

FPIN's Help Desk Answers

Pharmacologic Treatment of Borderline Personality Disorder

Justin D. Parker, MD, and Aimen Naeem, MD

Southern Illinois University Decatur Family Medicine Residency Program, Decatur, Illinois

Clinical Question

Are any medications effective in the treatment of borderline personality disorder?

Evidence-Based Answer

There is no pharmacotherapy regimen that improves the overall symptoms of borderline personality disorder. When used for six months or less, antipsychotics can improve paranoia, dissociation, mood lability, anger, and global functioning. (Strength of Recommendation [SOR]: B; based on a meta-analysis of randomized controlled trials [RCTs].) When used for six months or less, aripiprazole (Abilify), olanzapine (Zyprexa), lamotrigine (Lamictal), topiramate (Topamax), omega-3 fatty acids, and valproate (Depacon) can decrease anger, anxiety, depression, and impulsivity. (SOR: B, based on a systematic review of lower-quality clinical trials.)

Evidence Summary

A 2011 meta-analysis (11 RCTs; N = 1,152) evaluated the effectiveness of first- and second-generation antipsychotics on improving specific symptom domains of borderline personality disorder.¹ Study samples ranged from 23 to 314 adults, with intervention times ranging from five to 26 weeks. All patients met diagnostic criteria for borderline personality disorder from the *Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed. (DSM-III). Patients with other

personality or axis I disorders (psychotic, affective, or anxiety disorders) were excluded. A first- or second-generation antipsychotic (aripiprazole, haloperidol, olanzapine, quetiapine [Seroquel], or ziprasidone [Geodon]) was compared with placebo. Outcomes included the change in scores on validated rating scales and questionnaires for three primary symptom domains: cognitive-perceptual symptoms (paranoia and dissociation), impulsivity, and affective dysregulation (anger, anxiety, depression, global functioning, and mood lability). Antipsychotics had a small effect on cognitive-perceptual symptoms, mood lability, and global functioning, and a small to moderate effect on anger. Because results were pooled, individual antipsychotics could not be assessed. The duration of the studies also limited the ability to determine whether maintenance therapy is more effective than intermittent therapy for symptom management.

A 2010 systematic review (28 RCTs, nine of which were included in the 2011 meta-analysis; N = 1,742) evaluated the effects of specific medications on overall and individual symptoms in adults with borderline personality disorder.² This analysis compared single-drug therapy with placebo in adults meeting DSM-III criteria for borderline personality disorder. Study samples ranged from 16 to 314 patients, with intervention times ranging from 32 days to 24 weeks. Patients with severe somatic or neurologic

Help Desk Answers provides answers to questions submitted by practicing family physicians to the Family Physicians Inquiries Network (FPIN). Members of the network select questions based on their relevance to family medicine. Answers are drawn from an approved set of evidence-based resources and undergo peer review. The strength of recommendations and the level of evidence for individual studies are rated using criteria developed by the Evidence-Based Medicine Working Group (<http://www.cebm.net>).

The complete database of evidence-based questions and answers is copyrighted by FPIN. If interested in submitting questions or writing answers for this series, go to <http://www.fpin.org> or e-mail: questions@fpin.org.

A collection of FPIN's Help Desk Answers published in *AFP* is available at <https://www.aafp.org/afp/hda>.

Author disclosure: No relevant financial affiliations.

disorders, mental retardation, psychiatric conditions (including schizophrenia, bipolar disorder, and major depressive disorder), or substance-related disorders were excluded. There was no decrease in overall symptom severity with the use of haloperidol, thiothixene (Navane), olanzapine, ziprasidone, lamotrigine, or phenelzine (Nardil). There was improvement when specific second-generation antipsychotics, mood stabilizers, and omega-3 fatty acids were compared with placebo. Aripiprazole produced reductions in anger, impulsivity, depression, and anxiety. Olanzapine showed small improvements in anger and anxiety. Topiramate was effective for impulsivity, anxiety, and anger. Valproate produced improvements in anger and depression. Lamotrigine showed benefits for impulsivity and anger. Omega-3 fatty acids showed improvements in depression (one RCT; $n = 49$; relative risk = 0.48;

95% confidence interval, 0.28 to 0.81). Significant heterogeneity limited the ability to pool results, so most of the individual effects are based on estimates from single studies.

Copyright © Family Physicians Inquiries Network. Used with permission.

Address correspondence to Justin D. Parker, MD, at jparker@siumed.edu. Reprints are not available from the authors.

References

1. Ingenhoven TJ, Duivenvoorden HJ. Differential effectiveness of antipsychotics in borderline personality disorder: meta-analyses of placebo-controlled, randomized clinical trials on symptomatic outcome domains. *J Clin Psychopharmacol*. 2011;31(4):489-496.
2. Stoffers J, Völlm BA, Rücker G, Timmer A, Huband N, Lieb K. Pharmacological interventions for borderline personality disorder. *Cochrane Database Syst Rev*. 2010;(6):CD005653. ■