Case report: efficacy of Clozapine and Aripiprazole LAI on drug-resistant schizophrenia

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Introduction
Schizophrenia is a mental illness characterized by chronicity, positive symptoms (such as delusions, hallucinations, disorganized speech), psychotic symptoms or negative symptoms, and progressive global functional impairment. The lifetime prevalence in general population is around 0.3-0.7% (DSM-5). Treatment-resistant schizophrenia has been defined as resistance to at least 1-3 antipsychotic treatments of 4-6 weeks each with the equivalent daily doses of chlorpromazine 400-1000mg, while clinical response has been defined as a decrease of at least 20% in Positive and Negative Syndrome Scale (PANNS) or Brief Psychiatric Rating Scale (BPRS). Clozapine is the treatment of choice in treatment-resistant schizophrenia, but 30-50% of patients with resistant schizophrenia have a poor response to clozapine too or do not tolerate drug-associated adverse effects. These are the reasons why clozapine augmentation with other antipsychotics seems to be a good therapeutic option. Association between Aripiprazole and Clozapine is well documented and has shown promising results in a number of trials. The use of LAIs (Long Acting Injectable) in the treatment of schizophrenia has spread in the past few years. Aripiprazole LAI at the dose of 300-400 mg has shown a very good tolerability, a linear pharmacokinetic profile (comparable with a daily dose of 10-30 mg), a quicker absorption and a superior biodisponibility.

Discussion and conclusions
In selected cases of treatment-resistant schizophrenia, the combined use of Clozapine at mid/low doses and Aripiprazole LAI, until now never documented in scientific literature, might be an effective therapeutic strategy.

Materials e Methods

Presentation of the clinical case
Mr. Z is a 21-year-old Caucasian male affected by schizophrenia since age 18. The patient does not present with any other significant pathology. He was referred to psychiatric services for auditory hallucinations (both male and female unknown voices, commenting actions or imperatives), poor affective modulation (perplexity), ideas of influence. During the first three years of illness of the patient, the use of numerous typical and atypical antipsychotics (both orally and intramuscularly) did not produce any significant improvement. The patient continued to show a florid positive symptomatology associated with an important social isolation, demonstrated by high scores at both PANSS and BPRS ( 80 and 70 respectively). The drug-resistance of Mr. Z allowed the use of Clozapine 300 mg/die. This treatment brought to a partial improvement of the symptoms (PANSS = 70, BPRS = 60) but the onset of side effects determined the need of reducing the dose to 150 mg/die.

We therefore decided to associate Aripiprazole LAI 400 mg/month and Clozapine 150 mg/die.

Results

Association between Aripiprazole LAI 400 mg/month and Clozapine 150 mg/die brought to a gradual improvement of symptomatology and scores of PANSS and BPRS scales (shown in the table) without side effects.

Discussion and conclusions
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Bibliography

1. DSM-5.