A 53 year-old female patient with history of schizophrenia and systemic arterial hypertension was found in a room in her home with consciousness alteration after methane gas exposure. She was admitted to the Internal Medicine ward with compromised mental status and catatonia. Laboratory and cerebrospinal fluid tests were normal. The standard electroencephalogram showed encephalopathic pattern. T2 and Flair sequences on brain magnetic resonance imaging demonstrated diffuse hyperintensity in subcortical and deep white matter; this hyperintensity was observed bilateral and symmetrically with extension to the internal capsule and post-gadolinium showed no enhancement (Figure 1 and 2 axial). The recent history of methane gas exposure, clinical data, electroencephalogram findings and brain imaging supported a diagnosis of methane gas intoxication. Today the patient persists with motor symptoms and behavioral consequences. She is receiving physical therapy and psychiatric rehabilitation.