

Anxious & Avoidant Behavior

Physical Symptoms of Anxiety

- Increased heart rate
- Dizziness
- Blushing
- Sweating
- Numbness
- Blurred vision
- Increased respiration
- Dry mouth
- Upset stomach
- Diarrhea
- Vomiting
- Nausea
- Muscle tension
- Heart palpitations

Behavioral Symptoms of Anxiety

- Avoidance
- Trembling lip
- Avoid eye contact
- Stutter
- Cry/scream
- Nail biting
- Clenched jaw
- Twitch
- Difficult swallowing
- Fidgeting
- Trembling voice

Medical Differential

- Hyperthyroid
- Caffeine
- Migraine
- Asthma
- Seizure
- Lead exposure
- Hypoglycemia
- pheochromocytoma
- CNS illness
- Cardiac arrhythmia

Drug Side Effects

Antiasthmatics

Diet Pills/Teas

Cold medications

antihistamines

ADHD medications – amphetamine salts, methylphenidate

Steroids

SSRI

Antipsychotics (EPS)

- Methamphetamine

- MDMA

Anxiety Disorders

- Generalized Anxiety Disorder
- Social Anxiety Disorder/Social Phobia
- Post Traumatic Stress Disorder
- Specific Phobia
- Obsessive Compulsive Disorder
- Separation Anxiety Disorder
- Selective Mutism

Generalized Anxiety Disorder

- A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events for activities
- B. Difficult to control the worry
- C. Anxiety and worry associated with 3 of the following 6 symptoms (only one in children)
 1. Restlessness or feeling keyed up or on edge
 2. Being easily fatigued
 3. Difficulty concentrating or mind going blank
 4. Irritability
 5. Muscle Tension
 6. Sleep Disturbance

Social Anxiety Disorder

- Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others (children both peers and adults)
- Social situations almost always provoke fear or anxiety
- Fear or anxiety is out of proportion to the actual threat posed by social situation and sociocultural context
- Social situations are avoided or endured with intense fear or anxiety
- Fear, anxiety or avoidance causes clinically significant distress or impairment in social, occupational or other important areas of function
- Fear, anxiety or avoidance is persistent typically lasting for 6 months or more
- Fear is NOT restricted to speaking or performing in public

Post Traumatic Stress Disorder

- Exposure to actual or threatened death, serious injury, sexual violence in one or more of the following ways
 - Directly experiencing the traumatic event
 - Witnessing in person the event as it occurred to others
 - Learning that the traumatic event occurred to a close family member or friend (event was violent or accidental)
 - Experiencing repeated or extreme exposure to the aversive details of traumatic event
- Presence of one or more of the following intrusive symptoms associated with traumatic event beginning after traumatic event occurred
 - Recurrent, involuntary and intrusive distressing memories of the traumatic event. (children >6 repetitive play with themes of the traumatic event)
 - Recurrent distressing dreams in which content or affect are related to the trauma (children frightening dreams without recognizable content)
 - Intense or prolonged psychological distress at exposure to external or internal cues that resemble the events
 - Marked psychological reactions to external or internal cues that represent event
- Persistent Avoidance of stimuli associated with the trauma
 - Avoidance of or efforts to avoid distressing memories, thoughts or feelings associated with the trauma
 - Avoidance of or efforts to avoid external reminders that arouse distressing memories, thoughts or feelings associated with trauma

PTSD continued

- Negative alterations in cognitions or mood associated with traumatic events
 - Inability to remember important aspects of the trauma
 - Persistent and exaggerated negative beliefs or expectations about oneself, others or the world
 - Persistent distorted cognitions about the cause or consequences of the trauma that lead individual to blame himself or others
 - Persistent negative emotional state
 - Markedly diminished interest or participation in significant activities
 - Feelings of detachment or estrangement from others
 - Persistent inability to experience positive emotions
- Marked alterations in arousal and reactivity associated with the traumatic events evidenced by 2 or more of the following
 - Irritable behavior and angry outbursts (with little or no provocation), typically expressed as verbal or physical aggression towards people or objects.
 - Reckless or self-destructive behavior
 - Hypervigilance
 - Exaggerated startle response
 - Problems with concentration
 - Sleep disturbance
- Duration > 1 month

Obsessive Compulsive Disorder

Obsessions

- Recurrent and persistent thoughts, urges or images that are experienced as intrusive, unwanted and cause marked anxiety or distress
- Individual attempts to ignore or suppress such thoughts, urges or images or neutralize them with some thought or action (perform compulsion)

Compulsions

- Repetitive behaviors or mental acts that the person feels driven to perform in response to obsession or according to the rules that must be applied rigidly
- Behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation. Behaviors or mental acts are NOT connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive

Obsession or compulsion are timeconsuming and take more than one hour per day or cause clinically significant distress or impairment.

Separation Anxiety Disorder

- Developmentally inappropriate or excessive fear or anxiety concerning separation from those to whom the individual is attached evidenced by at least 3 of the following
 1. Recurrent excessive distress when anticipating or experiencing separation from home or from major attachment figures
 2. Persistent and excessive worry about losing major attachment figures or possible harm to them from illness, injury or death
 3. Persistent and excessive worry about experiencing an untoward event that causes separation from major attachment figures (being lost, kidnapped)
 4. Persistent reluctance or refusal to go out, away from home, to school, to work, or elsewhere due to fear of separation
 5. Persistent and excessive fear or reluctance about being alone or without major attachment figures at home or in other settings
 6. Persistent reluctance or refusal to sleep away from home or go to sleep without being near major attachment figure
 7. > 4 weeks in children. > 6 months in adults.

Selective Mutism

- Consistent failure to speak in specific settings in which there is an expectation for speaking (school, home) despite speaking in other settings. (not due to lack of knowledge of spoken language)
- Disturbance interferes with function
- > 1 month (not the first month of school)

Specific Phobia

- Marked fear or anxiety about specific object or situation
- Phobic object or situation almost always provokes immediate fear or anxiety
- Fear or anxiety is out of proportion to actual danger
- Phobic object or situation is actively avoided or endured with intense fear or anxiety
- > 6 months

treatment

- CBT – individual, group, workbook
- Educational support
- SPACE – parent based treatment

Medication treatment of anxiety

Table 2.
Medications that may be used to treat anxiety disorders in children and adolescents.

Class	Medication (Brand name)	Common dose range (mg/day)	Tablet size (mg)	Common side effects	Serious side effects	Uncommon, serious side effects
SSRI	Citalopram/escitalopram (Celexa/Lexapro™)	10/5–40/20	10/5, 20/10, 40	• Headache • Insomnia • Diarrhea • Decreased appetite • Hyponatremia/restlessness • Vomiting • Increased anger/irritability • Sexual dysfunction • Muscle pain • Weight loss/gain	• Bowel warning—suicidal thinking and behavior in children, adolescents, and young adults • Potential for abnormal heart rhythm • Mania	• Serotonin syndrome • Bleeding problems
	Fluoxetine (Lovox™, Lexor CR™)	100–300	25, 50, 100, 150			
	Sertraline (Zoloft™)	25–200	25, 50, 100			
	Fluoxetine (Prozac™, Sarafem™)	10–60	10, 30, 40, 60			
	Pipoxetine (Paxil™, Pexeva™)	10–50	10, 20, 40			
SNRI	Venlafaxine ER (Effexor™)	37.5–225	37.5, 75, 150, 225	• Sleepiness • Insomnia • Restlessness • Sexual dysfunction • Headache • Dry mouth • Increased anger/irritability • Increased blood pressure • Increased heart rate • Muscle gain • Weight loss/gain	• Bowel warning—suicidal thinking and behavior in children, adolescents, and young adults • Mania	• Serotonin syndrome • Bleeding problems
	Duloxetine (Cymbalta™)	30–120	20, 30, 40, 60			
	Alosetron (Straterra™)	10–100	10, 18, 25, 40, 60, 80, 100			
Tricyclic antidepressant	Clomipramine (Anafranil™)	75–250	25, 50, 75	• Sleepiness • Dry mouth • Weight gain	• Bowel warning—suicidal thinking and behavior in children, adolescents, and young adults • Heart rhythm problems; electrocardiogram and blood levels • Mania	Serotonin syndrome
	Imipramine (Tofranil™, Tofranil-PM™)		10, 25, 50			
Benzodiazepine	Alprazolam (Xanax™)	0.5–1.5	0.25, 0.5, 1, 2	• Drowsiness • Dizziness • Dry mouth • Dizziness • Abdominal pain	• Possible dependence • Withdrawal symptoms when used at high doses, especially when administered over long periods. Decreasing the dose gradually is a common strategy to decrease the risk of withdrawal symptoms. • Disinhibition • Memory impairment • Worsening depression	Respiratory depression (possible at high doses and when combined with other central nervous system depressants)
	Alosetron (Straterra™)	0.5–3	0.5, 1, 2			
	Lorazepam (Ativan™)	1–2	1, 2			
	Lorazepam Intensol™					
Atypical antipsychotic	Bupropion (Wellbutrin™)	15–60	5, 10, 15, 30	• Dizziness • Lightheadedness • Tiredness		
Antihistamine	Diphenhydramine (Benadryl™, Bancofen™, Ophedrin™)	12.5–50	25, 50	• Sleepiness • Dry mouth • Decreased sweating	• Abnormal heart rhythms • Agitation • Difficulty completely emptying the bladder • Harm to certain types of blood cells • Seizures	
	Doxylamine (Unisom™, WalSom™)	12.5–50	25, 50			
	Hydroxyzine (Atarax™)	25–50	10, 25, 50			

Adapted from Wilens, Hammerness. Straight Talk about Psychiatric Medications in Kids (Gulfport Press, 2016).

Effective medications for anxiety

- CAMS --childhood anxiety multimodal study (GAD, SAD, social phobia)
 - CBT alone
 - Sertraline alone
 - Sertraline plus CBT superior
- PTSD
 - Trauma focused CBT superior
- OCD (POTS trial)
 - Sertraline, fluoxetine and fluvoxamine FDA approved
- Social anxiety
 - Paroxetine > placebo (however children often have withdrawal – use with significant cautions in women of childbearing age)
 - Venlafaxine XR>placebo (however children have increased rate of new onset suicidal thinking, decrease in growth rate – use with caution)