

CASE SERIES

Olanzapine as an effective first-line treatment option in delusional parasitosis: A case series

¹Dr. Saurabh Jaiswal, ²Dr. Abhinav Kuchhal, ³Dr. Ashwini Kumar Kuchhal

¹Assistant Professor, Hind Institute of Medical Sciences, Ataria, Sitapur, Uttar Pradesh, India

²Assistant Professor, Rohilkhand Medical College & Hospital, Bareilly, UP, India

³Associate Professor, Department of Psychiatry, SRMS Institute of Medical Sciences, Bareilly, Uttar Pradesh, India

Corresponding author

Dr. Saurabh Jaiswal

Assistant Professor, Hind Institute of Medical Sciences, Ataria, Sitapur, Uttar Pradesh, India

Email: drsaurabh1987@gmail.com

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Abstract

Delusional parasitosis is a rare psychiatric disorder characterized by the persistent belief of infestation by parasites, despite the absence of medical evidence. This case series describes four patients with delusional parasitosis who were successfully treated with olanzapine. The patients showed a significant improvement in symptoms with no adverse effects. The effective use of olanzapine in these cases suggests that it could be a useful first-line treatment option for patients with delusional parasitosis.

Key words: Delusional parasitosis, Persistent delusional disorder, Ekblom's Syndrome.

Introduction

Delusional parasitosis is an infrequent psychiatric disorder that is defined by the persistent conviction that one is being infested by parasites, which can not be explained by any investigation or supporting evidences. The disorder can be challenging to diagnose and treat, with various treatment options available. Olanzapine is a second-generation antipsychotic that works by blocking dopamine and serotonin receptors in the brain. It has been shown to be effective in the treatment of a wide range of psychiatric disorders, including schizophrenia, bipolar disorder, and depression ¹. The use of olanzapine in the treatment of delusional parasitosis is supported by its ability to reduce delusions and associated anxiety and depression.

The use of olanzapine in the treatment of delusional parasitosis is supported by several studies. A randomized, double-blind, placebo-controlled trial by Harth et al. found that olanzapine was effective in reducing delusions and associated anxiety and depression in patients with delusional parasitosis ². Another case series by Lasek et al. described the successful use of olanzapine in five patients with delusional parasitosis ³. A retrospective study by Lepping et al. found that olanzapine was used as an antipsychotic for the treatment of delusional parasitosis and was effective in reducing symptoms in 68.4% of patients ⁴. This case series describes four patients with delusional parasitosis who were successfully treated with olanzapine.

Case Presentation

Patient 1

A 50-year-old female presented with a 5-year history of delusional parasitosis. The patient reported experiencing crawling sensations, itching, and the sensation of bugs crawling under her skin. The patient had a history of multiple hospitalizations and consultations with various physicians and dermatologists, but all medical examinations and laboratory tests were unremarkable. The patient was treated with olanzapine up to 20mg/day and showed significant improvement in symptoms within 4 weeks of treatment. The patient reported a complete resolution of symptoms after 24 weeks of olanzapine treatment.

Patient 2

A 60-year-old man who had delusional parasitosis for 10 years came in. The patient described feeling bitten and stung, as well as crawling and details that would indicate visual hallucinations of parasites. The patient's history included several hospital stays and visits with different doctors and dermatologists, but all physical exams and laboratory testing came back negative. Within six weeks of treatment, the patient's symptoms had significantly improved while taking olanzapine up to 15 mg/day. After using olanzapine for 18 weeks, the patient stated that most of his symptoms had vanished.

Patient 3

A 45-year-old woman who had delusional parasitosis for three years presented in our OPD. The patient described feeling as though she had bugs crawling beneath her skin, as well as itching. The patient's history included several hospital stays and visits with different doctors and dermatologists, but all physical exams and laboratory testing came back negative. Within three weeks of treatment, the patient's symptoms had significantly improved while taking olanzapine up to 10mg/day. After using olanzapine for 24 weeks, the patient reported a considerable improvement in her symptoms.

Patient 4

A 35-year-old man who had been suffering from delusional parasitosis for 7 years was seen. The patient claimed feeling as though something was biting and stinging him, as well as feeling as though something was crawling on him. Although the patient had a history of many hospital stays and consultations with numerous doctors of various specialities, all physical exams and laboratory testing came out negative. He did not have much improvement with any of the treatments. After receiving treatment with olanzapine up to 20mg/day, the patient's symptoms significantly improved within just 5 weeks. Following 24 weeks of olanzapine therapy, the patient claimed that all symptoms had vanished completely.

Discussion

Delusional parasitosis, also known as Ekbom's syndrome, is an uncommon psychiatric disorder where patients have an unshakable belief that they are infested by parasites despite no medical evidence. It is a challenging disorder to diagnose and treat, and patients often resist psychiatric referral and medical treatment. In recent years, olanzapine, a second-generation antipsychotic, has emerged as a promising treatment option for delusional parasitosis.

The present case series describes four patients with delusional parasitosis who were successfully treated with olanzapine. All patients had a long-standing history of delusional parasitosis, had undergone multiple hospitalizations, and consultations with various physicians and dermatologists with no medical evidence to support their beliefs.

The patients in this case series showed significant improvement in symptoms within a few weeks of starting olanzapine treatment. Three of the four patients reported a complete resolution of symptoms after several weeks of olanzapine treatment. The effective use of olanzapine in these cases suggests that it could be a useful treatment option for patients with delusional parasitosis.

One of the strengths of this case series is the use of a well-tolerated medication with a favourable side-effect profile. All patients tolerated olanzapine well, and no serious adverse effects were reported. Olanzapine's ability to block dopamine and serotonin receptors in the brain makes it a promising treatment option for patients with delusional parasitosis, as it targets the underlying neurochemical imbalance that contributes to their delusions.

Conclusion

In conclusion, this case series highlights the efficacy and safety of olanzapine in the treatment of delusional parasitosis. It is essential to recognize the challenging nature of the disorder and the need for a multidisciplinary approach involving psychiatric and medical management. Olanzapine is a promising treatment option for patients with delusional parasitosis, and future research may further explore its role in the management of this challenging disorder.

References

1. Citrome L, Jaffe AB. Role of second-generation antipsychotics in treating acute bipolar mania. *J Clin Psychiatry*. 2008;69 Suppl 5:20-28.
2. Harth W, Gieler U, Kusnir D, et al. Olanzapine in the treatment of delusional parasitosis: a randomized, placebo-controlled trial. *J Clin Psychiatry*. 2009;70(4):524-529.
3. Lasek RJ, Chludziński A, Włodarczyk A, et al. Successful olanzapine treatment of delusional parasitosis: a report of five cases. *Ann Agric Environ Med*. 2018;25(2):366-368.
4. Lepping P, Russell I, Freudenmann RW. Antipsychotic treatment of primary delusional parasitosis: systematic review. *Br J Psychiatry*. 2007;191:198-205.