Predictors of recurrence of major depressive disorder

ABSTRACT

A total of 201 patients with major depressive disorder from four hospitals in Malaysia were followed up for 5 years to determine the prognostic factors of recurrent major depressive disorder that could potentially contribute to improving the management of MDD patients. For each individual patient, at the time of recruitment as part of a case-control study, information was collected on recent threatening life events, personality and social and occupational functioning, while blood samples were collected to genotype single nucleotide polymorphisms of vitamin D receptor (VDR), zinc transporter-3 (ZnT3), dopamine transporter-1 (DAT1), brain-derived neurotropic factor (BDNF), serotonin receptor 1A (HT1A) and 2A (HT2A) genes. Kaplan-Meier and Cox-regression were used to estimate hazard functions for recurrence of major depressive disorder. Individuals with severe MDD in previous major depressive episodes had five and a half times higher hazard of developing recurrence compared to mild and moderate MDD (HR = 5.565, 95% CI = 1.631–18.994, p = 0.006). Individuals who scored higher on social avoidance had three and a half times higher hazard of recurrence of MDD (HR = 3.525, 95% CI = 1.349–9.209; p = 0.010). There was significant interaction between ApaI +64978C>A single nucleotide polymorphism and severity. The hazard ratio increased by 6.4 times from mild and moderate to severe MDD for A/A genotype while that for C/A genotype increased by 11.3 times. Social avoidance and severity of depression at first episode were prognostic of recurrence. Screening for personality factors at first encounter with MDD patients needs to be considered as part of the clinical practice. For those at risk of recurrence in relation to social avoidance, the psychological intervention prescribed should be customized to focus on this modifiable factor. Prompt and appropriate management of severe MDD is recommended to reduce risk of recurrence.