



# Aripiprazole in Delusional Disorder

Halide Duvar<sup>1</sup>, Cem Şengül<sup>2</sup>, Hasan Herken<sup>2</sup>

<sup>1</sup>Kastamonu State Hospital, Department of Psychiatry, Kastamonu, Türkiye

<sup>2</sup>Pamukkale University, Faculty of Medicine, Department of Psychiatry, Denizli, Türkiye

Eur J Gen Med 2010;7(4):433-435

Received: 25.05.2009

Accepted: 29.04.2010

## ABSTRACT

Though it has been known for a long time, due to the fact that the controlled studies are limited and the disorder is uncommon, case reports have been important supporting the data of the treatments. In general, depending on whether the patient used drug before and considering the effects and side effects of the drugs the first choice in the treatment is antipsychotic drugs. New atypical antipsychotic agents are preferred for their relatively less side effects and higher drug adaptation. We aimed to report a case of delusional disorder (jealous type) which did not respond to different atypical antipsychotic agents previously but shows a prognostic improvement by aripiprazole of 30mg/day. Aripiprazole may be an effective option for the treatment of delusional disorder, with few side effects, high drug compliance and efficacy.

**Key words:** Delusional disorder, aripiprazole, treatment

## Sanrısıl Bozuklukta Aripiprazol

Sanrısıl bozukluk uzun zamandır bilinmesine karşın, hastalığın çok yaygın olmaması sebebi ile kontrollü çalışmalar kısıtlıdır ve tedavisinde vaka sunumlarından elde edilen veriler önem arz etmektedir. Genel olarak sanrısıl bozukluk tedavisinde hastanın daha önce kullanmış olduğu ilaçlar, ilacın etkileri ve yan etkileri göz önüne alınarak antipsikotiklerin kullanılması ilk tercihtir. Son zamanlarda yeni kuşak antipsikotik ajanlar düşük yan etki profilleri ve ilaç uyumlarının yüksek olması sebebi ile daha fazla tercih edilmektedirler. Biz bu sunumda daha önce çeşitli atipik antipsikotik ilaçlara yanıt vermeyen ancak 30mg/gün aripiprazol ile belirgin düzelme gözlenen bir sanrısıl bozukluk (kıskançlık tipi) olgusunu sunmayı amaçladık. Aripiprazol düşük yan etki profili, yüksek ilaç uyumu ve etkinliği ile sanrısıl bozukluk tedavisinde faydalı bir tedavi seçeneği olabilir.

**Anahtar kelimeler:** Sanrısıl bozukluk, aripiprazol, tedavi

**Correspondence:** Cem Şengül  
Pamukkale Üniversitesi Tıp Fakültesi,  
Psikiyatri AD, Denizli, Türkiye  
E-mail: acemsen@gmail.com

## INTRODUCTION

Delusional disorder which was referred as paranoid disorder in the past, characterized clinically by one or more sustaining and persistent delusions. This disorder is a psychotic condition with systematic delusions that may relate with real life, with significant impact on the patient's life, and seen relatively infrequently (1). Even though it has been recognized for a long time, it is one of the mental disorders most difficult to treat. In general, the first choice in therapy is antipsychotic drugs. Drug choice depends, as in schizophrenia, on the patient's previous drug uses and beneficial effects or side effects of the drug. New antipsychotics may be preferred for their relative paucity of side effects in the treatment of delusional disorder, and for higher drug compliance in patients (2). There are no controlled studies conducted with aripiprazole in this area; however, case reports presented by Myers and Ruiz, and Rocha and Hara report that delusional disorder responds well to aripiprazole (3,4). This case presentation discusses the efficacy of aripiprazole in a delusional disorder (jealous type) that did not respond previously to two different atypical antipsychotic agents.

## CASE

A 64 year old woman is housewife and married. The patient thinks her husband is cheating on her and is going through marital problems. After a fight caused by her delusions, her husband attempted a suicide and was hospitalized in a psychiatry clinic for 9 days. Beside these jealousy ideas, she also complained of being unhappy, hopeless, and not getting any pleasure out of life. She seemed exhausted and depressive at the psychological status assessment. Her speech was slowed and she had psychomotor retardation. Her mood was depressive, she had anhedonia and apathy. Her thought content had delusions of jealousy that her husband was cheating on her. The patient was diagnosed with delusional disorder (jealousy type) accompanied with major depressive disorder. The patient was initiated on sertraline 50 mg/day and olanzapine 15 mg/day. The treatment was discontinued due to the patient's complaints continuing for 2 months in spite of the treatment, and weight gain, so, risperidone 4 mg/day was started. The patient experienced EPS signs including rigidity and tremor, and her complaints continued; then the patient was hospitalized in our clinic. Routine complete blood count, biochemistry, thyroid function tests, B12 and folic acid levels were

obtained. Cranial MRI was performed. Her test results had TSH of 0.158 $\mu$ IU/mL (0,27-4,2 $\mu$ IU/mL), therefore an endocrinology consultation was requested. Thyroid USG was performed and a hypoactive nodule was detected in the right lobe. Thyroid scan was performed, and results were normal, a follow-up period without drugs was suggested by endocrinologists. Cranial MRI was normal. The patient continued on risperidone 4 mg/day for 2 months, but her complaints was not resolved; and she did not want to use the drug because of extra pyramidal side effects. Her drugs were replaced with venlafaxine and aripiprazole. Venlafaxine was titrated up to dose of 225 mg/day, and aripiprazole of 30 mg/day. After 15 days of treatment, the patient's clinical picture resolved and she was discharged to be followed-up on outpatient status. The patient used aripiprazole 30 mg/day for 3 months. Follow up visits were scheduled for each 2 weeks. The dose was reduced to 10 mg/day because of the progressive decrease in delusions of the patient. Follow up visits were prolonged to each month and aripiprazole 10mg/day was continued for 1,5 year. Patient does not have jealousy delusions at present and can function normally.

## DISCUSSION

Antipsychotic drugs are widely used in the treatment of relatively difficult-to-treat and long acting delusional disorder. The efficiency of newly discovered antipsychotics in this disorder is mostly based on case reports. It is reported that atypical antipsychotics are effective in various types of delusional disorder. Cases treated with risperidone, quetiapine and olanzapine were reported to benefit from treatment with these drugs (5,6,7). In a review article discussing new developments in the treatment of delusional disorder, Manschreck and Kahn stated that with the introduction of atypical antipsychotics the treatment of delusional disorder is easier than before, and that clinicians have new options (2). Aripiprazole is a new antipsychotic with partial agonistic effect on D2, D3 and 5 HT1A receptors and antagonistic effect on 5HT2A (8,9,10). It was stated that, due to partial agonistic activity and weak binding to other receptors, it is effective in the treatment of negative and positive symptoms of schizophrenia, causes relatively few extra pyramidal symptoms and weight gain. It does not seem to increase prolactin levels, prolong QTc interval or change plasma glucose concentration

and lipid profiles (11, 12). It was approved by the FDA (Federal Drug Administration) for schizophrenia, and is used throughout the world. This drug was compared in schizophrenia patients with risperidone and olanzapine, and was shown to have a comparable efficacy to these drugs (13,14). Myers and Ruiz's report on treatment of a 17 year old female patient with delusional disorder erotomanic type was the first report showing the effect of aripiprazole in delusional disorder (3). In this case, patient recovered after an 8-week long period by treatment with aripiprazole combined with psychotherapy (3). Rocha and Hara reported a case of 85 year old woman with delusional parasitosis and Dimopoulos et al. reported a case of 51 year old woman with delusional disorder (somatic type) successfully treated with aripiprazole (4,15). Our case was the fourth one in the literature mentioning the role of aripiprazole in delusional disorder. Our case did not benefit from olanzapine treatment, despite administered with an adequate dosage and proper duration of treatment, and moreover side effect of weight gain was observed. Risperidone treatment could not be administered in effective dosage due to extra pyramidal side effects, and treatment had to be discontinued. Aripiprazole was preferred because of efficacy and paucity of side effects. Our patient was completely cured with aripiprazole and side effects such as weight gain and extra pyramidal side effects, previously seen on olanzapine and risperidone treatment, were not seen.

In conclusion, aripiprazole may be an effective treatment option in delusional disorder, with few side effects, high drug compliance and efficacy. Further reports are needed to confirm our finding.

#### REFERENCES

1. Abdel-Hamid M, Brüne M. Neuropsychological aspects of delusional disorder. *Curr Psychiatry Rep* 2008;10:229-34.
2. Manschreck TC, Khan NL: Recent advances in the treatment of delusional disorder. *Can J Psychiatry* 2006;51:114-9.
3. Myers WC, Ruiz R: Aripiprazole and psychotherapy for delusional disorder, erotomanic type. *J Am Acad Child Adolesc Psychiatry* 2004;43:1069-70.
4. Rocha FL, Hara C. Aripiprazole in delusional parasitosis: Case report. *Prog Neuropsychopharmacol Biol Psychiatry* 2007;31:784-6.
5. Freudenmann RW. A case of delusional parasitosis in severe heart failure. Olanzapine within the framework of a multimodal therapy. *Nervenarzt* 2003;74: 591-5.
6. Chae BJ, Kang BJ. Quetiapine for hypersexuality and delusional jealousy after stroke. *J Clin Psychopharmacol* 2006;26:331-2.
7. Kitamura H. A case of somatic delusional disorder that responded to treatment with risperidone. *Psychiatry Clin Neurosci.* 1997;51:337.
8. Monkul SE, Akdede BB. Aripiprazole: A new atypical antipsychotic drug. *Bulletin of Clinical Psychopharmacology* 2005;15:198-203.
9. Soygür H. Pharmacokinetic and pharmacodynamic characteristics of aripiprazole. *Bulletin of Clinical Psychopharmacology* 2008;18(Suppl. 1):1-6.
10. Lawler CP, Prioleau C, Lewis MM, et al. Interactions of the novel antipsychotic aripiprazole (OPC-14597) with dopamine and serotonin receptor subtypes. *Neuropsychopharmacology* 1999;20:612-27.
11. Hirose T, Uwahodo Y, Yamada S, et al. Mechanism of action of aripiprazole predicts clinical efficacy and a favourable side-effect profile. *J Psychopharmacol* 2004;18:375-83.
12. Alptekin K. New generation antipsychotics in the treatment of schizophrenia: dopamine stabilizing agents and aripiprazole. *Bulletin of Clinical Psychopharmacology* 2008;18(Suppl. 1):21-6.
13. Potkin SG, Saha AR. Aripiprazole, an antipsychotic with a novel mechanism of action, and risperidone vs placebo in patients with schizophrenia and schizoaffective disorder. *Arch Gen Psychiatry* 2003;60:681-90.
14. Chrzanowski WK, Marcus RN. Effectiveness of long-term aripiprazole therapy in patients with acutely relapsing or chronic, stable schizophrenia: a 52-week, open-label comparison with olanzapine. *Psychopharmacology (Berl)* 2006;189:259-66.
15. Dimopoulos N, Mitsonis C, Psarra V. Delusional disorder, somatic type treated with aripiprazole mirtazapine combination. *J Psychopharmacol* 2008;22:812-4.