Children's Hospital of Richmond at VCU

Anxiety disorder in children and adolescents

Fast facts

Anxiety is one of the most common mental health issues. Its incidence is 10% in children and adolescents and lifetime prevalence is 31.9% (Merikangas, 2011; Beesdo, 2009). The United States Preventive Services Task Force (USPSTF, Viswanathan,2022) suggests that all children above the age of 8 years be screened for anxiety.

Anxiety is an irrational and chronic fear that interferes with family life, social and academic functioning. Symptoms include subjective anxiety with change in school performance. Often the fear of being around people, fear of being outdoors or leaving home to go to school can interfere with functioning, and at times aggression and suicidality are observed.

Somatic complaints are present such as:

- Chest pain
- Headache
- Nausea, Abdominal pain

Anxiety can be normal at certain stages of life such as separation anxiety in a toddler or fear from the heightened awareness about death around the age of 5 to 7 which gradually recedes. This needs parental support and oversight but no professional intervention. When developmentally inappropriate and unrealistic fears pervade the child's life, anxiety should be considered as a problem requiring professional assessment and intervention

Background

Anxiety is a subjective feeling of irrational fear that is experienced as physical and emotional discomfort. The person will be able to identify being worried or anxious. The trigger may or not be known. Some triggers can be fear of getting sick; of being hurt or of your loved ones being harmed, fear about bad weather, spiders or other creatures and often a fear of the unknown. This fear is not rational and underestimates one's capacity to handle the feared situation. Aside from the subjective feeling of intense worry, discomfort, or a feeling of doom one can experience anxiety in a physical way such as, stomach aches, headaches, or panic attacks. A panic attack is a feeling of doom and "being out of control," which is accompanied by autonomic activation (i.e. palpitations, inability to swallow, profuse sweating). Like anxiety, panic attacks often do not have an identifiable trigger. As a result of the unpredictability of these events, the individual may refuse to leave home or engage in particular activities. Anxiety disorders can be associated with other psychiatric disorders, like depression. As anxiety is often genetic, parents with anxiety may need assistance, as untreated anxiety in parents may impact the child treatment and course.

Common Anxiety Disorders are:

- **Generalized Anxiety Disorder (GAD)**: A nonspecific pervasive fear.
- **Separation Anxiety Disorder (SAD)**: A fear of separating from a parent/loved one due to a fear that harm will come to them or self if separated.
- **Social Phobia/ Performance Anxiety**: Irrational fear of social situations and fear of talking or interacting in a public forum.
- **Panic Disorder**: Acute intense periods of irrational fear accompanied by autonomic symptoms of palpitations, shortness of breath and feeling of doom.

Although anxiety is a large component of Post Traumatic Stress Disorder (PTSD) and obsessive-compulsive disorder (OCD), they are no longer considered primary anxiety disorders.

Assessment: What type of assessment should be done to determine screen and monitor if this condition is present?

Two specific screeners for anxiety are:

- SCARED (free download) as a standard practice to screen in or out anxiety. This is a parent self-report instrument used to screen for childhood anxiety disorders that include GAD, SAD, panic disorder and social and school phobias. A score of 25 and above indicates the presence of an anxiety disorder while a score of 30 and above is considered positive for anxiety.
- GAD-7 (free download) is a shorter screening tool for GAD, Panic Disorder, social phobia, and post-traumatic stress disorder. Scores of 5–9=mild, 10–14=moderate and > 15=severe anxiety

They can be used to screen and monitor response to treatment over time.

Using rating scales and screening tools is a billable activity

Table 1: Standard set of follow up questions to explore anxiety

If the individual reports anxious or "worried" thoughts and feelings when asked "How would you describe your mood?" ask follow up questions to identify characteristics of anxiety symptoms.

What are your triggers?
How long has it been going on?
How does it interfere in your daily life? (i.e. school, friends, family)
Are you feeling sad or depressed?
Do you have thoughts of wanting to end your life?
Do you have panic attacks?
Do you think too often about scary things?
Can you stop?
How do you cope with these feelings?
Do you get sleepy, feel like you've got to move around a lot, or have trouble paying attention when you're supposed to?
Do you ever get scared suddenly when there isn't anything scary around?
(If yes, follow up: Do you have trouble breathing? Heart pounding? Shaking? Sweaty palms?)
Do you stay away from people or things because you're afraid or worried?

Table 2: Treatment plan for anxiety disorders based on severity	
Severity of anxiety disorder	**Treatment plan**
Mild (no impairment in daily functioning)	• Provide parent and individual with psychoeducation • Teach different coping skills (i.e. mindfulness and grounding techniques) • Reduce stressors
Moderate (significant impairment in a particular area or moderate impairment in several areas)	• Follow treatment plan for mild • Refer to psychotherapy • Initiate psychotropic medications for anxiety when quick response desired, partial response to psychotherapy, or unwilling to seek psychotherapy • Types of therapy: ○ Supportive Therapy and play therapy (below 6 years old) ○ Cognitive behavioral therapy (6 years and older): always ask child and family if the child is getting "homework" to try techniques learned in therapy) ○ Involves Psychoeducation, Somatic management skills training, cognitive restructuring, Relapse prevention plans. ○ Group psychotherapy specific to anxiety disorder ○ Consider medication if partial or no response to therapy
Severe (significant impairment in several areas)	• Follow RX plan for moderate anxiety • Initiate psychotropic medications for anxiety

Differential: clarified by focused questions

- Medical causes (thyroid, cardiac, migraine)
- Abuse /Threatening environment/Bullying
- Substance use
- Depression
- Adjustment Disorder
- Medication side effects (stimulants, withdrawal)
- Caffeine
- Pregnancy
- Autism Spectrum Disorder

Red Flags

- New or worsening panic attacks.
- History of trauma, nightmares, flashbacks, intrusive thoughts, and avoidance. Consider PTSD.
- Obsessions and compulsions. Consider OCD.
- New or worsening suicidal thoughts or behaviors after SSRI started.
- Serotonin Syndrome: mental status changes, autonomic hyperactivity, history of polypharmacy with serotonergic medications.

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Anxiety disorder in children and adolescents: Management/ treatment that can be done by PCP

DATA CAMS study: Combination of meds with therapy produced 81% improvement; medications alone 55%, therapy alone 60%, placebo 24% (Piacentini et al, 2013)

When to combine meds with therapy?

- Need for acute symptom reduction in a moderately to severely anxious child
- A comorbid disorder that requires concurrent treatment
- Partial response to psychotherapy
- Potential for improved outcome with combined treatment

How to prescribe medications?

- Initiate SSRI medications in patients above the age of 6 years old at the starting dose and titrate every 4-6 weeks based on effect and side effects. Do not exceed the maximum FDA recommended dose. (Table 3). Consider starting a medication that was beneficial for a first degree relative. Medication tolerability can be assessed within 2 weeks of initiation. Partial effects can be noticed within 4 to 6 weeks with full effect within 6 to 8 weeks of initiation.
- All antidepressants, including SSRIs, have a box warning of increased risk of suicidal thoughts and behaviors in people less than 24 years old.

What if the SSRI does not work?

- If medication is not tolerated, rule out potential external causes (i.e. partial adherence), or modifiable causes (nausea when taken on an empty stomach, or causes tiredness when taken in the morning).
- If suicidal thoughts or behaviors initiated or increased after starting SSRI, ensure patient's safety and ensure patient does not have access to any weapons. Encourage patients to be evaluated at the local emergency room or call 9-1-1. Stop the SSRI and consider starting another SSRI at the starting dose and titrate slower.

What if the second SSRI does not work?

- Reevaluate the patient's symptoms and confirm the diagnosis and rule out medical conditions. Collaborate with patient's therapists for diagnostic clarification.
- Rule out medical etiologies and rule out PTSD and OCD.
- Consider cross-titration to SNRI for 6- to 18-year-olds.
- Refer to a child and adolescent psychiatrist.

When to refer to a child and adolescent psychiatrist?

- Patient has psychiatric comorbidities
- Two or more SSRIs medications have failed
- Treatment plan is out of the primary care provider's comfort level

Table 3: Psychotropic Medication Management for Anxiety Disorders*				
Drug (generic/brand)	**Starting daily dose**	**Therapeutic dose range**	**FDA approval**	**Clinical pearls**
Fluoxetine (Prozac)	5 mg – 10 mg	20 mg – 60 mg	OCD: 7 years or older MDD: 8 years or older	May cause activation, which can present as irritability and anxiety Long half-life, can be stopped suddenly
Sertraline (Zoloft)	12.5 mg – 25 mg	50 mg – 200 mg	OCD: 6 years or older	Needs to be tapered up and down
Escitalopram (Lexapro)	2.5 mg – 5 mg	10 mg – 20 mg	MDD: 12 years or older	isomer of Citalopram, which has an increased risk for prolonged QTc
Citalopram (Celexa)	5 mg – 10 mg	20 mg – 40 mg	No	Increased risk of prolonged QTc
Fluvoxamine (Luvox)	25 mg	25 mg – 300 mg	No	Significant potential for drug-drug interactions
Paroxetine (Paxil)	5 mg – 10 mg	20 mg – 60 mg	No	Short half-life, increased withdrawal symptoms, not preferred in children
Duloxetine (Cymbalta)	30 mg	30 mg – 120 mg	GAD: 7 years or older	May treat neuropathic pain
Venlafaxine Extended Release (Effexor XR)	37.5 mg	37.5 mg – 225 mg	No	May treat migraines; needs titration and taper

* Hilt, R., & Barclay, R. (version 11 - 2023). Seattle Children's Primary Care Principles for Child Mental Health. Anxiety Disorders. Parentship Access Line Seattle Children's Hospital. wa-pal-care-guide.pdf (seattlechildrens.org)

Resources

Cameron K. Gallagher Mental Health Resource Center, Children's Hospital of Richmond at VCU
www.mentalhealth4kids.org
Location: 1308 Sherwood Ave, Richmond VA 23220
Phone: 804.828.9897

American Academy of Child and Adolescent Psychiatry: Anxiety Disorders Resource Center
https://www.aacap.org/AACAP/Families_Youth/Resource_Centers/AACAP/Families_and_Youth/Resource_Centers/Anxiety_Disorder_Resource_Center/Home.aspx

Virginia Mental Health Access Program (VMAP)
www.vmap.org
VMAP guidebook
Phone: 888.371.VMAP (8627)

- Consultations with regional child and adolescent psychiatrists
- Consultation with regional licensed mental health professionals such as psychologists and/or social workers
- Care navigation services to support with resource and referral needs

Anxiety and Depression Association of America
www.adaa.org

National Institute of Mental Health:
www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

Citation

1. Hilt, R., & Barclay, R. (version 11 - 2023). Seattle Children's Primary Care Principles for Child Mental Health. Anxiety Disorders. Parentship Access Line Seattle Children's Hospital. (wa-pal-care-guide.pdf (seattlechildrens.org)
2. Walter, H.J., Bukstein O. G., Abright, A.R., Keable H., Ramtekkar, U., Ripperger-Suhler, J., & Rockhill, C., (2020). Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents With Anxiety Disorders. Journal of the American Academy of Child and Adolescent Psychiatry, 59(10), 1107-124. https://doi.org/10.1016/j.jaac.2020.05.005
3. Bloch, M., Volkmar, F., Taylor, J. H., Lebowitz, E. R., & Silverman, W. K. (2018). Anxiety Disorders. In Lewis's Child and Adolescent Psychiatry: A comprehensive textbook (pp. 509–517). essay, Wolters Kluwer.