

DOUBLE-BLIND, RANDOMIZED, CLINICAL TRIAL OF TOPIRAMATE VERSUS SODIUM VALPROATE FOR THE TREATMENT OF BIPOLAR DISORDER IN ADOLESCENTS

Paria Hebrani¹, Fatemeh Behdani², Ali Akhoondpoor Manteghi³

ABSTRACT

Objective: To study the efficacy and safety of Topiramate versus Sodium Valproate for the Treatment of Bipolar Disorder in Adolescents

Methodology: One hundred twenty adolescents (aged 12-18) with an admission diagnosis of bipolar I disorder, manic or mixed episode were enrolled from the Adolescent Ward at Ebn-e-Sina Psychiatric Center of Mashhad University. They were assigned to receive 8 weeks of double-blinded, flexibly dosed treatment with topiramate or sodium valproate. The primary efficacy measure was the mean change from baseline to endpoint in the Young Mania Rating Scale (YMRS).

Results: Sodium Valproate was superior to topiramate. The YMRS scores decreased significantly in both groups. However, when efficacy of topiramate was analyzed, only 18.64% of the patients showed YMRS scores decrease more than 50% from baseline.

Conclusions: This study does not support the efficacy of topiramate as monotherapy in acute mania or mixed episodes in adolescents with bipolar I disorder and sodium valproate was found superior to topiramate.

KEY WORDS: Bipolar, Child and Adolescent, Topiramate, Sodium valproate.

Pak J Med Sci April - June 2009 Vol. 25 No. 2 247-252

How to cite this article:

Hebrani P, Behdani F, Manteghi AA. Double-blind, randomized, clinical trial of topiramate versus sodium valproate for the treatment of bipolar disorder in adolescents. Pak J Med Sci 2009;25(2):247-252.

1. Paria Hebrani, Child & Adolescent Psychiatrist, Associate Professor,
 2. Fatemeh Behdani, Psychiatrist, Associate Professor,
 3. Ali Akhoondpoor Manteghi, Psychiatrist, Assistant Professor,
- 1-3: Department of Psychiatry, Mashhad University of Medical Sciences, Mashhad - Iran.

Correspondence

Paria Hebrani,
Horre Ameli Street,
Ebn-E- Sina Hospital,
Mashad, Iran.
Email: hebranip@mums.ac.ir

- * Received for Publication: June 23, 2008
- * Revision Received: July 11, 2008
- * 2nd Revision Received: November 11, 2008
- * Final Revision Accepted: January 25, 2009

INTRODUCTION

Bipolar disorder in children and adolescents is a serious illness,¹ with poor outcome and adverse effects that influence social, family, and academic functioning.² Bipolar disorder in youth tends to be chronic with atypical and mixed features.³

Anticonvulsants, lithium, and atypical antipsychotics are frequently used to treat this disorder in children.⁴ But 50% or more of the patients don't respond thoroughly.^{5,6} Topiramate is a novel anticonvulsant that inhibits brain glutamate release, attenuates activity at Na⁺ channels and high-voltage-activated Ca²⁺ channels.⁷ It also increases cerebral (GABA) concentration.⁸