

6.15—6.17

Communication domain standard scores) score at week (wk) 24 assessed by ANCOVA. The study terminated due to futility after approximately 50% of the participants completed wk 24 or were withdrawn early.

Results: Wk 24 completers (N = 150) received BAL (n = 79) or PBO (n = 71). Cohort baseline characteristics were well balanced: mean age = 28 years; male = 80%; mean IQ = 106. Interim futility analysis showed low likelihood that the study would meet the primary endpoint and was terminated prematurely. BAL 10 mg was not associated with positive significant Cfb vs PBO in VABS 2DC scores at wk 24 (estimated treatment difference [ETD] = -1.84; 95% CI, -5.15 to 1.48). No significant Cfb in any outcome measure was observed for BAL vs PBO at wk 12. BAL 10 mg was not associated with significant Cfb vs PBO at wk 24 in: VABS composite scores (ETD = -0.52; 95% CI, -3.11 to 2.07); VABS standard score communication domain (ETD = -2.20; 95% CI, -7.31 to 2.92); socialization domain (ETD = -1.43; 95% CI, -4.88 to 2.01); daily living skills domain (ETD = 2.74; 95% CI, -0.16 to 5.63); or Hamilton Anxiety Rating Scale ([HAM-A]; -2.4; SD 4.3 vs -3.0; SD 5.1). BAL showed a numerical but not significant improvement vs PBO in Pediatric Quality of Life Inventory generic (8.9; SD 13.6 vs 5.2; SD 11.2); and family impact scores (4.8; SD 15.0 vs 3.3; SD 14.0). BAL and PBO showed lower participant responses at wk 24 in Clinical Global Impression (CGI)-improvement (16% vs 25%) and Cfb vs PBO in CGI-severity (32% vs 33%). BAL vs PBO had similar proportions of participants reporting adverse events (56% vs 58%).

Conclusions: The V1aduct futility analysis indicated no difference in effect for BAL vs PBO at 12 and 24 wks in any efficacy measure. BAL had no safety concerns. Vasopressin receptor 1A (V1a) antagonism does not appear to be a viable target for socialization and communication in adult ASD in this study. Several factors are being explored to understand the high rate of PBO response.

ASD, RCT, ND

Supported by F. Hoffmann-La Roche Ltd.

<https://doi.org/10.1016/j.jaac.2020.08.108>

6.15 PREVALENCE OF MENTAL HEALTH COMORBIDITY IN ADULTS WITH AUTISM SPECTRUM DISORDER

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Objectives: This study aimed to examine mental health comorbidity in clinically referred adults with autism spectrum disorder (ASD). It has been hypothesized that comorbid mental health disorders were higher among patients with ASD than patients without ASD.

Methods: Thirty-six adults with ASD referred in the year 2019 in a psychiatric consultation center in Dhaka city in Bangladesh were included in the study. They were derived from the case register of the center. Similar number of age- and sex-matched adult mental health patients without ASD were selected for comparison. All patients were referred for mental health consultation. Sociodemographic variables were collected from the patients' records. A clinical diagnosis of mental health disorders, including ASD, was made by an experienced psychiatrist based on all available information, examination, and relevant investigations. Diagnoses were assigned according to DSM-5 criteria. Then, comparisons of mental health disorders were made between the 2 patient groups.

Results: The cases ranged in age from 18 to 41 years, with a mean age of 26.72 ± 6.5 years. Among them, 22 were male and 14 were female. The male:female ratio was 1.57:1. Most of the subjects received no education and were from middle-income families with urban backgrounds. The mean number of comorbid mental health disorders was 1.86 in patients with ASD and 1.71 in patients without ASD, and the difference was not significant. The 2 most frequent comorbidities among ASD patients were OCD (27.77%) and specific phobia (19.44%), followed by social phobia and intermittent explosive disorder (16.67% for each), ADHD (13.89%), and conduct disorder (11.11%). All of these disorders were significantly higher in patients with ASD than in those without ASD. Conversely, MDD (30.55%) was most frequent among the patients without ASD and was significantly higher than in patients with ASD. Other frequent disorders like bipolar disorder, schizophrenia, generalized anxiety disorder, and substance-related disorder were also higher among patients without ASD.

Conclusions: This research shows that comorbid mental health disorders were frequently found in patients with ASD. Subsequent broad-based studies using

extensive measures of psychopathology are required to confirm these preliminary findings.

ASD, CM, OCD

<https://doi.org/10.1016/j.jaac.2020.08.110>

6.16 REVIEW OF RANDOMIZED CONTROLLED TRIALS STUDYING THE BENEFITS OF EQUINE-ASSISTED ACTIVITIES AND THERAPY IN CHILDREN WITH AUTISM SPECTRUM DISORDER

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Objectives: Autism spectrum disorder (ASD), as defined by the DSM-5, is having persistent deficits in social communication and social interaction in multiple contexts as well as displaying restricted and repetitive patterns of behavior, interests, or activities. Presently, there are no effective medications to treat the core symptoms of ASD. There are multiple proposed alternative interventions, including Equine-Assisted Activity and Therapy (EAAT), which involves utilizing a horse to provide the therapy. Equine-assisted activities can provide both occupational therapy such as therapeutic horseback riding, vaulting, carriage driving, and hippotherapy, as well as social and communication benefits such as grooming, stable management, and interaction with the horse.

Methods: An extensive literature review was conducted on PubMed, PsycINFO, Education Resources Information Center (ERIC), Scopus, and Cumulative Index to Nursing and Allied Health Literature (CINAHL) for studies, using the keywords "equine" and "autism spectrum disorder," which resulted in 613 studies. We focused on studies that were randomized controlled trials and have included 2 studies with a total of 183 participants. In addition to randomized controlled trials, we also looked at the studies with repeated measures with a total number of participants of 46.

Results: In our review of randomized controlled trials, we found that EAAT participants have shown improvements in irritability and hyperactivity with an effect size of 0.50 and 0.53, respectively. Significant improvements were also seen in social and speech variables, with effect sizes between 0.41 and 0.63. EAAT further demonstrated significant improvements in participants' caring actions with their family pets, with an effect size of 0.74.

Conclusions: Children with ASD who participated in EAAT have shown significant improvement in behavior toward others, social cognition, social communication, and speech (use of a total number of words and new words in a session). It has also been shown to significantly improve children's caring actions with family pets. EAAT also proved to improve the quality of life in the short term, and possibly in the long term. These promising results indicate the need for more randomized controlled trials studying the effects of EAAT in the ASD population, because there is severe scarcity in research trials. The limitation of these studies is their relatively small sample sizes, as well as the lack of uniformity of observed variables.

ASD, EDUC, TREAT

<https://doi.org/10.1016/j.jaac.2020.08.111>

6.17 STRUCTURAL BRAIN ABNORMALITIES IN CHILDREN AND ADOLESCENTS WITH COMORBID AUTISM SPECTRUM DISORDER AND ADHD

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Objectives: Autism spectrum disorder (ASD) and ADHD share high rates of comorbidity, with the DSM-5 now acknowledging the comorbid diagnosis of ASD and ADHD. Although structural abnormalities in the prefrontal cortex, cerebellum, and basal ganglia occur in both ASD and ADHD, no structural studies have focused exclusively on patients with comorbid ASD and ADHD. We thus aimed to clarify the structural features and developmental changes in patients with comorbid ASD and ADHD in a relatively large sample from 2 sites.