Marchiafava-Bignami disease as a cause of visual hallucinations

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Alcohol is one of the most used addictive substances worldwide and its dependence constitutes one of the most important causes of morbidity and mortality, accounting for 5.9% of all deaths.\(^1\) Alcohol has two types of effects on the brain: direct, by acting on neurotransmitters and electrolytes; and indirect, such as through encephalopathy or coagulopathies. Some conditions, such as Marchiafava-Bignami disease (MBD), are associated with chronic alcoholism, but it is still not clear whether directly or indirectly.\(^2\)

A 52-year-old woman was admitted to our institution with a 10-day history of visual hallucinations – complaining of dead people and cameras inside her house – with restricted diffusion involving the entire corpus callosum, affecting mainly the genu and the splenium, that can even progress to focal necrosis.\(^3\)

In acute MBD, patients may present with seizures or coma, whereas patients with chronic MBD usually exhibit cognitive deficits, hallucinations, or depression lasting for several months. MBD can also coexist with Wernicke’s encephalopathy, Korsakoff’s syndrome, osmotic demyelination syndrome, and Morel’s laminar necrosis, which are also associated with chronic alcoholism.\(^2\)

Imaging is crucial to the diagnosis. CT may reveal focal or diffuse hypodense lesions involving the genu and the splenium as well as in the periventricular area. Magnetic resonance studies usually depict non-edematous T2-hyperintense lesions, sometimes with focal areas of necrosis. In the acute phase, there can be peripheral enhancement on postcontrast studies, and lesions exhibit restricted diffusion.\(^3\)

References


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Disclosure

The authors report no conflicts of interest.
We read with interest the letter published by Dr. Abayomi concerning our article entitled “Religious beliefs and alcohol control policies: a Brazilian nationwide study.”

We agree that cultural values, personality, and stressful life events can have an important influence on alcohol use. In our study, the population was predominantly composed by Catholics (67.3%), followed by Evangelical Protestants (23.3%). These religious affiliations usually have stronger opinions regarding public policy than do other religious traditions, including advocating for more restrictive alcohol policies.

There are distinct differences in alcohol use between religious traditions, as we reported in a recent article. For instance, Afro-Brazilian religions (i.e., Umbanda) utilize alcohol in their rituals, whereas some Brazilian Protestant Evangelicals forbid its use entirely, whether for religious or non-religious purposes.

With regard to the concepts of spirituality and religiosity and their measurement, we agree that these are distinct constructs, sometimes difficult to distinguish. According to Koenig et al., spirituality is “the personal quest for understanding answers to ultimate questions about life, about meaning and about relationship to the sacred or transcendent, which may (or may not) lead to or arise from the development of religious rituals and the formation of community.” Several authors have examined relationships between spirituality, religiosity, and mental health, with varying results. For example, King et al. investigated associations between a spiritual or religious understanding of life and psychiatric symptoms in 7,403 people in England. They found religious people were similar to those who were neither religious nor spiritual.