Ultra-High-Dose Long-Acting Injectable Aripiprazole in Chronic Refractory Schizophrenia: A Case Report

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Abstract

An intramuscular long-acting injectable (LAI) aripiprazole administered once a month as a single injection into the gluteal muscle is increasingly appreciated in the course of a long-term maintenance treatment of schizophrenia. Due to efficacy in delaying and decreasing relapse, low rates of feared side effects including extrapyramidal, metabolic and cardiovascular disturbances, aripiprazole LAI has the potential to significantly improve adherence. According to the prescribing information, the maximal starting as well as maintenance dose of aripiprazole LAI is restricted to 400 mg following a 26-day interval between the single doses.

We present a case of a 72-year-old female inpatient with an acute exacerbation of chronic refractory schizophrenia treated with aripiprazole LAI (ABILIFY MAINTENA) beyond the officially approved dose range (up to 1200 mg per month). Applying this ultra-high-dose antipsychotic maintenance treatment over 12 weeks, we observed a clinically meaningful reduction of the initially severe psychopathological phenomena with primarily positive symptoms (a total-score reduction from 111 to 75 on the Positive and Negative Syndrome Scale; PANSS). Despite multi-morbidity and rather advanced age of the patient, no objectionable adverse events, which were measured by The Dosage Record Treatment Emergent Symptom Scale (DOTES) and The Barnes Akathisia Rating Scale (BARS), occurred during the treatment.

Our safe experience with an almost threefold higher monthly dose might encourage researchers to further investigate the efficacy, tolerability as well as handling of highly dosed aripiprazole LAI as a maintenance treatment option in refractory schizophrenia.

Case Report

We report on a 72-years-old female inpatient (66 kg) suffering from chronic refractory schizophrenia according to the current versions of The International Statistical Classification of Disease and Related Health Problems (ICD-10) [8] and The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [9]. In spite of numerous antipsychotic treatment attempts including oral- as well as intramuscular administration of both first- and second-generation antipsychotics, co-medication with benzodiazepines and mood stabilizers, accompanied by thorough psychotherapeutic and psychosocial support, she remained refractory, exhibiting primarily positive symptoms such as excessive persecutory delusions. Consequently, she required frequent hospitalizations, mostly because of acute self-endangerment with extensive self-care deficit in the context of relapse or non-adherence. Eventually, olanzapine LAI 405 mg administered once a month at the outpatient unit of the Department of Psychiatry and Psychotherapy, Medical University of Vienna, Austria kept her psychopathology at a stable level without a...
Discussion

To our knowledge, this is the first report on an ultra-high-dose aripiprazole LAI (ABILIFY MAINTENA up to 1200 mg once monthly) as off-label intramuscular maintenance treatment in chronic refractory schizophrenia. The medication did not lead to extrapyramidal, metabolic or cardiovascular side effects as well as other adverse events, in a 72-years old patient with a number of comorbidities (arterial hypertension, mitral valve insufficiency, post-thrombotic syndrome).

Since we observed a clinically meaningful reduction of the initially severe psychotic symptoms (PANSS total-score reduction from 111 to 75), our safe experience with almost threefold higher monthly dose might encourage researchers to further investigate the efficacy and tolerability of a high dose aripiprazole LAI as a maintenance treatment option for refractory schizophrenia. Furthermore, since two single intramuscular injections are necessary to apply 600 mg or 800 mg of aripiprazole LAI, which is challenging when administered once or twice monthly, a handing-improvement would be highly appreciated.

References