Efficacy of Propofol Combined with Etomidate for Major Depressive Disorder with Modified Electroconvulsive Therapy and its Effects on Cognitive Function of Patients

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SUMMARY. In this study we investigated the efficacy of propofol combined with etomidate in the treatment of major depressive disorder (MDD) with modified electroconvulsive therapy (MECT) and its effects on cognitive function of patients. Sixty-six patients were randomly divided into propofol, etomidate and propofol combined with etomidate (propofol+etomidate) groups. The MECT was performed once every other day, for 20 days. At 30 min before MECT, the three groups were given propofol, etomidate and propofol plus etomidate, respectively. After treatment, compared with propofol group and etomidate group, in propofol+etomidate group the HAMD-17 scores were significantly decreased (p < 0.05), the MoCA scores were significantly increased (p < 0.05), and the serum MBP and NSE levels were significantly decreased (p < 0.05). In addition, the incidence in propofol+etomidate group was significantly lower than other two groups (p < 0.05). In conclusion, propofol combined with etomidate can enhance the efficacy of MECT for MDD, improve the cognitive function of patients, and reduce the adverse reactions.

KEY WORDS: cognitive function, etomidate, major depressive disorder, modified electroconvulsive therapy, propofol.

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