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**WHITE MATTER HYPERINTENSITIES, MAJOR AFFECTIVE DISORDERS, AND SUICIDAL BEHAVIOR**

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**Introduction:** White matter hyperintensities (WMHs) may be associated with increased risk of suicidality in subjects with major affective disorders. Unfortunately, they may be frequently confounded by the use of previous medications and duration of illness. Objectives: Although findings from the current literature are quite conflicting, we proposed that WMHs are important markers/endophenotypes of specific subgroups of individuals with major affective disorders such as those at high suicidal risk. Methods: A literature search has been performed aiming to examine the presence and severity of WMHs in patients with major affective disorders, and the association with suicidal behavior. The reference lists of the selected studies were also scanned for additional relevant studies. Results: Based on the Fazekas modified scale, the severity of WMHs may serve as a trait marker of major affective disorders. Several studies reported a significant association between WMHs, in particular periventricular WMHs, major affective disorders, and suicidal behavior. A significantly higher number of suicide attempters were found to have WMHs than non-attempters. Conclusions: WMHs may represent neurobiological markers between the underlying susceptibility and clinical expression of major affective disorders. Clinicians should carefully investigate patients with major affective disorders for the presence of WMHs in order to identify specific subgroups of subjects at-risk for a poor outcome.