Short communication

Prophylactic effect of lithium in bipolar affective illness may be related to serotonin transporter genotype

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Abstract:
Serotonin transporter promoter length polymorphism (5-HTTLPR) has been implicated in the pathogenesis of mood disorders and in the therapeutic response to serotonergic drugs. In this study, the 5-HTTLPR was estimated in 67 patients with bipolar mood disorder, receiving lithium carbonate for prophylactic purposes for the period of more than 5 years (mean 15 years). The patients were divided into excellent responders (n = 18), partial responders (n = 35) and poor responders (n = 14). In lithium non-responders, the genotype s/s and the allele s was significantly more frequent than in excellent and partial responders. The obtained results are discussed in view of other studies showing an association of S genotype with worse response to serotonergic drugs. A supposition is made that prophylactic management of bipolar illness can be optimized by defining 5-HTTLPR genotype.

Key words:
lithium prophylaxis, serotonin transporter, 5-HTTLPR, pharmacogenetics