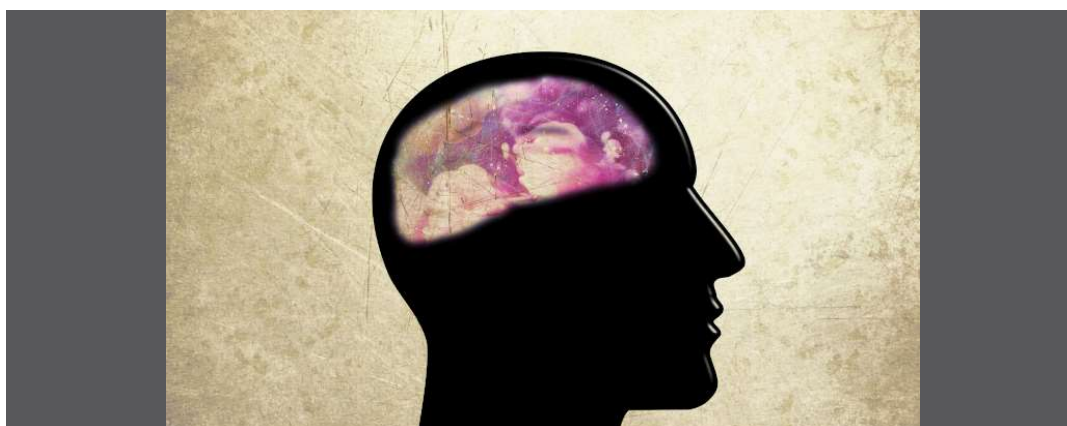


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Variability of vitamin B1 treatment in patients with Wernicke's encephalopathy studied



A multicenter study in which the Germans Trias i Pujol University Hospital has participated on Wernicke's encephalopathy, a neurological disease associated with alcohol abuse, reveals a wide clinical variability in vitamin B1 treatment. According to the study, although the timing of treatment initiation appears crucial for prognosis, the dose and route of administration may have less impact, highlighting the need to improve clinical care for this disease.

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Alcohol abuse or dependence over a long period can cause disorders in multiple structures of the nervous system, which can affect cognitive function, the cerebellum, or the peripheral nerves, among others. Wernicke's encephalopathy is an acute neurological disease associated with thiamine deficiency caused, in most cases, by chronic alcohol abuse or dependence. Clinically, it is characterized by the appearance of mental confusion, eye movement alterations and a lack of muscle control.

It is a disease that, once recognized, responds to vitamin B1 but if left untreated, can evolve into psychosis or irreversible dementia (Korsakoff's syndrome). However, there is little scientific evidence on what dosage of vitamin B1 is necessary, the best route of administration and the optimal duration of treatment. There is no consensus among clinical guidelines.

In 2012, the working group on Alcohol and Alcoholism of the Spanish Society of Internal Medicine promoted a multicenter study that managed to register one of the largest series of cases of Wernicke's encephalopathy. Recently, from this working group we have published the Vitamin B1 treatment received by 443 patients diagnosed with Wernicke's encephalopathy between 2000 and 2012 in 21 Spanish hospitals. From these patients, information was collected on the symptoms related to the onset of the disease, history of alcohol misuse, blood parameters at diagnosis, and the treatment they received (dose of vitamin B1, frequency and route of administration), among others. These patients were mostly men (81%) with a median age of 55 years and 94% diagnosed with Alcohol Use Disorder.

Regarding the pharmacological treatment, 84% received vitamin B1 in the 48 hours before or after the diagnosis of the disease and 3.4% did not receive vitamin B1. A total of 52% of cases received treatment intramuscularly, 39% intravenously and the rest orally. A fifth of the patients were given an initial dose >300mg/day and 62% of patients received <200mg/day.

After analyzing the treatment guidelines based on the evolution of the patients, the study indicates that the time of starting treatment is important for the prognosis of Wernicke's encephalopathy, although the dose and route of administration of vitamin B1 would not be so relevant. Thus, our study describes the high variability in the way we treat the disease and suggests that we need better interventions to improve prognosis.

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