Article: 0066

Topic: S22 - Symposium 17: Long-term brain effects of antipsychotics – Balancing harm and benefit

The Effect of Antipsychotic Dose-reduction On Cognition

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Cognitive impairment is one of the core features in schizophrenia, which is closely related to functional impairment. Despite tremendous efforts to develop pro-cognitive drugs for schizophrenia, no cognitive enhancer is currently available. Beneficial effects of antipsychotic medication on cognition have remained controversial; in fact, both typical and atypical antipsychotics have been shown to induce cognitive impairment across various domains in healthy subjects as well as patients with schizophrenia. However, data on antipsychotic dosing strategy for improvement of cognitive function have been scarce.

In this presentation, the presenter will review the available evidence showing the relationship between antipsychotic dose and cognitive impairment and discuss antipsychotic dosing strategy to achieve better cognitive function. To date, a body of evidence has suggested that higher dose of antipsychotics or excessive dopaminergic blockade impairs cognitive function in patients with schizophrenia, even treated with atypical antipsychotics. Furthermore, a recent randomized controlled trial demonstrated that dose reduction of risperidone or olanzapine by half improved cognitive function without significantly increasing the risk of relapse or clinical worsening for stable patients with schizophrenia over six months. These results highlight the fact that even atypical antipsychotics can induce cognitive impairment in a dose-dependent fashion, and underscore the need for using the lowest possible dose of typical or atypical antipsychotics to minimize or prevent such cognitive side effects.