

## Case Report

# Clozapine and Aripiprazole Association in Severe Psychosis: A Case Study

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**Abstract**

Severe psychosis is an important issue to prescribers, often leading to polypharmacy. In some cases, association between two or more anti-psychotics is required. However, there is little research regarding which associations are both safer and effective, and which might lead to unwanted and potentially life threatening side effects, such as malignant neuroleptic syndrome. In the present case, a successful association between clozapine and aripiprazole is displayed.

**CASE PRESENTATION****Patient case and research findings**

A 40 year old patient is admitted in the hospital with severe psychosis. Symptoms had started two years before admission, with persecutory delusion, pseudo- hallucinations, and gross behavior disorganization. However, due to religious taboo, it took the patient's family about two years to bring her to medical attention, when she started to display violent behavior.

The patient was immediately admitted in the hospital, and had administered 10 mg of haloperidol, that was later increased up to 20 mg/day. Due to extra-pyramidal side effects, 2 mg of biperiden, an anti-cholinergic agent, was introduced, as well as 2 mg of clonazepam, for sedation.

During hospitalization, every possible cause for organic psychosis was ruled out, and the patient was diagnosed as a late case of paranoid schizophrenia.

In the course of two months, the patient showed no signs of improvement of her condition. She still had delusions, but didn't react as violently as before, probably due to neurolepsy, and blunt affect. However, every time she saw her family, she would react violently towards them, since being harmed by them was the main theme of the patient's delusion.

Several medications were used in monotherapy, such as quetiapine, risperidone, olanzapine and clozapine, with no signs of improvement in the patient's condition. Association between 900 mg of clozapine and weekly sections of electro shock therapy was tried, with no success whatsoever. Finally, with the introduction of 30 mg of aripiprazole, the patient started to slowly show some improvement. She would not react violently to her relatives anymore. She was ultimately discharged after eight months, and continued her treatment outside the hospital. There

were a few signs of delusions left, but the patient achieved social remission, and went back to her family.

**DISCUSSION**

Clozapine is widely regarded as the most powerful anti-psychotic drug there is. However, it is not so effective in monotherapy in 50-70 % of resistant schizophrenia patients [1]. In those cases, polypharmacy is adopted.

Since clozapine has major and possibly life threatening side effects, such as Agranulocytosis, seizures, appetites increase, liver toxicity, increase of type two diabetes [2], physicians should take special care when combining any drug with it.

The combined use of clozapine with other anti-psychotic drugs usually results in increase of clinical effects, but also in side effects. For example, Chong S.A. found an increase in leukopenia, in the association between clozapine and risperidone [3].

There are very few studies accessing the association of clozapine and aripiprazole. Most of them showed important clinical benefits to the patients [4,5], and very few side effects. Besides, there are studies pointing out that some known side effects of clozapine could be decreased with the association of aripiprazole, such as weight gain and sedation [5].

It could be theorized that, since aripiprazole is not a dopamine blocker, such as other anti-psychotic drugs, it could work as a stabilizer for the dopamine tracts in the central nervous system, preventing dopamine levels to drop to low [5].

**CONCLUSION**

Clozapine is widely regarded as the most powerful anti-psychotic drug available for prescribers. However, it does not work in all chronic schizophrenic patients. For those that didn't respond to, nor couldn't tolerate high dosages of clozapine,

association with another second generation anti-psychotic drug should be encouraged.

Aripiprazole rises as a good alternative for association with clozapine, due to remarkable increase of anti-psychotic power, augmentation of control of the negative symptoms, and irrelevant increase in side effects.

## REFERENCES

1. De Risio A, Pancheri A, Simonetti G, Giannarelli D, Stefanutto L, Gentile B. Add-on of aripiprazole improves outcome in clozapine-resistant schizophrenia. *Prog Neuropsychopharmacol Biol Psychiatry*. 2011; 35: 1112-1116.
2. Cordioli AV. *Psicofármacos Consulta Rápida*, 2nd edition. Porto Alegre, RS, Brazil, Artmed Editora, 2000: 80-85.
3. Henna NJ. Potencialização da clozapina: eficácia e segurança. *Revista de Psiquiatria Clinica*. 2002; 29: 104-105.
4. Muscatello MR, Bruno A, Pandolfo G, Mico U, Scimeca G, Nardo FD, et al. Effect of aripiprazole augmentation of clozapine in schizophrenia: a double blind, placebo controlled study. *Schizophr Res*. 2011; 127: 93-99.
5. Benedetti A, Di Paolo A, Lastella M, Casamassima F, Candiracci C, Litta A, et al. Augmentation of clozapine with aripiprazole in severe psychotic bipolar and schizoaffective disorders: a pilot study. *Clin Pract Epidemiol Ment Health*. 2010; 6: 30-35.

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