the National Institutes of Health analyzed data from 38 clinical trials that assessed the efficacy of DMTs on disability progression in more than 28,000 people living with MS. Results suggest the effectiveness of DMTs significantly decreases with advancing age. Data shows treatment with these medications is most beneficial during the early stages of MS, and, after age 53, there is no benefit to receiving DMT for the “average” MS patient. Having said this, it is important to note this study does not suggest that all people with MS who are older than 53 should be untreated. This is a decision that should be made on an individual basis in consultation with one’s healthcare providers.
Whether and when people with longer standing MS should safely discontinue DMTs are challenging questions that require further study in clinical trials. Currently available data are mostly from database studies or smaller reviews. Investigators at the Cleveland Clinic conducted an **observational study**, the results of which suggest discontinuing DMTs may be safe for most older people with MS. The research team looked at data from 600 participants with MS that were more than 60 years old, 178 of whom stopped DMT. Most participants stopped treatment due to age, side effects, lack of benefit, stable or secondary progressive disease, other health conditions, or cost. Most participants who stopped DMT remained off of their medication (only 10 percent restarted) and only one clinical relapse occurred. The top reasons for re-initiating treatment were patient/provider preference, changes on magnetic resonance imaging (MRI), clinical progression, or clinical trial participation. On the other hand, at the 2019 **CMSC** annual meeting (Consortium of Multiple Sclerosis Centers), investigators at the University of Washington presented two cases in which individuals over the age of 60 experienced unexpected disease activity after discontinuing DMT.

Historically, MS clinical trials have had age restrictions that have limited the participation of people with MS over the age of 55 (resulting in missing important data). Two ongoing studies may help shed more light on the benefit and risk of using DMTs in this age group. **DISCOMS** (Discontinuation of DMTs in MS) plans to enroll 260 participants with MS age 55 and older at 19 sites across the United States by February 2022. Half of the participants will stay on their current MS medication and the other half will discontinue their medication. Assessments will be performed to measure participants’ quality of life, symptoms, cognitive status, and disease activity on MRI. The **STOP-I-SEP** clinical trial (DMT Withdrawal in Inactive Secondary Progressive MS Patients Older Than 50 Years) is currently underway in France with an estimated completion date of January 2026. As the name implies, this study is focused on learning more about stopping DMTs in older SPMS participants with stable MS. Specifically, investigators are looking at disability progression, the number of relapses participants may have, disease activity on MRI, as well as quality of life, and economic impacts.
There is evidence that the risk-benefit ratio of DMTs shifts with aging. More research is needed that includes older individuals with MS in order to carefully and systematically answer the questions of whether or not it is safe to stop a DMT at a certain age, and if so, in what category of people. In addition, further study is necessary to shed light on the other aspects of an individual’s regimen that may need to be modified to optimize outcomes when their medications change, such as diet, exercise, smoking habits, as well as tending to their emotional and spiritual needs. The core of ACP’s mission is to facilitate research efforts such as these, which have the potential to improve the health and quality of life for people living with MS throughout their lifetime.