Effects of Atomoxetine in Individuals with Attention-Deficit/Hyperactivity Disorder and Low-Functioning Autism Spectrum Disorder

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ABSTRACT

Objectives: This naturalistic, retrospective study investigated the effects of atomoxetine (ATX) on attention-deficit/hyperactivity disorder (ADHD) symptoms and autistic features in children with autism spectrum disorders (ASDs) and intellectual disability (ID).

Methods: Participants (n = 37, age range 6–17 years, mean: 10.16 ± 3.60) were assessed at baseline, 4th and 12th weeks using Clinical Global Impressions (CGI) scales, DSM-IV-based ADHD-rating scale (ADHD-RS), and amended Turkish version of Aberrant Behavior Checklist (ABC). The primary outcome measure was a treatment response defined by a CGI-improvement score of 1 or 2 together with a decrease of at least 25% in the parent-rated ADHD-RS total score at the end of 12th week.

Results: Five patients (13.5%) stopped medication at 4 weeks due to ineffectivity (2) and intolerable side effects (increased motor activity and talkativeness [n = 1], irritability [n = 2], temper outbursts [n = 2], and increased blood pressure [n = 1]). Sixteen patients (43.2%) were judged to be responders according to primary outcome measure. Improvement rate on CGI scale was 48.8%. On ADHD-RS, there were significant reductions between baseline and 4th week and between baseline and 12th week in both hyperactivity and inattention, and between baseline and 12th week in impulsivity scores. Decrease was significant in hyperactivity and social withdrawal subscales of the parent-reported ABC. Responders based on primary outcome measure were not significantly different from nonresponders in terms of sociodemographic features or clinical parameters, including intellectual, language, autism symptom, and ADHD symptom levels.

Conclusion: In this chart review, ATX appears to be safe and effective for social withdrawal and ADHD symptoms in children with ASD and ID.