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Therapeutic Effect and Adverse Events between Quetiapine and Haloperidol on the Treatment of  
Methamphetamine - Induced Psychosis

**Abstract**

**Background :** Only few double-blind randomized-controlled trials (RCT) with antipsychotic drugs were conducted to examine the treatment of methamphetamine –induced psychosis (MAP). The aims of this study are to compare the antipsychotic and adverse events of quetiapine, an atypical antipsychotic drug, to haloperidol, a standard treatment for primary psychotic disorder, in individuals with MAP.

**Methods :** Eighty individuals with MAP were randomly assigned into two treatment groups, i.e. treatment with quetiapine (n=36) and haloperidol (n=44). Sixty-eight patients (85%) completed the study protocol, i.e. treatment with quetiapine at least 100 mg per day or haloperidol at least 2 mg per day orally once a day for four weeks. The doses were increased every 5 days until no psychotic symptom was observed from the Positive and Negative Syndrome Scale. Common antipsychotic adverse events were checked and documented daily. Data were analyzed by survival analysis with Cox’s proportional regression analysis, general estimating equation and logrank tests.

**Results :** Quetiapine and haloperidol reduced psychotic symptoms in 89% and 84% of MAP individuals, respectively. There were no significant differences between the antipsychotic effects of quetiapine and haloperidol. There was a trend towards fewer extrapyramidal effects in MAP patients treated with quetiapine as compared to those treated with haloperidol.

**Conclusions:** Quetiapine may be used as an antipsychotic treatment for individuals with MAP with comparable therapeutic effects and adverse events to treatment with classical antipsychotic drugs.

**Keywords:** Quetiapine, Haloperidol, Methamphetamine, Psychosis