Záver

Chronická zápalová demyelinizačná polyneuropatia je získaná autoimunitná neuropatia, ktorej patogenéza nie je ešte úplne objasnená. Pri jej vzniku sa potvrdila účasť autoreaktívnych T- a B-lymfocytov, zložiek komplementu, zápalových chemokínov, cytokínov a protilátok proti rôznym glykoproteínovým a glykolipidovým nervovým štruktúram. Objav autoprotilátok proti proteínom Ranvierovho uzla a paranodálnej oblasti u pacientov s atypickou CIDP potvrdzuje jej patogenetickú rôznorodosť. Napriek viacerým problémom je diagnóza CIDP založená na súbore klinických a elektrodiagnostických kritérií a v prípade pochybností na pomocných laboratórnych a zobrazovacích vyšetreniach. Kondukčné štúdie zostávajú najužitočnejším nástrojom na odhalenie znakov, ktoré podporujú demyelinizáciu, pokiaľ sa testy vykonávajú a interpretujú správne. Súčasná prvolíniová liečba CIDP založená na dôkazoch zahŕňa intravenózne a subkutánne imunoglobulíny, kortikosteroidy a výmenu plazmy a je účinná u väčšiny pacientov. V prípade zlyhania preukázateľne účinnej liečby možno v indikovaných prípadoch zvážiť ako prídavnú liečbu azatioprín, cyklofosfamid, cyklosporín, mykofenolát mofetil alebo rituximab. Priaznivý efekt rituximabu sa opakovane preukázal pri nodo-/paranodopatiách s pozitivitou IgG4 protilátok. Transplantácia autológnych krvotvorných kmeňových buniek môže byť účinná pri refraktérnych formách CIDP, ak sa podáva v špecializovaných centrách. Medzi perspektívne nové možnosti liečby CIDP patria blokátory FcRn receptorov a inhibítory komplementu. Rozšírenie terapeutického arzenálu zvyšuje potrebu včasného a správneho stanovenia diagnózy CIDP a hľadania spoľahlivých biomarkerov na hodnotenie účinku liečby.

LITERATÚRA

1. Allen JA, Ney J, Lewis RA. Electrodiagnostic errors contribute to chronic inflammatory demyelinating polyneuropathy misdiagnosis. *Muscle Nerve.* 2018;57(4):542-549. doi:10.1002/mus.25997.

2. Berg-Vos R, Berg L, Franssen H, et al. Multifocal inflammatory demyelinating neuropathy: A distinct clinical entity? Neurology. 2000;54(1):26 doi:10.1212/WNL.54.1.26.

3. Breiner A, Qrimli M, Ebadi H, et al. Peripheral nerve high-resolution ultrasound in diabetes. *Muscle Nerve.* 2017;55(2):171-178. doi:10.1002/mus.25223.

4. Breiner A, Bourque PR, Allen JA. Updated cerebrospinal fluid total protein reference values improve chronic inflammatory demyelinating polyneuropathy diagnosis. *Muscle Nerve.* 2019;60(2):180-183. doi:10.1002/mus.26488.

5. Broers MC, Bunschoten C, Nieboer D, et al. Incidence and prevalence of chronic inflammatory demyelinating polyradiculoneuropathy: a systematic review and meta-analysis. *Neuroepidemiology.* 2019;52(3-4):161-172. doi:10.1159/000494291.

6. Brun S, de Sèze J, Muller S. CIDP: Current Treatments and Identification of Targets for Future Specific Therapeutic Intervention. *Immuno.* 2022;2(1):118-131. https://doi.org/10.3390/immuno2010009.

7. Bunschoten C, Jacobs BC, Van den Bergh P, Cornblath DR, van Doorn P. Progress in diagnosis and treatment of chronic inflammatory demyelinating polyradiculoneuropathy. *Lancet Neurol.* 2019;18:784-794.

8. Burns TM. Chronic inflammatory demyelinating polyradiculoneuropathy. *Arch. Neurol.* 2004;61:973-975. doi:10.1001/archneur.61.6.973.

9. Burt RK, Tappenden P, Balabanov R, et al. The cost effectiveness of immunoglobulin vs. Hematopoietic stem cell transplantation for CIDP. *Front Neurol.* 2021;12:645263. doi:10.3389/fneur.2021.645263.

10. Collet R, Caballero-Avila M, Querol L. Clinical and pathophysiological implications of autoantibodies in autoimmune neuropathies. *Rev. Neurol.* 2023;179(8):831-843. doi:10.1016/j.neurol.2023.02.064.

11. Dalakas MC. Advances in the diagnosis, pathogenesis and treatment of CIDP. *Nat. Rev. Neurol.* 2011;7:507-517. doi.org/10.1038/nrneurol.2011.12.

12. Donaghy M, Mills KR, Boniface SJ, et al. Pure motor demyelinating neuropathy: deterioration after steroid treatment and improvement with intravenous immunoglobulin. *J Neurol Neurosurg Psychiatry.* 1994;57:778-783.

13. Doneddu PE, Cocito D, Manganelli F, et al. Atypical CIDP: diagnostic criteria, progression and treatment response. data from the Italian CIDP database. *J Neurol Neurosurg Psychiatr.* 2019;90(2):125-132. doi:10.1136/jnnp-2018-318714.

14. Doneddu PE, De Lorenzo A, Manganelli F, et al. Comparison of the diagnostic accuracy of the 2021 EAN/PNS and 2010 EFNS/PNS diagnostic criteria for chronic inflammatory demyelinating polyradiculoneuropathy. *J Neurol Neurosurg.* 2022;1:329357. doi:10.1136/jnnp-2022-329357.

15. Dyck PJ, Lais AC, Ohta M, et al. Chronic inflammatory polyradiculoneuropathy. *Mayo Clin Proc.* 1975;50(11):621-637.

16. Dyck PJ, O'Brien PC, Oviatt KF, et al. Prednisone improves chronic inflammatory demyelinating polyradiculoneuropathy more than no treatment. *Ann. Neurol.* 1982;11:136-141. doi.org/10.1002/ana.410110205.

17. Dziadkowiak E, Waliszewska-Prosół M, Nowakowska-Kotas M, et al. Pathophysiology of the Different Clinical Phenotypes of Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP). *Int. J. Mol. Sci.* 2022;23:179. https://doi.org/10.3390/ijms23010179.

18. Eftimov F, Vermeulen M, van Doorn PA, et al. PREDICT. Long-term remission of CIDP after pulsed dexametha sone or short-term prednisolone treatment. *Neurology.* 2012;78:1079-1084.

19. Eftimov F, Winer JB, Vermeulen M, et al. Intravenous immunoglobulin for chronic inflammatory demyelinating polyradiculoneuropathy. *Cochrane Database Syst Rev.* 2013;(12):CD001797. https://doi.org/10.1002/14651858.

20. Goedee HS, Jongbloed BA, van Asseldonk JH, et al. A comparative study of brachial plexus sonography and magnetic resonance imaging in chronic inflammatory demyelinating neuropathy and multifocal motor neuropathy. *Eur J Neurol.* 2017;24(10):1307-1313. doi:10.1111/ene.13380.

21. Goedee HS, van der Pol WL, Hendrikse J, van den Berg LH. Nerve ultrasound and magnetic resonance imaging in the diagnosis of neuropathy. *Curr Opin Neurol.* 2018;31(5):526-533. doi:10.1097/WCO.0000000000000607.

22. Grimm A, Rattay TW, Winter N, Axer H. Peripheral nerve ultrasound scoring systems: benchmarking and comparative analysis. *J Neurol.* 2017;264(2):243-253. doi:10.1007/s00415-016-8305-y.

23. Gurčík L, Špalek P, Turčanová Koprušáková M, et al. CIDP – dlhodobé skúsenosti s diagnostikou a liečbou v Slovenskej republike. *Neurológia.* 2024;19(1):13-21.

24. Herraets IJT, Goedee HS, Telleman JA, et al. Nerve ultrasound improves detection of treatment-responsive chronic inflammatory neuropathies. *Neurology.* 2020;2020:3. doi:31959710 DOI: 10.1212/wnl.0000000000008978.

25. Herraets IJT, Goedee HS, Telleman JA, et al. Nerve ultrasound for diagnosing chronic inflammatory neuropathy: a multicenter validation study. *Neurology.* 2020;95(12):e1745-e1753. doi:10.1212/WNL.0000000000010369.

26. Hughes RA, Donofrio P, Bril V, et al. Intravenous immune globulin (10% caprylate-chromatography purified) for the treatment of chronic inflammatory demyelinating polyradiculoneuropathy (ICE study): a randomised placebo-controlled trial. *Lancet Neurol.* 2008;7:136-144.

27. Hughes RA, Mehndiratta MM, Rajabally YA. Corticosteroids for chronic inflammatory demyelinating polyradiculoneuropathy. *Cochrane Database Syst Rev.* 2017;11(11):CD002062. doi:10.1002/14651858.CD002062.pub4.

28. Iijima M, Koike H, Hattori N, et al. Prevalence and incidence rates of chronic inflammatory demyelinating polyneuropathy in the Japanese population. *J Neurol Neurosurg Psychiatry.* 2008;79:1040-3. 10.1136/jnnp.2007.128132.

29. Ikeda S, Koike H, Nishi R, et al. Clinicopathological characteristics of subtypes of chronic inflammatory demyelinating polyradiculoneuropathy. *J. Neurol. Neurosurg. Psychiatry.* 2019;90:988-996. doi.org/10.1136/jnnp-2019-320741.

30. Johnsen B, Fuglsang-Frederiksen A. Electrodiagnosis of polyneuropathy. *Neurophysiol Clin Clin Neurophysiol.* 2000;30(6):339-351. doi:10.1016/S0987-7053(00)00237-9.

31. Jomier F, Bousson V, Viala K, et al. Prospective study of the additional benefit of plexus magnetic resonance imaging in the diagnosis of chronic inflammatory demyelinating polyneuropathy. *Eur J Neurol.* 2020;27(1):181-187. doi:10.1111/ene.14053.

32. Kobessho H, Oishi K, Hamaguchi H, Kanda F. Elevation of cerebrospinal fluid protein in patients with diabetes mellitus is associated with duration of diabetes. *Eur Neurol.* 2008;60(3):132-136. doi:10.1159/000144083.

33. Koike H, Nishi R, Ikeda S, et al. Ultrastructural mechanisms of macrophage-induced demyelination in CIDP. *Neurology.* 2018;91:1051-1060. doi.org/10.1212/WNL.0000000000006625.

34. Koike H, Katsuno M. Macrophages and autoantibodies in demyelinating diseases. *Cells.* 2021;10:844. doi.org/10.3390/cells10040844.

35. Kuitwaard K, Fokkink WR, Brusse E, et al. Maintenance IV immunoglobulin treatment in chronic inflammatory demyelinating poly radiculoneuropathy. *J Peripher Nerv Syst.* 2017;22:425-432.

36. Latov N, Deng C, Dalakas MC, et al. Timing and course of clinical response to intravenous immunoglobulin in chronic inflammatory demyelinating polyradiculoneuropathy. *Arch Neurol.* 2010;67:802-807.

37. Lee LY, Tan CY, Wong KT, Goh KJ, Shahrizaila N. Diagnostic yield of nerve biopsy in the evaluation of peripheral neuropathies. *J Clin Neurosci.* 2023;107:40-47. doi:10.1016/j.jocn.2022.11.017.

38. Lehmann HC, Burke D, Kuwabara S. Chronic inflammatory demyelinating polyneuropathy: Update on diagnosis, immunopathogenesis and treatment. *J. Neurol. Neurosurg. Psychiatry.* 2019;90:981-987.

39. Lewis RA, Sumner AJ, Brown MJ, Asbury AK. Multifocal demyelinating neuropathy with persistent conduction block. *Neurology.* 1982;32(9):958-964. doi:10.1212/WNL.32.9.958.

40. Liberatore G, Manganelli F, Cocito D, et al. Relevance of diagnostic investigations in chronic inflammatory demyelinating poliradiculoneuropathy: data from the Italian CIDP database.