Abstract

Rationale: The long-term effectiveness of olanzapine and aripiprazole in real clinical conditions at flexible doses in patients after hospital discharge has not been evaluated yet.

Objectives: This study was a multicenter retrospective cohort study. Patients with schizophrenia (n=398) were prescribed olanzapine (n=303) or aripiprazole (n=95) at hospital discharge. The continuation of olanzapine or aripiprazole at 26, 52, or 104 weeks after the hospital discharge were compared using a Cox proportional hazards model and adjusted for possible confounders.

Results: The Kaplan-Meier survival curves revealed that the continuation of olanzapine at 26 (P=0.001) and 52 weeks (P=0.018) was significantly higher than that of aripiprazole but not at 104 weeks. Olanzapine was better than aripiprazole in efficacy at 26 (hazard ratio: 0.321, 95% confidence interval: 0.159–0.645, P=0.001), 52 (hazard ratio: 0.405, 95% confidence interval: 0.209–0.786, P=0.008), and 104 weeks (hazard ratio: 0.438, 95% confidence interval: 0.246–0.780, P=0.005). Aripiprazole was better than olanzapine in tolerability at 104 weeks (hazard ratio: 4.574, 95% confidence interval: 1.415–14.787, P=0.011). Rates after two years continuation of olanzapine and aripiprazole were not significantly different in patients with less than five years' duration of illness, but olanzapine was more commonly maintained for more than two years in those patients who had been ill for over five years' due to its greater efficacy.

Conclusion: Olanzapine treatment showed better continuation rates at 26 and 52 after hospital discharge than aripiprazole, whereas maintenance with the two antipsychotics did not differ significantly at 104 weeks, due reduced tolerability of long-term olanzapine treatment.

Keywords: schizophrenia, olanzapine, aripiprazole, long-term efficacy, long-term tolerability, Kaplan-Meier,

Cox proportional hazards model