Age of onset for disease is an important factor affecting clinical outcomes across the life span in patients receiving disease-modifying therapy (DMT) for multiple sclerosis (MS), according to a study published online Feb. 25 in the European Journal of Neurology.

Viktor von Wyl, Ph.D., from the University of Zurich, and colleagues used data from a database of Swiss health insurers to identify 9,705 MS patients (including 236 pediatric-onset patients) taking DMT for at least one year. Associations between age at disease onset and clinical outcomes were evaluated.

The researchers found that pediatric-onset patients had higher relapse rates and marginally slower disability worsening rates versus adult-onset MS patients. The risk for relapse was highest in childhood and continuously fell until about 35 years of age. The risk for relapse remained stable for about a decade and then again continuously decreased. However, risk for disability worsening remained stable from childhood to about 32 years of age and then increased sharply around the age of 45 years.

"These results indicate that DMT response in pediatric-onset MS might be poorer than in comparable adult-onset MS patients, which may have some implications for the choice of first-line DMT," the authors write.

Several authors disclosed financial ties to the pharmaceutical and biotechnology industries.

More information: Abstract/Full Text (subscription or payment may be required)