American Association of Psychiatric Pharmacists

Evidence-based treatment of Autism Spectrum Disorders (ASD)

AAPP Statement

AAPP supports evidence-based treatment of autism spectrum disorder that is based on an accurate assessment of the available data.

Rationale

Autism spectrum disorder (ASD) is a common neurodevelopmental disorder (NDD) characterized by two core symptom clusters: 1) differences in social communication/interaction and 2) restricted, repetitive patterns of behavior, interests, or activities.[1,2] Early identification, treatment, and service engagement are essential among youth with ASD given the impact on academic performance, social/cognitive development, and mental health outcomes.[2] With the more widespread availability of standardized screening for ASD, rates of ASD have increased over time.[2–4]

More than half of individuals with ASD have co-occurring psychiatric disorders, with anxiety, sleep, depression, and attention-deficit/hyperactivity disorders among the most common.[2,5,6] Physical health comorbidities, including frequent gastrointestinal upset, constipation, and seizure disorders, are also common in this patient population. Given the complex interaction of physical and mental health comorbidities among youth with ASD, access to evidence-based treatment is essential.

Treatment guidelines recommend that all youth with ASD have access to educational support (e.g., individualized education plan), behavioral interventions (e.g., applied behavioral analysis), in-home services/therapy (e.g., occupational therapy, speech and language interventions, sensory therapies), and psychotropic medications. While psychotropic medications are not recommended to treat core symptoms of ASD, they are recommended for associated symptoms and/or co-occurring mental health conditions.[2]

Landmark studies demonstrate improved outcomes of psychotropic medications in this patient population[2,7–16] Atypical antipsychotics, including aripiprazole and risperidone, have an FDA-approved indication for severe irritability/aggression among youth with ASD. While most youth with ASD do not have severe irritability/aggression, access to these medications is important for youth who may benefit.[7,9–12,14–16] Additionally, treatment guidelines recommend the use of antidepressants, stimulants, and mood stabilizers to treat co-occurring conditions including depression/anxiety, ADHD, and bipolar mood disorders, respectively.[2]

While complementary and alternative medicines (e.g., l-theanine, magnesium, leucovorin, l-methylfolate) are considered in this patient population, more data is needed to support their routine use.[2,17] Treatment guidelines do recommend melatonin for youth with difficulty falling asleep, as its efficacy and safety is well-established.[2]

Outcomes Related to Medication Utilization in Youth with Autism

Treatment with risperidone or aripiprazole

- Significantly reduces irritability and aggression among those with persistent, severe irritability/aggression.[2,7,9–12,14–16,18,19] To reduce risk for side effects (e.g., weight gain, increased appetite, and involuntary muscle movements), short-term treatment (<3 months) is recommended.[2]

Treatment with an antidepressant (e.g., selective serotonin reuptake inhibitor)

- Improves anxiety, depression, obsessive/compulsive symptoms. Decreases suicidal ideation and behaviors. Decreases rates of suicide.[2,20]

Treatment with a stimulant (e.g., methylphenidate)

- Improves inattention, hyperactivity, impulsivity, distractibility. Significantly reduces aggression among those with persistent, severe irritability/aggression.[21–33]

Treatment with leucovorin/folinic acid

- While there is potential benefit, current evidence does not support regular use. Questions remain regarding doses, adverse effects, and effectiveness.[17]

Impact of Psychiatric Pharmacists

Psychiatric pharmacists are members of the interdisciplinary team who work collaboratively with patients, their families, and providers to optimize short- and long-term outcomes among individuals with psychiatric disorders, including substance use disorders (SUDs).[34–39] They help patients meet clinical, patient-centered, and medication-related treatment goals as advocates for the evidence-based use of psychotropic medications through comprehensive medication management (CMM).[34–39]

Psychotropic stewardship is a model in which psychiatric pharmacists play a key medication management role on the interdisciplinary psychiatry team.[38] As part of an interdisciplinary team, psychiatric pharmacists can play a critical role in providing patient/family education and recommend an evidence-based treatment plan that is appropriate based on a child's age, co-occurring mental and physical health conditions, and concomitant medications.[36]

Patient preferences, mental and physical health comorbidities, and adverse effect profiles should be utilized to identify the best treatment approach.[40] As psychotropic medication experts, psychiatric pharmacists can support shared decision making and optimal medication decisions.[34–39]

Advocacy Talking Points

- Psychotropic medications are evidence-based medications for the treatment of co-morbid mental health conditions among youth with ASD.
- Access to psychotropic medications, in addition to educational support (e.g., individualized education plan), behavioral interventions (e.g., applied behavioral analysis), in-home services/therapy (e.g., occupational therapy, speech and language interventions, sensory therapies) is essential.
- Leucovorin/folinic acid is not currently recommended.
- Psychiatric pharmacists are essential team members to ensure safe and effective use of psychotropic medications in youth with ASD.

Support/References

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