

Podľa výsledkov observačných štúdií so všetkými ich limitáciami a ojedinelých randomizovaných štúdií sú klinické údaje ohľadom vysadenia DMT u starších pacientov s RS rozporuplné. Faktory asociované s vyšším rizikom rekurencie zápalovej aktivity RS sú nižší vek, kratšie obdobie stability choroby na liečbe DMT a vyšší počet gadolínium enhancujúcich lézií na MR v čase vysadenia DMT (nežiaduce udalosti, rozhodnutie pacienta) (Bsteh et al.,

2021). Potrebné sú spoľahlivejšie dáta jednak zo štúdií, ako aj z reálnej klinickej praxe, registrov, napomáhajúce v rozhodovaní o vysadení DMT vo vyššom veku. Klinickým výsledkom môžu pridať na hodnotu faktory ako optimálne stanovené cieľové hodnotené ukazovatele, dostatočne veľké súbory pacientov, prísnejšie zaraďovacie kritériá, dlhší čas hodnotenia a tiež zaradenie analýzy biologických markerov, ako napríklad neurofilamentov a koncentrácií GFAP.

Záver

Je nesporné, že vek pacienta má byť dôležitým aspektom pri manažmente liečby roztrúsenej sklerózy. Ochorenie je celoživotné a stále naliehavejšie potrebujeme presvedčivé dáta, na základe ktorých by sme mohli poskytovať liečbu DMT u starších pacientov s RS, nakoľko v tejto vekovej kategórii je potrebné starostlivo zvážiť pomer rizika a prínosu pre pacienta.

LITERATÚRA

1. Bsteh G, Hegen H, Riedl K, et al. Quantifying the risk of disease reactivation after interferon and glatiramer acetate discontinuation in multiple sclerosis: The VIAADISC score. *Eur J Neurol*. 2021 May;28(5):1609-1616. doi: 10.1111/ene.14705. Epub 2021 Jan 18. PMID: 33370478; PMCID: PMC8248019.
2. De Seze J, Dive D, Ayrignac X, et al. Narrative Review on the Use of Cladribine Tablets as Exit Therapy for Stable Elderly Patients with Multiple Sclerosis. *Neurol Ther*. 2024;14:519-533. doi: 10.1007/s40120-024-00603-y.
3. Eschborn M, Pawlitzki M, Wirth T, et al. Evaluation of age-dependent immune signatures in patients with multiple sclerosis. *Neurol Neuroimmunol Neuroinflamm*. 2021;8:e1094. doi: 10.1212/NXI.0000000000001094.
4. Fulop T, Larbi A, Pawelec G, et al. Immunology of aging: the birth of inflammaging. *Clin Rev Allergy Immunol*. 2023;64:109-22. doi:10.1007/s12016-021-08899-6.
5. Giovannoni G, Mathews J. Cladribine tablets for relapsing-remitting multiple sclerosis: a clinician's review. *Neurol Ther*. 2022;11:571-95. doi: 10.1007/s40120-022-00339-7.
6. Giovannoni G, Rammohan K, Cook S, et al. Cladribine tablets 35 mg/kg is efficacious in patients aged above and below 45 years with relapsing multiple sclerosis in the clarity study. *Mult Scler Relat Disord*. 2018;26:P262.
7. Graves JS, Krysko KM, Hua LH, et al. Ageing and multiple sclerosis. *Lancet Neurol*. 2022;4422:1-12. doi: 10.1016/s1474-4422(22)00184-3.
8. Hua LH, Fan TH, Conway D, et al. Discontinuation of disease-modifying therapy in patients with multiple sclerosis over age 60. *Mult Scler J*. 2019 Apr;25(5):699-708. doi: 10.1177/1352458518765656.
9. Li X, Li C, Zhang W, et al. Inflammation and aging: signaling pathways and intervention therapies. *Signal Transduct Target Ther*. 2023;8:239. doi: 10.1038/s41392-023-01502-8.
10. Lizak N, Hodgkinson S, Butler E, et al. Real-world effectiveness of cladribine for Australian patients with multiple sclerosis: an MS Base registry substudy. *Mult Scler*. 2021;27:465-74. doi: 10.1177/1352458520921087.
11. Kaminsky AL, Omarou AY, Soudant M, et al. Discontinuation of disease-modifying treatments for multiple sclerosis in patients aged over 50 with disease inactivity. *J Neurol*. 2020;267:3518-3527.
12. Macaron G, Larochelle C, Arbour N, et al. Impact of aging on treatment considerations for multiple sclerosis patients. *Front Neurol*. 2023 Jul 7;14:1197212. doi: 10.3389/fneur.2023.1197212.
13. Mouresan EF, Montesidou E, Berglund A, et al. Clinical characteristics and Long-term outcomes of Late-onset Multiple Sclerosis. *Neurology*. 2024;102(6):e208051.
14. Pantazou V, Pat C, Pasquier RD, et al. Recurrence of disease activity after fingolimod discontinuation in older patients previously stable on treatment. *Mult Scler Relat Disord*. 2021 Jun;51:102918. doi: 10.1016/j.msard.2021.102918.
15. Patti F, Penaherrera JN, Zieger L, Wiclein EM. Clinical characteristics of middle-aged and older patients with MS treated with interferon beta-1b: post-hoc analysis of a 2-year, prospective, international, observational study. *BMC Neurol*. 2021;21(1):324. doi: 10.1186/s12883-021-02347-w.
16. Prosperini L, Lucchini M, Ruggieri S, et al. Shift of multiple sclerosis onset towards older age. *Journal of Neurology, Neurosurgery & Psychiatry*. 2022;93:1137-1139.
17. Roos I, Malpas C, Leray E, et al. Disease reactivation after cessation of disease modifying therapy in patients with relapsing-remitting multiple sclerosis. *Neurology*. 2022;99:e1926-e1944. doi: 10.1212/WNL.000000000000201029.
18. Schweitzer F, Laurent S, Fink GR, et al. Age and the risks of high-efficacy disease modifying drugs in multiple sclerosis. *Curr Opin Neurol*. 2019;32:305-12. doi:10.1097/WCO.0000000000000701.
19. Salavisa M, Sarrazina F, Ladeira AF, et al. Discontinuation of disease-modifying therapy in MS patients over 60 years old and its impact on relapse rate and disease progression. *Clin. Neurol Neurosurg*. 2023;225:107612. doi: 10.1016/j.clineuro.2023.107612.
20. Wallin MT, Culpepper WJ, Campbell JD, et al. The prevalence of MS in the United States: a population-based estimate using health claims data. *Neurology*. 2019;92:e1029-40. doi: 10.1212/WNL.00000000000007035.
21. Walton C, King R, Rechtman L, et al. Rising prevalence of multiple sclerosis worldwide: Insights from the Atlas of MS, third edition. *Mult Scler*. 2020 Dec;26(14):1816-1821. doi: 10.1177/1352458520970841. Epub 2020 Nov 11. PMID: 33174475; PMCID: PMC7720355.
22. Weideman AM, Tapia-Maltos MA, Johnson K, et al. Meta-analysis of the age-dependent efficacy of multiple sclerosis treatments. *Front Neurol*. 2017;8:577. doi: 10.3389/fneur.2017.00577.
23. Zhang Y, Caldito NG, Shirani A, et al. Aging and efficacy of disease-modifying therapies in multiple sclerosis: a meta-analysis of clinical trials Yinan. *Ther Adv Neurol Disord*. 2020;13:1-10. doi: 10.1177/1756286420969016.

Neurologie pro praxi
www.neurologiepropraxi.cz

