

# When our fate finds us: the growing impact of neurodegenerative disorders

## Cuando el destino nos encuentre: el creciente impacto de las enfermedades neurodegenerativas

Raul Medina-Rioja<sup>1\*</sup> and Ramiro Ruiz-Garcia<sup>2</sup>

<sup>1</sup>Department of Neurological Emergencies; <sup>2</sup>Vice Chair for Education. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez, Mexico City, Mexico

*“Let us search in spite of everything we face. Let us search, because it is the best way to find. And perhaps, thanks to our efforts, the verdict of tomorrow will not be the verdict of today” – J. M. Charcot<sup>1</sup>*

A global increase in neurodegenerative diseases is anticipated, primarily due to aging, the main risk factor. According to estimates from the 2019 *Global Burden of Disease* study, approximately 600,000 cases of dementia were recorded in our country that year. By 2050, projections suggest that the number of cases will exceed one and a half million, representing an approximate increase of 209%<sup>2</sup>.

This growth will pose a significant challenge to health systems worldwide. Although neurodegenerative diseases can be a major cause of mortality, the main problem lies in the loss of functionality, primarily manifesting in the years lost to disability that these diseases often cause.

For this reason, most research groups have focused on finding ways to prevent the onset of cognitive decline or, alternatively, to slow its progression. This year, the *Lancet* journal published the 2024 report on dementia prevention, highlighting new modifiable factors (such as blindness and high LDL cholesterol) that could impact up to 45% of all dementia cases. It concludes that almost half of all cases of neurodegenerative diseases are preventable<sup>3</sup>.

Unfortunately, the lack of awareness campaigns on this topic causes many patients to be referred to consultation in moderate or advanced stages of the disease, which limits the therapeutic options and interventions that could improve their quality of life. In our country, the loss of memory and loss of independence in the elderly is often “normalized.”

Therefore, it is essential to focus on interventions that address patient management beyond the preventive approach and in early stages. In this edition of the Mexican Journal of Neuroscience, an article prepared by a panel of Mexican experts lead by Peña de León is presented. Using a Delphi methodology, the group discusses pharmacological options such as cholinesterase inhibitors and memantine, as well as the potential combination with other agents used in daily practice, such as citicoline. The group concludes that combining rivastigmine with citicoline could be an effective therapeutic strategy. However, these findings should be taken with caution, as clinical trials with more convincing evidence are needed to support this conclusion. Nevertheless, this may represent a potential first step for development of more clinical trials and naturalistic studies exploring the efficacy and effectiveness of combined therapies for neurodegenerative diseases. The article demonstrates the growing need for

### \*Correspondence:

Raul Medina-Rioja  
E-mail: rmedinar@innn.edu.mx

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research about effective interventions for the treatment of neurodegenerative diseases beyond prevention.

Another article included in this issue analyzes the risk factors associated with psychotic symptoms in Parkinson's disease. This cross-sectional study involved 306 patients and found associations between some non-motor symptoms and psychotic symptoms, including orthostatic hypotension, apathy, cognitive impairment, and the duration of the disease. The findings highlight how little we know about the development of psychosis in Parkinson's disease and other neurodegenerative diseases, and help identify patients at risk of developing neuropsychiatric complications early on<sup>4</sup>.

The phrase "When our fate finds us" should not be an excuse for us to remain passive in the face of the growing need for prevention and effective treatments

against neurodegenerative diseases. Instead, it should inspire us to be proactive and to lead initiatives that seek to alleviate the burden of these diseases on patients and their caregivers. It is crucial to act now, as we are all at risk, and to date, prevention measures do not guarantee complete protection.

## References

1. Goetz CG. Charcot: Past and present. *Rev Neurol (Paris)*. 2017 Dec; 173(10):628-636. doi: 10.1016/j.neurol.2017.04.004.
2. GBD 2019 Dementia Forecasting Collaborators. Estimation of the global prevalence of dementia in 2019 and forecasted prevalence in 2050: an analysis for the Global Burden of Disease Study 2019. *Lancet Public Health*. 2022 Feb;7(2):e105-e125.
3. Livingston G, Huntley J, Liu KY, Costafreda SG, Selbaek G, Alladi S, et al. Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. *Lancet*. 2024 Aug 10;404(10452):572-628.
4. Acosta-Espinoza EJ, Salinas-Leal DI, Ortiz-Marroquin IA, González-Cantú A, González-González M, et al. Unveiling the link between stress-related disorders and autonomic dysfunction in Parkinson's disease: A cross-sectional study. *Rev Mex Neuroci*. 2024;25(5):131-137.