ECHO IDAHO: AUTISM STAT

Understanding and Managing Anxiety in Autistic Children

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Elena Harlan Drewel, PhD and KC Knudson, DO, MBA
St. Luke's Children's Hospital

Objectives

- Review of prevalence and type of DSM-5 anxiety disorders in those with ASD
- Assessing anxiety
- Treating anxiety
  - Psychotherapy
  - Pharmacotherapy

What is an anxiety disorder?

- A fear of something about the world or environment that seems above and beyond what would be expected and impairs functioning.
- Several different anxiety disorders (i.e., separation anxiety, selective mutism, specific phobia, social anxiety, panic, agoraphobia, generalized anxiety).
- Experiencing “sensory overload” is common, especially when in the feared or distressing situation.

Prevalence of anxiety disorders in ASD

- Cumulative incidence of anxiety disorders in those with ASD is approximately 50% by 30 years of age.
- A recent meta-analysis of a community-based sample of youth with ASD indicated that approximately 30% experience clinically elevated anxiety symptoms and 20% have an anxiety disorder diagnosis.

Prevalence of anxiety disorders in ASD

- Common anxiety-like symptoms in those with ASD include fear of change/novelty, unusual specific phobias (e.g., murals, beards, toilets), sleep disruption, hyperactivity/restlessness, and/or learning difficulties.
- Anxiety is associated with increased behaviors such as aggression, repetitive behaviors, and social avoidance.

Prevalence of anxiety disorders in ASD

- Anxiety prevalence may be higher due to differences with emotion/sensory regulation, understanding social intent, and communicating distress/frustration, which makes the environment seem more threatening.
- Peer relationship problems and social isolation have a high association with anxiety symptoms in youth with ASD.

Prevalence of anxiety disorders in ASD

- The most prevalent anxiety disorders in ASD include specific phobia (41%), social anxiety (28%), generalized anxiety (27%), panic (6%), separation anxiety (14%), and agoraphobia (5%).
- Compulsive disorders like obsessive-compulsive disorder are also more common in ASD compared to the general population.
- Most anxiety disorder symptoms will not fully manifest until a child is older (i.e., school age).

Assessing anxiety disorders in ASD

- If anxiety is suspected, screening instruments such as the SCARED may be helpful (ages 8-18).
- There are self-report and parent-report versions.
- Those with ASD may underreport their symptoms for a variety of reasons (i.e., communication limitations, cognitive difficulties, reduced insight regarding internal emotional states), so information from parents and other collateral informants (e.g., teachers) will be useful.
- Currently, there are no anxiety measures adapted or developed specifically for youth with ASD.

Assessing anxiety disorders in ASD

- Any intense, persistent fears?
- Any fears that impair their ability to go about day-to-day life or impair the family's ability to function?
- How long has the behavior been happening?
- When do the behaviors occur?
- Important to also ask about other behaviors related to mood, irritability, etc. given high co-occurrence with anxiety.

Anxiety treatment

- Long-standing evidence that psychotherapeutic and pharmacological interventions are the most effective for treating anxiety in combination compared to either intervention alone.
- Refer for mental health counseling and/or medication management if anxiety is significant.

Anxiety treatment

- Encourage continuation of other therapies as these will also have “downstream” impacts on anxiety symptoms (i.e., addressing sensory modulation, communication, etc.)
- Encourage family to access broader services to support parent well-being and a stable home life.

Psychotherapy

Anxiety treatment

- Cognitive-behavioral therapy (CBT) has been shown to be an effective treatment of anxiety in children and adolescents with ASD.
- CBT uses both behavioral (i.e., graduated exposure, fear hierarchies, calming strategies) and cognitive (i.e., cognitive restructuring, psychoeducation, problem solving) strategies to help the individual face and manage feared situations or events.

Anxiety treatment

- CBT is more appropriate for school-age, verbal children because of the cognitive component.
- Starting treatment early is key because some anxiety may be resistant to CBT in older youth with ASD.
- Behavior-based strategies (i.e., graduated exposure, calming strategies) for managing anxiety symptoms can be used with the broader population.

Pharmacotherapy

Using Medication

- Medication can be a part of effective treatment for psychiatric disorders in childhood
- Medications are very RARELY the primary treatment for anxiety disorders
- Medication is generally used in combination with some form of therapy (i.e. Behavioral, CBT, Supportive, etc…).

Pharmacotherapy for Anxiety Disorders Under Age 6

When do we treat with medications?

- If poor or partial response to psychosocial treatment after AT LEAST 12 weeks
- Symptoms are SEVERE to the point that they are causing rapid decompensation
  - Weight loss
  - School Absence
  - Illness
- Strong family history

What's First?

- Prozac (fluoxetine) and CONCURRENT psychotherapy
  - Review BBW (Black Box Warning) for Suicidality
  - 8-10 week trial (if tolerated) starting at 1-2 mg/day
  - Maximum dosing: 5-10 mg/day
  - Increased risk of behavioral activation in this age group
    - Difficulty falling asleep
    - Increased motor activity
    - Increased talkativeness
  - Discontinue after 6-9 months of effective medication treatment with gradual downward titration

Other Options To Consider

- Zoloft (sertraline) and CONCURRENT psychotherapy
  - Review same warnings as before
  - Starting dose: 5 mg/day
  - Maximum dosing: 50-75 mg/day
  - Recommend same plan for discontinuation (i.e. period of stability for 6-9 months)
- Limited data: Luvox (fluvoxamine) and Lexapro (escitalopram)

Not Recommended Under Six

- Medications without psychosocial treatment
- Use of tricyclic antidepressants (TCA's)
- Ongoing use of benzodiazepines
  - NOTE: Short-term use may be considered for severe anxiety either surrounding medical or dental procedures

Pharmacotherapy for Anxiety Disorders Ages 6-17

When do we treat with medications?

- Moderate to Severe Anxiety
- Inadequate response to CBT

What's First-line treatment?

- Initiate treatment with Prozac (fluoxetine) OR Zoloft (sertraline) monotherapy or in combination with CBT
  - NOTE: Combination therapy with CBT shown to be more effective than pharmacotherapy alone (multiple studies)
  - Review same risks as noted previously (i.e. BBW, Behavioral Activation, etc.)
- If first SSRI trial with Prozac (fluoxetine) or Zoloft (sertraline) is ineffective or has limiting side effects, switch to the alternative not used first (i.e. Prozac vs Zoloft)

Second Line Treatment Options

- Cymbalta (duloxetine)
  - Important to monitor height, weight, blood pressure and pulse
  - FUN FACT: This is the ONLY medication that has an FDA approval for treatment of Generalized Anxiety Disorder (GAD) in Children ages 7 and older
- Lexapro (escitalopram)
  - For ages 12-17 years
- Luvox (fluvoxamine)

Anything Else?

- Third-line treatment
  - Celexa (citalopram) or Effexor (venlafaxine)
- Other Considerations
  - Buspar (buspirone)
  - Alpha Agonists (guanfacine or clonidine)
  - Clomipramine

Not Recommended

- Paxil (paroxetine) as first or second line treatment
  - Increased concern for adverse effects
    - Insomnia
    - Behavioral activation
    - Decreased appetite
    - Vomiting
    - Discontinuation Symptoms
    - Suicidal ideation
- Benzodiazepines as first-line therapy for long-term treatment

Clinical Pearls

- Once lowest therapeutic dose is reached, can titrate SSRI or SNRI dose after one month (if well tolerated)
- If switching medications, it is preferable to cross-titrate vs wash-out
- Can consider discontinuation after 12 months of effective treatment with gradual taper and monitoring for relapse

Quick Reference Dosing Guide: 6-12 Years

Medication	Starting Dose	Maximum Dose
• Prozac (fluoxetine)	• 2.5-5 mg/day	• 40 mg/day
• Zoloft (sertraline)	• 10-12.5 mg/day	• 100-150 mg/day
• Luvox (fluvoxemine)	• 12.5-25 mg/day	• 100-200 mg/day
• Lexapro (escitalopram)	• 2.5 mg/day	• 10-20 mg/day
• Celexa (citalopram)	• 5 mg/day	• 20-40 mg/day
• Cymbalta (duloxetine)	• 20-30 mg/day	• 60 mg/day
• Effexor (venlafaxine)	• 37.5 mg/day (XR)	• 75-112.5 mg/day

Quick Reference Dosing Guide: Adolescents

Medication	Starting Dose	Maximum Dose
• Prozac (fluoxetine)	• 5-10 mg/day	• 60 mg/day
• Zoloft (sertraline)	• 25 mg/day	• 150-200 mg/day
• Luvox (fluvoxemine)	• 25 mg/day	• 150-300 mg/day
• Lexapro (escitalopram)	• 5 mg/day	• 20 mg/day
• Celexa (citalopram)	• 10 mg/day	• 40 mg/day
• Cymbalta (duloxetine)	• 30 mg/day	• 120 mg/day
• Effexor (venlafaxine)	• 37.5 mg/day (XR)	• 150 mg/day (<49 kg); 225 mg/day (>50 kg)

References

Byrne G, Ghráda ÁN, O'Mahony T. Parent-Led Cognitive Behavioural Therapy for Children with Autism Spectrum Conditions. A Pilot Study. Journal of Autism and Developmental Disorders. Published online January 12, 2022. doi:https://doi.org/10.1007/s10803-022-05424-2

Kirsch AC, Huebner ARS, Mehta SQ, et al. Association of Comorbid Mood and Anxiety Disorders With Autism Spectrum Disorder. JAMA Pediatrics. 2020;174(1):63. doi:https://doi.org/10.1001/jamapediatrics.2019.4368

Kreslins, A., Robertson, A. E., & Melville, C. (2015). The effectiveness of psychosocial interventions for anxiety in children and adolescents with autism spectrum disorder: A systematic review and meta-analysis. *Child and Adolescent Psychiatry and Mental Health, 9*(1), 22. https:// doi. org/ 10. 1186/ s13034- 015- 0054-7

Lecavalier L, McCracken CE, Aman MG, et al. An exploration of concomitant psychiatric disorders in children with autism spectrum disorder. Comprehensive Psychiatry. 2019;88:57-64. doi:https://doi.org/10.1016/j.comppsych.2018.10.012

References

Leachman, C., Nichols, E. S., Al-Saoud, S., & Duerden, E. G. (2024). Anxiety in children and adolescents with autism spectrum disorder: behavioural phenotypes and environmental factors. BMC Psychology, 12(1). https://doi.org/10.1186/s40359-024-02044-6

Thiele-Swift, H. N., & Dorstyn, D.-S. (2024). Anxiety prevalence in youth with autism: A systematic review and meta-analysis of methodological and sample moderators. Review Journal of Autism and Developmental Disorders. https://doi.org/10.1007/s40489-023-00427-w