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Review

Obstacles in the treatment of common psychiatric comorbidities in patients with epilepsy: What is wrong with this picture?

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ABSTRACT

The aim of this special issue is to highlight a major problem that plagues the management of patients with epilepsy (PWE): the failure to identify and treat relatively frequent psychiatric comorbidities, in particular, depression and anxiety disorders. The causes are multiple, starting from the neurologists' failure to investigate the existence of these common comorbidities during the initial evaluation or even throughout the course of treatment of these patients. Does this phenomenon reflect a lack of curiosity, ignorance, or both? The problem is compounded by the limited or lack of access to treatment once the psychiatric comorbidity has been identified. This special issue tries to analyze the causes of this very serious problem that not only has serious implications in the comprehensive management of PWE but also raises serious questions on the lack of communication between neurologists and psychiatrists… truly a "bizarre phenomenon".

This article is part of the Special Issue "Obstacles of Treatment of Psychiatric Comorbidities in Epilepsy".

For the last five years, I have served as faculty of the National Residents Scholar Program, a two-day intensive course for neurology residents that covers the most relevant aspects of epilepsy. Between 70 and 80 residents, each one from a different neurology residency program in the USA (and occasionally Canada) attends this meeting. In reviewing the topic of "Psychiatric Aspects of Epilepsy", I always begin with the following question: "Show of hands, how many of you are expected by your attendings to screen for depression or anxiety disorders in every patient with epilepsy?" I specifically focus on these two psychiatric comorbidities as these are identified in one out of every three people with epilepsy in population-based studies [1]. Invariably, only two to three participants (2.5% to 4%) raise their hands. I then ask the following question: "Show of hands, how many of you are expected by your attendings to screen for a history of high blood pressure, diabetes, and hypercholesterolemia in every patient with a new stroke?" Invariably, all residents raise their hand. Sadly, the answer to the first question may explain the fact that psychiatric comorbidities are unrecognized and untreated in a majority of patients with epilepsy (PWE) [2], despite relatively high lifetime prevalence rates.

Furthermore, the new definition of epilepsy published by a task force of the International League against Epilepsy (ILAE) indicates that "*Epilepsy is a disorder of the brain characterized by an enduring predisposition to generate epileptic seizures, and by the neurobiologic, cognitive, **psychological**, and social consequences of this condition*" [3]. In this definition, "psychological consequences" refer to "psychiatric comorbidities", which are assumed to be a complication of the seizure disorder. Thus, if clinicians were to follow this definition of epilepsy, they would invariably screen patients for the existence of these comorbidities and incorporate their management in the overall treatment plan, in the same way neurologists investigate the presence of variables associated with an increased risk of cardiovascular disease in patients evaluated for a stroke. *So, what is wrong with this picture?*

We decided to investigate the causes that may explain the reluctance of neurologists to identify psychiatric comorbidities in PWE in this special issue of *Epilepsy & Behavior*. Most of the articles will focus on the problems associated with the identification of depression and anxiety disorders, as these are the most frequent psychiatric comorbidities in PWE [1].

The reasons to address this problem are not theoretical, as failure to identify and treat psychiatric comorbidities has a negative impact on the course of the seizure disorder, its treatment, and the life of these patients at multiple levels. For example, a history of depression preceding the onset of epilepsy has been associated with an increased risk of treatment-resistant epilepsy [4–6] and an increased risk to develop psychiatric iatrogenic effects to several antiepileptic drugs [7]. In addition, a comorbid history of anxiety and depressive disorders is associated with a worse tolerance of antiepileptic drugs (AEDs), an increased risk of suicide [8], and premature death from external causes [9]. Finally, they are associated with a poor quality of life [10,11], an increased economic burden to the patient and his family and to society as a whole [12].

Unfortunately, the ILAE definition of epilepsy does not take into account the fact that not only these psychiatric comorbidities are a

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complication of the seizure disorder, but also, they often precede the onset of the epilepsy, and they may also increase the risk of developing epilepsy. In fact, several population-based studies have demonstrated that patients with primary mood and anxiety disorders have a two- to threefold higher risk of developing epilepsy [4]; the risk increases to 3.5-fold with Attention Deficit Hyperactivity Disorder (ADHD) of the inattentive type, to 5-fold in the presence of suicidality, and to 7–9-fold in the presence of primary psychotic disorders [13].

Clearly, psychiatric comorbidities and epilepsy have a complex relation with dire consequences to the life of these patients if they go unrecognized. Mula and Salpekar introduce this special issue with a review of the relatively high prevalence rates of psychiatric comorbidities in PWE. Based on a review of the neurobiologic aspects of primary depression, Kanner and Ribot propose the existence of common pathogenic mechanisms operant in epilepsy and psychiatric comorbidities as a possible explanation of the relatively high prevalence rates of psychiatric disorders in these patients and their negative impact on the course of the seizure disorder.

Lopez and collaborators explore the reasons why neurologists fail to investigate the existence of psychiatric comorbidities in PWE without mincing words. They confront the poor training of psychiatrists and neurologists on the psychiatric aspects of neurologic disorders and of epilepsy, in particular, and try to explain the "absurd" lack of communication between the two disciplines. They conclude their article with remedial suggestions to overcome this bizarre problem.

Identifying depression and anxiety disorders in the setting of a busy outpatient epilepsy clinic may seem to be an onerous task. In the third article of this issue, Adriana Bermeo provides neurologists a pragmatic solution based on the use of self-rating instruments, and she reviews their advantages and limitations.

Heidy Cleary and Jay Salpekar discuss a possible role of neurologists in the management of depression and anxiety disorders in adults with epilepsy and also provide a series of practical strategies that they can use. David Dunn, on the other hand, addresses the same question with respect to the pediatric neurologists' involvement in the management of common psychiatric comorbidities in this age group and reviews pharmacologic regimens that neurologists could implement without much difficulty.

Psychiatric comorbidities are very frequent in patients with treatment-resistant focal epilepsy and in patients with intellectual disabilities. Indeed, psychiatric comorbidities have been identified in 40% to 70% of patients that have been evaluated for epilepsy surgery [14]. While a history of these comorbidities is associated with an increased risk of postsurgical psychiatric complications, most major epilepsy centers do not include a psychiatric evaluation in the presurgical work-up of these patients. Fasano and Kanner highlight the magnitude of this problem, discuss the complexities of psychiatric aspects of epilepsy surgery with respect to postsurgical psychiatric and seizure outcomes, and provide strategies that epilepsy centers can implement.

The final article of this issue by Kerr and collaborators reviews the problems inherent in the identification and management of psychiatric comorbidities in patients with intellectual disabilities and, as in previous papers, provide practical recommendations for the treating neurologist.

Hopefully, this special issue will help neurologists and psychiatrists recognize a major problem plaguing the two disciplines and much of which could be prevented. The cost is immense as it affects directly the comprehensive management of PWE but which also applies to patients with other neurologic disorders in which psychiatric comorbidities are relatively frequent.

Conflict of interest

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