Update on the diagnosis and treatment of neurological diseases

Atualização no diagnóstico e no tratamento de doenças neurológicas

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This second supplementary edition of the Arquivos de Neuro-Psiquiatria (ANP), the official journal of the Brazilian Academy of Neurology, organized to commemorate the 80th anniversary of its uninterrupted publication, presents seven articles with great scientific relevance in the field of clinical neurology.

The first article written by Latov and other colleagues with great expertise in the field, entitled “Anti-MAG neuropathy: historical aspects, clinical-pathological correlations, and considerations for future therapeutical trials” reviews fundamental aspects of anti-MAG neuropathy. This form of peripheral neuropathy is characterized by the presence of distal demyelinating polyneuropathy, IgM monoclonal gammopathy, and elevated titers of anti-MAG antibodies. The authors review the current literature on the disease, with an emphasis on treatment with anti-B cell agents. The article on gene-based therapies for neuromuscular disorders, by Zanotelli, França & Marques Jr., clearly discusses the new treatments for genetically caused neuromuscular diseases, in particular the use of therapies with gene regulation, including gene replacement, small interfering RNA (siRNA), and antisense antinucleotides. The review emphasizes the new treatments for motor neuron diseases, neuropathies, and Duchenne muscular dystrophy. Next, the group of neurologists with expertise in movement disorders, led by Munhoz, Tumas, Pedroso & Silveira-Moriyama, presents a valuable article about the clinical diagnosis of Parkinson’s disease. The authors masterfully discuss the history of Parkinson’s disease, the clinical criteria for diagnosis, and the auxiliary diagnostic tests, in addition to the role of non-motor and pre-motor signs and symptoms. In the area of neuro-rehabilitation, Capato and colleagues present a robust article highlighting the news on assisted technology in Parkinson’s disease gait. The authors present new alternative interventions with assisted technology, which can be used to improve gait disorders in patients with Parkinson’s disease. In the area of epilepsy, Pinto and colleagues present the article entitled “Practices in the prescription of antiseizure medications: is it time to change?” The authors review the various advantages of prescribing the new antiseizure medications (ASM), emphasizing that the selection of these ASMs should be made according to the individual characteristics of each patient, and provide practical suggestions for choosing the new ASMs. In the area of sleep, Santos Coelho presents a structured review entitled “Narcolepsy: an interface among neurology, immunology, sleep, and genetics.” The author reviews valuable information about this rare clinical entity, highlighting the clinical picture with excessive daytime sleepiness plus cataplexy, hallucinations, sleep paralysis, and sleep fragmentation, as well as the pathophysiological mechanism, with the consequent hypocretin-1 deficiency. Finally, in the area of neuroradiology, Carvalho Macruz and colleagues present the article entitled “The new era of artificial intelligence in neuroradiology: current research and promising tools.” This interesting review explores the use of artificial intelligence in this area of neurology, which is most conducive to it, including a discussion of digital workflow, standardized protocols for image storage, and several well-defined interpretative activities.

We believe that the articles published in this supplementary issue of ANP will make a significant contribution to disseminating this new knowledge arising from the dizzying evolution that has taken place in the field of neuroscience in recent years.

Authors’ Contributions
HAGT: conceptuzation, analysis, writing and editing; ARM: review.

Conflict of Interest
There is no conflict of interest to declare.

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ISSN 0004-282X.
References


