Multiple Sclerosis in Older Adults

Last reviewed January 2020

Multiple Sclerosis in the Elderly: Considerations in the Geriatric Population for Diagnosis and Management https://link.springer.com/article/10.1007/s13670-015-0128-7

This review discusses the existing data on the features unique to multiple sclerosis in the elderly. **(PAID ACCESS)**

Epidemiology and Treatment of Multiple Sclerosis in Elderly Populations

https://www.nature.com/articles/s41582-019-0183-3

This review focused on the epidemiology of MS in ageing patients. Unique considerations for this population are discussed. **(PAID ACCESS)**

Late Onset Multiple Sclerosis: Concerns in Aging Patients

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0004-282X2017000700451&lng=en&nrm=iso&tlng=en

This study describes the clinical characteristics of patients with late onset multiple sclerosis (LOMS). **(OPEN ACCESS)**

Late Onset Multiple Sclerosis: Is it Really Late Onset?

https://www.sciencedirect.com/science/article/abs/pii/S2211034814000121

The authors sought out to identify the clinical characteristics of demyelinating disease in patients over 50 years of age from four different MS centers in the USA. **(PAID ACCESS)**

Multiple Sclerosis and Aging: Complexities, Concerns and Considerations for Care https://www.futuremedicine.com/doi/full/10.2217/1745509X.5.1.89

This article discusses age-related and age-accelerated MS progression as well as differences in the aging experience compared to healthy peers to inform multidisciplinary care. **(PAID ACCESS)**

Aging and Multiple Sclerosis

https://journals.sagepub.com/doi/full/10.1177/1352458516634871?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed

This review discusses the physiology of aging, its effects on MS disease course and the pathological and immunological changes associated with aging and disease progression. Common comorbidities that occur in aging people with MS are also reviewed. **(OPEN ACCESS)**

Age and Disability Accumulation in Multiple Sclerosis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3179646/?report=reader

The authors tested the hypothesis that age is a prognostic factor with respect to long-term accumulation of disability in MS. **(OPEN ACCESS)**

Multiple Sclerosis in Older Adults

Progressive Forms of Multiple Sclerosis: Distinct Entity or Age-Dependent Phenomena https://www.sciencedirect.com/science/article/pii/S0733861917300932?via%3Dihub

The authors overview different phases of MS disease and their relation to age. **(PAID ACCESS)**

Age and Disability Drive Cognitive Impairment in Multiple Sclerosis Across Disease Subtypes https://journals.sagepub.com/doi/full/10.1177/1352458516674367?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed

The aim of this study was to compare the prevalence and profile of cognitive impairment across MS subtypes and assess its clinical determinants. **(OPEN ACCESS)**

Cogntive Impairment Differs Between Primary Progressive and Relapsing-Remitting MS https://n.neurology.org/content/80/16/1501

This article discusses a cross-sectional study comparing cognitive abilities of patients with primary progressive multiple sclerosis (PPMS) and relapsing-remitting multiple sclerosis (RRMS) with healthy controls, matched for age, sex and education level. **(PAID ACCESS)**

Neuroprotection and Neuroregeneration in Multiple Sclerosis https://link.springer.com/article/10.1007%2Fs00415-008-6014-x

This article discusses the molecular mechanisms of repair processes and MS pathophysiology to achieve neuroprotective and neuroregenerative treatments in MS. **(PAID ACCESS)**

Brain Reserve and Cognitive Reserve in Multiple Sclerosis https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3721094/?report=reader

The objective of this study was to test the brain reserve hypothesis in MS by examining whether larger maximal lifetime brain volume (MLBV) protects against disease-related cognitive impairment as well as whether cognitive reserve gained through life experience protects against cognitive decline independently of MLBV. **(OPEN ACCESS)**

Cognition in Older Patients with Multiple Sclerosis Compared to Patients with Amnestic Mild Cognitive Impairment and Healthy Older Adults https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6126957/

The objective of this study was to identify differences in the cognitive performance between older adults with MS and those with amnestic mild cognitive impairment (aMCI). **(OPEN ACCESS)**

Interplay Between Age and Neuroinflammation in Multiple Sclerosis: Effects on Motor and Cognitive Functions https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6092506/

The authors emphasize the importance of the neuroinflammatory dependent mechanisms, such as synaptopathy and synaptic plasticity impairments, suggesting their potential exacerbation or acceleration with advancing age in MS. **(OPEN ACCESS)**

Frontal Brain Activation Changes due to Dual-Tasking Under Partial Body Weight Support Conditions in Older Adults with Multiple Sclerosis https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5493004/

The aim of this study was to examine the effects of partial body weight support on the prefrontal cortex activation while dual-tasking in older adults with and without MS. **(OPEN ACCESS)**

Multiple Sclerosis in Older Adults

Cognitive Processing Speed is Related to Fall Frequency in Older Adults with Multiple Sclerosis https://www.sciencedirect.com/science/article/pii/S0003999313001342?via%3Dihub

This retrospective cross-sectional study aimed to examine mobility, balance, fall risk, and cognition in older adults with multiple sclerosis (MS) as a function of fall frequency. **(OPEN ACCESS)**

Understanding Falls in Multiple Sclerosis: Association of Mobility Status, Concerns About Falling, and Accumulated Impairments

https://academic.oup.com/ptj/article/92/3/407/2735249

The objectives of this study were to estimate the percentage of people with MS who report falling, concerns about falling and activity restrictions related to concerns about falling. The investigators examined the relationship between these factors with fall status and explored associations between fall status, mobility function and the number of accumulated impairments. **(OPEN ACCESS)**

Home-based Exercise Program and Fall-Risk Reduction in Older Adults with Multiple Sclerosis: Phase 1 Randomized Controlled Trial

https://journals.sagepub.com/doi/full/10.1177/0269215513501092?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed

The objective of this randomized controlled pilot trial was to determine the feasibility, safety, and efficacy of a home-based exercise intervention targeting fall risk in older adults with multiple sclerosis. **(OPEN ACCESS)**

Physical Activity, Sedentary Behaviour, and Physical Function in Older Adults with Multiple Sclerosis https://journals.humankinetics.com/view/journals/japa/26/2/article-p177.xml

This study examined associations among light and moderate-to-vigorous physical activity, sedentary behaviour, and physical function in older adults with MS. **(PAID ACCESS)**

Levels and Rates of Physical Activity in Older Adults with Multiple Sclerosis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4898924/

This study compared levels of physical activity and rates of meeting public health guidelines for moderate-to-vigorous physical activity among different cohorts of adults with MS. **(OPEN ACCESS)**

Home-Based, Square-Stepping Exercise Program Among Older Adults with Multiple Sclerosis: Results of a Feasibility Randomized Controlled Study

https://www.sciencedirect.com/science/article/pii/S1551714418303616?via%3Dihub

The authors conducted a randomized controlled trial examining the feasibility of a 12-week, home-based Square Stepping Exercise (SSE) program in older adults with MS. **(PAID ACCESS)**

Effects of a DVD-Delivered Exercise Intervention on Physical Function in Older Adults with Multiple Sclerosis: A Pilot Randomized Controlled Trial

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5433324/

The objective of this pilot trial was to examine the effects of a DVD exercise intervention targeting flexibility, strength, and balance in older adults with MS in order to generate effect sizes to power a larger trial. **(OPEN ACCESS)**

Multiple Sclerosis in Older Adults

Physical Function in Older Adults with Multiple Sclerosis: An Application of the Short Physical Performance Battery https://insights.ovid.com/pubmed?pmid=27893568

This cross-sectional study examined physical function in community-dwelling older adults with MS using the Short Physical Performance Battery (SPPB). **(PAID ACCESS)**

The Elderly Person with Multiple Sclerosis: Clinical Implications for the Increasing Life-Span https://insights.ovid.com/article/01376517-201512000-00006

This article focuses on the current literature in health-related quality of life in older persons with MS. A specific aim is to examine the factors associated with a decreased QOL in older persons with MS. **(PAID ACCESS)**

Predicting Health Promotion and Quality of Life with Symptom Clusters and Social Supports Among Older Adults with Multiple Sclerosis

https://www.healio.com/nursing/journals/jgn/2017-9-43-10/%7B3f899501-6185-4d8a-9f0b-b5884e59888f%7D/predicting-health-promotion-and-quality-of-life-with-symptom-clusters-and-social-supports-among-older-adults-with-multiple-sclerosis.pdf

This study sought to identify and examine symptom clusters' effect on health promotion and quality of life, data from 215 adults with MS 60 years and older. **(OPEN ACCESS)**

Promoting Resilience in Individuals Aging with Multiple Sclerosis: Results from a Pilot Randomized https://psycnet.apa.org/record/2018-34720-001

This study sought to evaluate whether "Everyday Matters", a novel positive psychological program had a positive effect on resilience and other related outcomes in adults aging with MS. **(PAID ACCESS)**

Self-Efficacy and Environmental Correlates of Physical Activity Among Older Women and Women with Multiple Sclerosis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2733801/

The authors used a social cognitive perspective to examine the independent roles of perceptions of the environment, self-efficacy and functional limitations in understanding physical activity levels among elderly women and women with MS. **(OPEN ACCESS)**

Factors Associated with Poor Sleep in Older Adults with Multiple Sclerosis

https://link.springer.com/article/10.1007%2Fs12529-017-9653-4

The objectives of this study were to document the prevalence of sleep problems in a Canadian sample of older adults with MS to identify demographic and clinical factors associated with poor sleep as well as to investigate the potential impact of possible sleep-promoting and sleep-interfering medications. **(PAID ACCESS)**

Lower Urinary Tract Symptoms in Elderly Population with Multiple Sclerosis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5885135/

The aim of this study was to compare the clinical and urodynamic characteristics of urinary disorders in multiple sclerosis (MS) patients in a geriatric population with a nongeriatric population. **(OPEN ACCESS)**