

ARIPRAZOLE LONG-ACTING INJECTABLE FOR AN ELDERLY PATIENT WITH DELUSIONAL DISORDER AND MILD DEMENTIA

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INTRODUCTION

When the delusion first appears in the elderly, delusional disorder, the dementia process, and even very late-onset schizophrenia are all possible differential diagnoses and may overlap in some cases. The similarities between the above diagnoses pose a challenge to psychiatrists, as higher doses of antipsychotic drugs are commonly used in the treatment of delusional disorder/ schizophrenia compared to delusions linked to dementia (Lo et al. 1997). When it comes to delusional disorder, patients generally lack insight and often avoid psychiatrists. Antipsychotic drugs remain the mainstay of treatment, although a lack of insight and non-adherence typically limit success (Mews & Quante 2013). Here, we report an elderly patient initially diagnosed as dementia with psychotic symptoms, and then the diagnosis was revised to delusional disorder with mild dementia. The patient initially received rivastigmine with low-dose antipsychotics but appeared to benefit after using aripiprazole long-acting injection (LAI).

CASE REPORT

A 67-year-old woman was admitted to the acute psychiatric ward when she first developed delusion of being stolen and aggressive behavior. According to the patient, her neighbors, friends, and family conspired to occupy her house and take her belongings. Her daughter expressed continued concerns about the delusion she was displaying. Apart from the delusion and aggressive behavior, the psychiatric examination revealed delusion-related dysthymia and a decline in memory but with no apparent hallucinatory symptoms.

A series of examinations were arranged. The results of complete blood count, glucose level, renal and liver function tests, serologic tests for syphilis, vitamin B12 and folate levels, and thyroid function tests were within normal limits. Brain magnetic resonance imaging scan showed mild atrophy with subcortical white matter small vessel ischemic changes. At that time, the Cognitive Abilities Screening Instrument score was 61 (cutoff score 70), and the global rating was 0.5 on the Clinical Dementia Rating scale.

She was diagnosed as having dementia with psychotic symptoms and was treated with flupentixol 0.5 mg twice daily, quetiapine 25 mg before sleep, and rivastigmine transdermal patch (9.5 mg/24h). After a 2-week trial, treatment with these regimens resulted in limited improvement in her delusion and aggression, and she experienced a side effect of daytime sleepiness.

Another possible diagnosis we thought for this patient was a delusional disorder coexisting with mild dementia. We started to use aripiprazole 15 mg daily combined with rivastigmine transdermal patch. After 1-week, her delusion became less fixed, and the aggression decreased.

Unfortunately, the patient began to deny the need for medication and refused treatment with the threat of stopping eating if the oral drug was forced. She was then given a 400 mg aripiprazole long-acting injectable (LAI) formulation combined with the rivastigmine transdermal patch. At the end of the first injection (1 month later), she described only minimal delusion with a marked improvement in memory. She was then discharged and continued outpatient treatment with aripiprazole LAI and rivastigmine transdermal patch for one year without relapse of delusion.

DISCUSSION

In the diagnosis, this patient was difficult to differentiate between dementia with psychotic symptoms and delusional disorder with mild dementia. This patient who developed progressive delusion does not seem compatible with the seriousness of the cognitive decline, and the treatment of her delusion requiring a comparatively higher dose of antipsychotics, implying a delusional disorder with mild dementia is probably the appropriate diagnosis for this patient.

The literature on the treatment of the delusional disorder is mainly limited to case reports and small case series (Mews & Quante 2013). Antipsychotic drugs remain the treatment of choice, with approximately 35% to 50% of patients responding, although patients tend to lack insight, and non-adherence is a significant barrier to treatment (Mews & Quante 2013, Munoz-Negro & Cervilla 2016). Previous literature has suggested that delusional disorder responds better to pimozide treat-

ment (Munro & Mok 1995). A meta-analysis has indicated that typical antipsychotics have slightly better efficacy for delusional disorder than atypical agents (Munoz-Negro & Cervilla 2016). Still, more recent work suggests that all antipsychotics are equally effective after considering adherence to treatment (Mews & Quante 2013). Aripiprazole was chosen for this patient because of its reported qualities of being well tolerated with a low potential for extrapyramidal symptoms in the elderly population (Coley et al. 2009) and because of the availability, if necessary, of an LAI formulation to ensure the adherence to treatment.

Several case reports providing information on the treatment of delusional disorder with aripiprazole (Diefenderfer et al. 2018). Also, aripiprazole has been used to treat delusions in the context of other specific mental illnesses, including obsessive-compulsive disorder, olfactory reference syndrome, and delusional parasitosis (Iannuzzi et al. 2019). In addition to the oral formulation of aripiprazole, the drug is available as an LAI formulation, which can resolve non-compliance with oral medication. A case report has mentioned the successful treatment of a 29-year-old man with delusional disorder using aripiprazole LAI (Diefenderfer et al. 2018). Our report adds value to the literature that aripiprazole LAI may also be used in elderly patients with delusional disorder.

CONCLUSION

We conclude that when the symptoms of delusion and cognitive decline are present in an elder, except for dementia with psychotic symptoms, be aware that a delusional disorder with dementia may be present. Also, aripiprazole LAI could be considered to treat this type of patient in case of non-compliance with treatment. Since the United States Food and Drug Administration has issued a separate warning regarding the increased risk of mortality in elderly patients with dementia treated with atypical antipsychotics (Madhusoodanan et al. 2007), including aripiprazole, a thorough discussion of the risks and benefits of using aripiprazole LAI in

delusional disorder with dementia should be led by the clinician with the patient and caregivers.

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All authors made equal contribution to this case report in terms of drafting, writing, obtaining the patient's consent, and revising the paper.

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