## Autoimmune encephalitis: A rare neurocritical disease in Latin America? Encefalitis autoinmune: ¿una enfermedad neurocrítica rara en América Latina? Encefalite autoimune: uma doença neurocrítica rara na América Latina?

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## Content

Dear Editor,

Autoimmune encephalitis is conceptually a "new entity". Since Dalmau reported the isolation of antineuronal antibodies for the first time in 2007 Dalmau et al. (2007), more antibodies have been identified and associated with this entity that includes a wide spectrum of immunological disorders and clinical manifestations that affect the central nervous system and sometimes is associated with the affection of another systems, oncological or post-infectious processes Abboud et al. (2021). Given its great diversity, Graus et al. In 2016, published an article in which postulated a clinical approach to establish diagnostic criteria and levels of confirmation in this entity, with the aim of initiating prompt immunotherapy Graus et al. (2016).

Since its description, autoimmune encephalitis has gained increasing clinical relevance since it was observed that many of the conditions of patients who came for encephalopathy or a neuropsychiatric condition of acute or subacute evolution, and in whom an infectious etiology was ruled out, ended up being a patient with the diagnosis of autoimmune encephalitis Abboud et al. (2021).

Autoimmune encephalitis is currently one of the main causes of non-infectious encephalitis, with an estimated prevalence of 13.7/100,000 inhabitants and an estimated annual incidence of 0.8 per 100,000 person-years Dubey et al. (2018). In Latin America, a study was carried out in Brazil where an incidence of 0.16/100,000 person-years was estimated, a much lower value that is assumed to be due to the underdiagnosis that exists in our region of Latin America Nóbrega et al. (2019); Vasconcelos et al. (2021).

It is important to mention that timely treatment is associated with a better functional and cognitive prognosis in those people affected by autoimmune encephalitis, therefore it is important to identify this disease early, quickly perform tests that confirm the diagnosis and exclude other entities that can mimic or present with similar symptoms Vences et al. (2020). One of the difficulties in our countries is that there are certain immunosuppressive medications that are not available in our hospitals or lack approval for this indication. Likewise, it is estimated that there is a lack of protocols or clinical practice guides that regulate the management of patients with autoimmune encephalitis in Latin America.

Admission to critical care units is frequent in this entity, this is because a high percentage of patients develop complications associated with encephalitis such as status epilepticus, severe dysautonomia or due to critical processes secondary to hospitalization complications Harutyunyan et al. (2017). It is important, therefore, that intensive care doctors are trained in the management of this entity. It is also important to prioritize the admission of these patients to neurocritical care units or, failing that, to only have multipurpose ICUs, they must be under the care of someone specialized in neurological critical care and preferably under the care of a multidisciplinary team.

In January 2021, Vasconcelos GdA et al. published a study where they identified 58 articles of autoimmune encephalitis confirmed by detection of antibodies in Latin America, during the period from January 2007 to July 2020, reporting 383 cases, of which 353 were cases of anti NMDA-R encephalitis. It is striking that of all reported cases of anti-NMDA-R encephalitis, only 9.35 % were admitted to critical care units, a percentage very distant from what has been reported in other latitudes and from what we usually see in our clinical practice daily in our region Vasconcelos et al. (2021).

This event can be explained by the lack of representativeness of the articles published to date, the majority being case reports or small series, in which the authors try to emphasize some atypical clinical characteristic or a call to attention to the timely suspicion of this entity and do not necessarily represent all the cases managed in hospital centers.

In low- and middle-income countries, including Latin American, there are certain limitations that make it more difficult to reach a diagnostic conclusion for autoimmune encephalitis, the most important being the lack of local access to confirmatory antibody isolation tests. In most cases, it is necessary to refer the analysis of the tests to other centers abroad. Other difficulties are the lack of knowledge of this entity, the lack of personnel trained in neurocritical care and the difficult access of a large part of the population to reference hospitals, with the difficulty of performing tests to support the diagnosis to exclude other causes Vasconcelos et al. (2021); Vences et al. (2020); Harutyunyan et al. (2017); Morillos et al. (2024). Likewise, these facts make it difficult to truly estimate the frequency and impact of autoimmune encephalitis in our region, making it necessary to carry out epidemiological studies in Latin America.

It is important to carry out regional initiatives in our Latin American countries that allow us to know the demographic and clinical characteristics, as well as the evolution and longterm prognosis of autoimmune encephalitis in our region. These initiatives require multidisciplinary participation by all clinical specialties involved in the care of this entity, such as neurology, pediatrics, internal medicine, psychiatry, intensive care medicine, physical medicine and rehabilitation, among other specialties.

Knowing the importance of the Latin American Brain Injury Consortium (LABIC) in our region of Latin America, and being the Latin American Neurointensive Care Journal, its newly founded and main scientific means of diffusion, I call on all colleagues involved in neurocritical care, get involved in these initiatives and fight to improve the care of patients with autoimmune encephalitis in Latin America.

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