Neurodevelopmental and neurodegeneration

Sergio Iván Valdés Ferrer*
Department of Neurology and Psychiatry, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico

Neurodevelopmental issues in lower- and middle-income countries are incompletely understood. The current issue of Revista Mexicana de Neurociencia has two timely articles on neurodevelopment: the first one by Ricardo-Garcéll and colleagues evaluated neurodevelopmental milestones in children during the first 5 years in urban, suburban, and rural communities in Queretaro and Toluca, two large cities in Mexico. For that, these authors relied on a validated electronic tool. Reassuringly, their results are not different from those observed elsewhere. However, there was vast between-city differences. While the study was not designed to evaluate potential causes, these results prompt further studies also aimed at evaluating causes of neurodevelopmental delays in children in Mexico. A second manuscript by Núñez-Contreras thoroughly reviews critical neurobiological aspects of autism and epilepsy, narrowing down common mechanisms between both conditions. This review covers basic, translational, and clinical aspects.

The gut-brain axis, a two-way highway of information has gained track in the past two decades, particularly after the group of Kevin J. Tracey discovered the so-called cholinergic anti-inflammatory pathway, effectively launching a new field of reflex neuroimmune communication. In this issue, Murguiondo-Pérez and colleagues succinctly review key aspects of the gut-brain axis from the perspective of neurodegenerative disease.

We hope that this issue will be of interest to our readers, particularly those interested in neurodevelopment and neurodegeneration.

Sergio Iván Valdés Ferrer
Co-Editor, Revista Mexicana de Neurociencia