Dear Sirs,

Marchiafava-Bignami disease (MBD) is a rare disorder of unknown etiology. Alcoholism is the greatest risk factor for MBD. The disease is characterized by progressive symmetrical demyelination and necrosis of corpus callosum. The clinical features of MBD are non-specific and it presents with a plethora of neuropsychiatric symptoms. The modern diagnosis is almost always based entirely on the magnetic resonance imaging (MRI). There are several indications that this disease may be underdiagnosed. Early diagnosis and treatment of the disease leads to a favorable outcome. We report a case of MBD in a middle-aged man with chronic alcohol abuse who presented with a cluster of neuropsychiatric symptoms.

A 36-year-old gentleman with seven years history of alcohol dependence presented to the psychiatry outpatient department with three months history of behavioral change. There was a history of slowness of all activities, poor oral intake and standing in the same place for few minutes at times. In addition, there was a marked reduction in interaction with family members, slurred incomprehensible speech, and emotional lability. He required assistance in performing all his activities of daily living and occasions of fecal and urinary incontinence were also reported. There were no withdrawal symptoms. Mental status...
hemispheric white matter and basal ganglia. Presence of areas sometimes extending into the genu, and the splenium. on T1-weighted images in the body of the corpus callosum, on T2-phase and FLAIR signal intensity, and hypointense Conventional MRI typically detects lesions as hyperintense scans, with the exception of cases that are characterized by stage. as it is difficult to differentiate from other diseases at an early stage.

MBD is a multifaceted disorder primarily involving the periventricular and subcortical white matter of bilateral frontal and parietal lobe, the genu, rostrum, and splenium of corpus callosum, with thinning of genu and rostrum [Figures 1-4]. The diagnosis of MBD was made based on the clinical presentation of neuropsychiatric symptoms and MRI findings of symmetrical corpus callosal involvement. He was started on parenteral thiamine supplementation up to 1500 mg per day in divided doses and oral lorazepam 2 mg was given at the night for insomnia. Patient was followed up for a period of three months and there was a partial improvement in his cognition and behavioral disturbance. The HMSE score improved to 18/31 from a baseline score of 9/31. He was continued on oral thiamine supplementation.

The diagnosis of MBD was suspected in this patient with history of alcohol dependence who presented with behavioral symptoms along with plethora of neuropsychiatric symptoms such as emotional lability, slowness of movements, gait disturbances, global aphasia, memory disturbances along with fecal and urinary incontinence and MRI imaging confirmed the diagnosis of MBD based on symmetrical corpus callosal involvement, especially seen with T2 weighted images showing hyperintensities of genu, rostrum, and splenium of corpus callosum with thinning of genu and rostrum. Supplementation with parenteral thiamine during hospitalization and later with oral thiamine supplementation led to partial improvement in his cognition and behavioral symptoms at the end of three months follow-up.

MBD was first described in 1903 by the Italian pathologists Amico Bignami and Ettore Marchiafava in three Italian patients with a history of red wine consumption. MBD is rare disease and does not have typical clinical presentation as it is difficult to differentiate from other diseases at an early stage. The corpus callosum appears hypo attenuated on CT scans, with the exception of cases that are characterized by subacute bleeding, in which it may be iso to hyper attenuated. Conventional MRI typically detects lesions as hyperintense on T2-phase and FLAIR signal intensity, and hypointense on T1-weighted images in the body of the corpus callosum, sometimes extending into the genu, and the splenium. Early diagnosis of MBD is typical lesions limited to genu, body and splenium of corpus callosum. It can also affect bilateral cerebral hemispheric white matter and basal ganglia. Presence of areas of diffusion restriction within the involved cortical areas could represent the cytotoxic edema which indicates acute phases of Morel’s laminar cortical necrosis.

Early stage is characterized by diffuse swelling of the corpus callosum in the form of T1 hypo intensity and T2 hyperintensity of corpus callosum. After the acute stage, edematous change subsides and the corpus callosum recovers its normal intensity. In chronic stage, it is characterized by diffuse atrophy of corpus callosum with areas of corpus callosum that appear as T1 hypointense and T2 hyperintense areas confined to genu, body, and splenium of corpus callosum. CT is not useful in diagnosis, while MRI is better in diagnosing and follow-up.

In an alcoholic with abovementioned spectrum of imaging findings, the differentials would be MBD and Wernicke’s encephalopathy. In Wernicke’s encephalopathy, the mammillary bodies will be atrophied and show high signal intensity on T2 weighted images. Also, there will be T2 hyperintensity along the medial thalamus, periaqueductal grey matter.

There is no specific treatment regimen approved for MBD. However, studies have proved that early initiation of treatment with parenteral thiamine has demonstrated a statistically significant outcome when compared with delayed treatment and has improved the prognosis of MBD from frequently fatal to a mortality of less than 8%. The early initiation of treatment within two weeks of symptom onset is the most important predictor of treatment outcome in those treated with thiamine when compared with those with delayed treatment initiation. Although steroids had been tried in treating MBD, it lacks significant results like those observed with treatment with parenteral thiamine. Further studies are required to establish a standard treatment regimen and for better understanding about the disease.

MBD should be considered in patients with alcohol abuse who present with neuropsychiatric symptoms. A high index of suspicion and an early MRI in such patients can facilitate early detection and treatment of MBD. Typical lesions of the corpus callosum can aid in the diagnosis and an early initiation of treatment with parenteral thiamine and multivitamins can facilitate a favorable outcome.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.
Sir,

Given the fact that the research has consistently shown that animates have a special status in evolutionary-based survival processing, have been noted in episodic and semantic memory functions. Studies pointing toward an advantage of animate words over inanimate words (animacy effect), indicative of faster learning and better retention of animate words. Alzheimer's disease (AD) is thought to be intriguing since a handful of studies have reported the vulnerability of animate concepts in pathological aging.

Animacy effects in fluency task performance in early AD and age and gender-matched normal controls (NC) were carried out for the total cohort. While age had no significant correlation for phonemic fluency and confrontation naming were carried for years of education, which was higher for the NC (Mann-Whitney U tests were used to compare age and education significance was kept at P<.05 for all analysis).

The phonemic fluency verbatim responses for chart review. To the diagnosis since data were collected via retrospective study period between 2017 and 2020. Authors were not blinded for analysis. Data analysis was done using Statistical Package for the Social Sciences software version 21. Level of anxiety-depression subscales. Participants with a minimum of Scale 0 to 0.5, and Hospital Anxiety Depression Scale <7 on symptoms, M-ACE score of >85, Clinical Dementia Rating Scale <2, and minimal impairment on activities of daily living were included for the Social Sciences software version 21. Level of anxiety-depression subscales. Participants with a minimum of Scale 0 to 0.5, and Hospital Anxiety Depression Scale <7 on symptoms, M-ACE score of >85, Clinical Dementia Rating Scale <2, and minimal impairment on activities of daily living were included. A review of CT/MRI confirmed cases. J Neurol Neurosurg Psychiatry 2015;27:e149-50.

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