



Influence of aripiprazole on the antidepressant, anxiolytic and cognitive functions of rats

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Abstract:

Recent research has suggested that cognitive disorders are a persistent trait of mental illnesses such as schizophrenia. Cognitive deficits in the course of schizophrenia may be due to the disease and/or drug therapy, especially with old-generation drugs.

Several clinical experiments have indicated the beneficial effects of new-generation antipsychotics on cognitive processes in patients treated for mental disorders.

Aripiprazole is a new, atypical antipsychotic with a unique mechanism of action, which may have positive effects on cognitive functions.

The aim of this study was to investigate the effects of aripiprazole on spatial memory in the Morris water maze and antidepressant activity in the Porsolt test. In addition, we examined whether aripiprazole had any side effects in the chimney test. The behavioral tests showed that aripiprazole improved spatial memory in rats and had antidepressant and anxiolytic effects after a single treatment; however, aripiprazole impaired motor coordination after repeated administration.

We concluded that aripiprazole could be an effective antipsychotic for the treatment of patients with schizophrenia or bipolar disorder who have associated anxiety and cognitive deficits.

Key words:

aripiprazole, cognitive function, animal model, rats
