

# Anxiety disorders in Children and Adolescents

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It is normal to be anxious in certain circumstances: during a tornado, before a big job interview, or after you have nearly run over the neighbor's five year old. The Anxiety disorders are when children are anxious when there is no reason to be fearful: Going away from mom at age 8 for a day of school, being afraid of heart attacks and cancer as a healthy 10 year old, and being terrified of speaking at a restaurant at age 13 are a few typical instances.

Much has been learned about anxiety disorders in the last 20 years. In 1980, hardly anyone recognized them in children. By 1995, psychiatrists were finding children who had an anxiety disorder quite often. By 2002, psychiatrists rarely were finding children with one anxiety disorder. Most of them had multiple anxiety disorders. Now in 2008, it seems that these anxiety disorders are not really separate disorders in the same way as Schizophrenia is a psychiatric disorder. They are all really part of the same family of disorders and often a child will have one disorder for awhile, then switch to another, or just add another on.

This article will discuss all the anxiety disorders except for Obsessive-Compulsive Disorder, which is not quite as closely related

## Different Anxiety Disorders are based on different fears

It would be great if the different anxiety disorders were based on some lab test or abnormality in the brain, but they are not. They are based on what a person is afraid of. In a nutshell, here is how this looks.

### Separation Anxiety Disorder

- Unreasonable fear of being separated from parent or caregiver

### Generalized Anxiety Disorder

- an unreasonable collection of everything from dying, to storms, to running out of gas, to coyotes in the closet to whatever you can imagine

### Social Anxiety Disorder

- unreasonable fear of social situations where they might be embarrassed, noticed, or have to interact with others

## **Panic Disorder**

- Episodes of very intense fear that have lots of physical signs and symptoms

## **Agoraphobia**

- unreasonable fear of crowds

## **Specific Phobia**

– someone who specializes in one particular thing they are afraid of such as spiders, hurricanes, or blood.

## **Post-Traumatic Stress Disorder**

– Having the reasonable fear of some horrible thing that really did happen to you in the past continue to cause you troubles, even though the horrible trauma is over

# **Details on what each of these look like**

## **Generalized Anxiety Disorder**

Everyone has a friend or neighbor with this problem. These are people who wake up and throughout the day find something to be fearful of at every turn. For children, the fears depend on the developmental stage, but they all have certain characteristics.

### **Here is the official definition.**

A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).

B. The person finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months). Note: Only one item is required 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 (difficulty falling or staying asleep, or restless unsatisfying sleep)

D. The focus of the anxiety and worry is not related to some other psychiatric disorder.

E. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

F. The disturbance is not due to the direct physiological effects of a drug, medication or other medical disease

## **Examples**

### **Preschool - Josh worried before he could walk**

Well, maybe not quite, but his parents can't ever remember a time when he could talk that he wasn't worrying about something or another. At four years of age, the worst times are in the morning, traveling to pre-school, and at night. Breakfast is hard, because he usually has a stomachache, especially if his Dad has left the TV on during breakfast. Fires, car-wrecks, murders, and storms all lead to the same problem: a sore stomach at breakfast plus some questions. "Are there any clouds?" (anything other than blue sky is dangerous) "Is it a swimming day?" (the showers are terrifying!) "where is Shooter?" (In other words, did Shooter run out of the house with Dad and get run over). This continues with a few variations throughout the day. When they are in the car, the question is whether there is enough gas. When they go to the store, "Do we have enough money?". At bedtime, the questions become bigger. "Are you going to die?" (no, Josh's mother says, I am not old) "Is Grandpa going to die?" At this point, Josh's mother would like to say, "Grandpa is not going to die. I am not going to die. You are not going to die. Nothing bad is ever going to happen to you or me, our family, our friends, neighbors, and the whole world!" But she knows what the answer would be: "Are you sure?"

### **Elementary School- Mindy says she needs more Tylenol**

At 10 years of age, Mindy is not exactly healthy, at least in her own mind. She gets headaches almost everyday, at least everyday there is school. The headaches are worst right before noon hour recess. Mindy can't tell you why this is, but her teacher and mother can. From Mindy's perspective, 90% of the school population consists of bullies. You never know when they might push you down, take your lunch, steal your backpack, or call you names. In a small French school of only 45 children, the answer is usually never. The other children aren't perfect, but none of these things happen regularly. Since Mindy started school 4 years ago, one bus turned over in a storm in another district, but no one was hurt. But given how bad the headaches are in the afternoon once a few snowflakes fall, Mindy is expecting another bus disaster, with her on it, nearly every day. There are coyotes in the woods, and they are hungry. From Mindy's perspective, the diet of a coyote consists of pets (like her kitten), dogs (like Grandma's poodle) and of course girls, (like Mindy!). When the wind blows, her parents think it is the house creaking.

Mindy knows it is a hungry Coyote picking at a crack in the house, trying to get in. No wonder she can't sleep!

### **High School-Tasha's friends are going crazy**

Tasha comes home from school and immediately goes to the phone to call Lacey to see if she is alright. Lacey is on her way to a Girl's Basketball game. She doesn't answer her cell phone. Tasha calls two other people on the team. No one is answering their phone. Tasha starts to pace and feels a little dizzy and calls to her mom, "Lacy, Shelly, Ashley, and the rest of the team must have had an accident. I just know it!" Tasha's mom tries to calm her down so that she doesn't start calling more people. Besides worrying about her friends, she is worrying about the project. It is due in two weeks. Now she is going to have to do it alone, because Lacey won't be able to help her. Now she can't swallow very well and her mother is trying to get her to just sit down and listen to some music. Finally, she is able to get Lacey to lie down. She takes her husband's cell phone and calls Lacey. Lacey is fine, but she admits that she couldn't take Tasha calling all day long everytime she went anywhere so all three girls blocked Tasha's home phone number. Lacey tells Tasha's mom, "We really like Tasha, but her calls are driving us nuts!"

## **Panic Attacks and Panic Disorder**

Up to 12% of ninth graders have had a panic attack. About 1-2% of all adults have multiple panic attacks. If you look at adults with panic disorder, 20% had their first panic attack before age 10. The first question is, What is a panic attack?

### **Here is the official definition:**

#### **Panic Attack**

A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reach a peak within 10 minutes:

1. palpitations, pounding heart, or accelerated heart rate
2. Sweating
3. Trembling or shaking
4. Sensations of shortness of breath or smothering
5. feeling of choking
6. chest pain or discomfort
7. nausea or abdominal distress
8. feeling dizzy, unsteady, lightheaded, or faint
9. derealization (feelings of unreality) or depersonalization (being detached from oneself)
10. fear of losing control or going crazy
11. fear of dying
12. parasthesia (numbness or tingling sensation)
13. chills or hot flushes

#### ***Examples***

In children and teenagers, panic attacks can take on many different disguises. Here are a few of the presentations.

The Classic - At age 10 Ted walked into the school and felt his heart race, skip, and all of a sudden he could not breathe well. His chest hurt and he called out to his friend to get the principal. By the time the principal came Ted was sitting on a chair and his face was very red. He was breathing very fast. He said everything was spinning. He told the principal he was afraid he was dying, and to call an ambulance. By the time the ambulance arrived and brought Ted to outpatients, Ted was scared, but all of the other symptoms were gone. Routine medical tests showed nothing.

The Nausea disguise - Sheryl is 14. Even though the bus goes right by her house, her Dad takes her to school. The reason is that every time she gets on the bus she feels very, very nauseated. She is afraid she will vomit right on the bus. If she stays on the bus, she gets more and more restless, her heart races and she starts shaking. She had this for one entire bus ride, and she told her mother she would never risk that again in her life.

The anger disguise - Jean, age 12, was sitting in math class. All of a sudden he felt like he had to run out of there or he was going to go nuts or hurt someone. He felt a rush of adrenaline surge through his body. He started breathing hard, felt his heart race and was trembling. He raised his hand to tell Mr. D'entremont he had to leave. Mr. D'entremont said no. Jean started screaming that he was going anyway and knocked over his desk and then slammed the door so hard they could hear it upstairs. By the time he ended up in the vice-principal's office, it was over and he was sorry, but he ended up with a lot of detention.

The family doctor's new child - Cody, age 9, has been to the family doctor six times in the last two weeks. He has insisted that his mother take him ever since he had a spell when he was dizzy, felt like his stomach was turning inside out, and couldn't breathe. He thought he was going to die. The family doctor couldn't find anything. But Cody wonders every time he feels a little bit wrong if maybe the family doctor missed something and maybe if he went now they could find out what it is. On the way home from doctor visit number 7, Cody told his mom that sometimes he wishes that he could just live at his family doctor's house in case there ever was another spell.

### ***How can you be sure that what happened was a Panic Attack and not some other medical problem?***

Panic attacks in children can be confused with many things. Common imitators are ulcers, irritable bowel syndrome, thyroid disease, some prescription drugs, migraines, epilepsy, diabetes, drug abuse, and other psychiatric disorders. There are some research tests which look at the brain which will show certain abnormalities in panic attacks. However, for a variety of reasons these are not in regular clinical use. The main principle is to rule out other problems using a careful medical history, a physical exam, and often certain lab or x-ray examinations. If the history and exam looks like panic attacks and no other cause is found, then a physician assumes it is a panic attack.

In females, stomach aches and headaches together are very, very common. In fact, recent studies have shown that when these two are found together in the same child, 69% had an anxiety disorder.

**You have been talking about panic attacks as if it only happens once. My son has them all the time.**

One Panic attack is bad enough, but recurrent panic attacks can be devastating. If a child or adolescent has recurrent panic attacks and the following, it is called -

## **Panic Disorder**

1. recurrent unexpected Panic Attacks
2. At least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:
  - a. Persistent concern about having additional attacks
  - b. worry about the implications of the attack or its consequences (e.g., losing control, having a heart attack, "going crazy")
  - c. a significant change in behavior related to the attacks.

Panic disorder in children is a very disabling condition. It will often affect a child's school performance. It almost always impairs them socially, and can lead to a lot of other problems. It is not a common illness in children. While perhaps 10% of children will have a panic attack, about 1-2% will develop Panic disorder. Of those that do develop Panic disorder, 10-35% will recover and remain well the rest of their lives. At least 50% will be mildly affected years later, and the rest will have chronic Panic disorder for years. If you follow-up children with panic disorder, about 25% will still have it years later. Of those who continue to have Panic disorder as they go into adulthood, many will develop other psychiatric difficulties. About 50% will develop agoraphobia, 20% will make suicide attempts, 27% will develop alcohol abuse, 60% will develop depression, 35% will believe they are unhealthy, 27% will not be financially independent, 28% will make frequent outpatients visits, and 50% will be show significant social impairment.

## **Agoraphobia**

**The most common fear or phobia in the context of Panic disorder is Agoraphobia.**

**Here is the official definition.**

- A. Anxiety about being in places or situations from which escape might be difficult (or embarrassing) or in which help might not be available in the event of having an unexpected panic attack or panic-like symptoms. Agoraphobic fears typically involve characteristic clusters of situations that include being outside the home alone, being in a crowd or standing in line, being on a bridge, and traveling in a bus, train, automobile, or plane.
- B. The situations are avoided (e.g., travel is restricted) or else are endured with marked distress or with anxiety about having a Panic Attack or Panic-like symptoms, or require the presence of a companion.

C. This is not due to social phobia, Obsessive-compulsive disorder, Post traumatic Stress Disorder, or Separation Anxiety Disorder.

The usual pattern I find with children is not that different than with adults. Panic attacks will set in process a slow restricting of peoples lives. Slowly the stop doing all sorts of things they used to and stop going all sorts of places. Lots of times, especially with children, they have some excuse (other than fear of panic) for not going which seems fairly reasonable at first. Often they play at their home without problems, but if they have to go there is always a reason they aren't going. Sometimes it is because the child says he doesn't want to (even though you know he would love to do this before) other times it is because all of a sudden her stomach is hurting, she feels weak and tired, her eyes hurt, or she needs to go use the bathroom.

### **Agoraphobia and school**

This is of only minor concern compared with agoraphobia that revolves around school. There are many parts of school which are the cause of problems in agoraphobics. I have never seen a child or adolescent who did not have problems with school. I will start from the beginning.

Wake up - Many children with agoraphobia will awaken on school days with horrible abdominal pain, diarrhea, nausea, headache, or many other signs of physical illness which all disappear as soon as there is no chance they are going to school. This is real, not made up. The anxiety is making their body react this way. This results in a battle between parent and child and sometimes involves the school.

Bus rides - It is common that children with agoraphobia will be afraid that something horrible or embarrassing will happen on the bus such as diarrhea, vomiting, going crazy, and getting sick with no one to help. Often this results in parents driving the child to school.

Going in the school - Other children are fine until they see the school and they know they have to go in. The idea of going and sitting in their classrooms leads to all sorts of anxiety about what could go wrong (as in the bus ride). Some children will just refuse to go to school.

Leaving class - For some agoraphobic children, they get into school, but they can not stay the whole day. Their physical signs of anxiety are enough to get most teachers to call home and have a parent come and get the child. As a result, the parent is basically "on-call" throughout the school day.

Special events - some agoraphobic children can handle the usual school day but not field trips (without their mother), performances, and changes in teachers.

All of these can lead to school refusal. There are other reasons besides Agoraphobia that children will refuse to go to school. However, it is usually what will bring a child to my attention. Any of the other anxiety disorders of children can lead to school refusal. The most important thing is to get them back in school as soon as possible and find out what the problem(s) is.

**My son says he is fine as long as we don't do anything to make him worse.**

Many children with agoraphobia and panic disorder will have come up with their own "treatment". This consists of getting everyone else on the planet to live their lives such that it minimizes the anxiety for this child. When people (usually family members) forget or refuse to follow one of these many rules, then the child with the anxiety disorder blames the family member for his or her anxiety. Common rules are:

I don't ride in other people's cars

I don't go to birthday parties

I don't go to the mall

I am driven to school

I don't wait in lines.

I don't go on the 101 or 103.

This "treatment" drives caregivers nuts. Any worsening of anxiety is now the parents fault. Obviously, this is not the way to go. However, most children prefer this as they have no responsibility and the focus is not on them.

## Separation Anxiety Disorder

Agoraphobia and Panic attacks often go together. More recently it has been discovered that Panic attacks and agoraphobia are much more common in children who currently have Separation Anxiety Disorder or had it in the past. What is Separation Anxiety Disorder?

It is a worry about being away from home or about being away from parents which is way out of line for that child's age, culture, and life.

So if a child worries about being away from his mother while at preschool at age 4 for a few weeks, that isn't Separation Anxiety Disorder.

If a child is very concerned about their mother and is calling her at home, that is unusual, but if the mother just got out of cancer treatment the week before, that is not Separation Anxiety Disorder.

### Signs of Separation Anxiety Disorder

#### Getting nervous if the parent is going to leave, even if they haven't left yet.

Examples would be a young child having a tantrum when the mother starts to get her work clothes on or an older child noticing that in two hours the mother is leaving and starting to have panic symptoms.

#### Worrying that something bad is going to happen to a parent.

For example, a young child goes in at night to make sure parents are still breathing in their beds. A child calls all relatives in the area because the mom is 10 minutes late. A teenager has to stay home from school to watch mom because the mother is slightly ill.

## **Worrying that a they will be lost or kidnapped**

A teenager must have eye contact with parents in a mall. A child who is outside playing will go and check and make sure parents are still in the house and have not been stolen away every 10 minutes.

## **Being afraid to go places without parents**

Examples are being afraid to go to school, having to call home many times a day from school. Unable to stay overnight at friends or camps, afraid to ride on bus as there is no way to contact parents.

## **Can't be alone at home without parents.**

Examples are a small child who can not play in a room without parent visible in the next room. Going to check on parent if the child doesn't hear the parent every few minutes. Being unable to play in the yard even though the parent is in the house. A teenager unable to tolerate the mother going for a short 10 minute walk.

## **Can't sleep alone**

An older child still sleeping with parents. A child wants to sleep with sibling or will not sleep at all. A teenager wanting room right next to parents.

## **Nightmares about being separated**

Common ones are dreams of parents getting in car accidents, of houses burning down. Of being lost in malls, schools, and stores. Of getting lost on camping trips. All the signs of Panic attacks occurring when parent is leaving or child is forced to leave. Common ones are severe headaches, nausea, vomiting, shortness of breath and diarrhea right before school or before parent goes to work.

## **Examples**

### **Pre-School**

Tina is 4 years old. She is a pleasant child and no problem for the mother at all at home. No one would guess there is any difficulty to visit the family at their home. But Tina's mom is about ready to throw her out the window. Why? Her mom says it is because she has had an "overdose" of Tina. She wakes up in the morning to find Tina in bed. She sneaks in during the night. Tina waits outside the bathroom door while her mother gets ready for the day. Every few minutes Tina calls out "Mom?" to check and make sure her mother hasn't somehow disappeared. Then it is off to breakfast and time for the big question, "Is there pre-school today?" If the answer is no Tina is happy, sits down to eat her cereal and sings to herself. If the answer is yes, she starts screaming, won't eat a thing because her stomach hurts and grabs on to her mother's leg. Then the fun really begins. It takes about 45 minutes to dress her and then drag her out the door. All the way out she is grabbing for anything she can hold on to and screaming "noooooo". Once wrestled into the car seat it is a noisy trip until she stops the car at the pre-school. Then the two women who run the place come out and drag her into the preschool. It takes Tina an hour to calm down but the second hour now goes all right. She has been going for almost a year now.

Once her mother appears she grabs on like velcro for the rest of the day. Outside of pre-school, there is nothing that separates the two. When her father comes home Tina puts on her shoes and walks as fast as she can with the walkman in an attempt to regain her sanity before the bedtime ritual. That is not easy. Tina does not want to go to bed without her mother for fear her mother will leave in the night. After about 2 hours of stories, threats, screaming and calling out, she is asleep. Tina's mother is always sleep deprived because she tries to live a whole life between 9 pm and bedtime.

## **Elementary School**

Terry is 9 years old. He always looks sleepy and looks like something is bothering him. Well, something is bothering him. Every night he has to make sure that his mom is alright. A year ago his great-grandfather died in his sleep. Terry wasn't that close to him but it did make him think. His mom is not that young (35 years old) and could she die in her sleep? Terry wakes up in the night and wonders, is mom alive or not? So he goes in and checks on her. He can't tell in the dark if she is sleeping or dead so he just wakes her up to make sure she is in fact okay. "Mom, are you okay" is what she hears. She has learned that if she speaks her mind and says, "I am not okay! I was sound asleep and now I am awake!" then Terry just worries more and more and doesn't go back to sleep. But usually he does and doesn't wake her up again until near 5:00 when the fishing boats are going by. As a result, the mother and son are always tired and they fight a lot. So at breakfast Terry asks her (never his Dad, for some reason he doesn't worry much about him) exactly what she is doing that day. Terry wants to know where his mother will be at every moment of the day just in case he needs her. Of course she doesn't plan her schedule down to the minute which leads to the usual arguments. "What do you mean, you might go down to Yarmouth in the afternoon? Are you going or not?" Terry used to use his lunch money to call home and check on her but now she does not answer the phone if the school is calling after getting twenty phone calls one day when she had the flu. After school all goes well unless she is a little late getting home. He isn't alone those days. Usually his Dad is working in the shed when he comes home. Of course he isn't once Terry comes home. Terry wants to know why she isn't home, where she has gone and gets all worked up over a 5-10 minute delay. His Dad jokes with his friends that he would never have to worry about his wife having an affair, as Terry keeps one close eye on his mom. His mom tells his father that the danger isn't an affair, but murder. She has had it with this and sometimes would like to send Terry to visit his Uncle in BC. Permanently.

## **High School**

Laura is now 16. She is no stranger to anxiety. When she was 12 she started having panic attacks. When she was 14 she got depressed. Last year, when she was 15, things seemed to really turn around. She liked all her teachers and got involved playing drums in a small group. They played for some parties and weddings. She also had a really nice boyfriend who took her out even though she would have rather stayed home. But this year her luck has changed. The band broke up and her boyfriend moved to Dartmouth with his family. Her Dad's boat had engine trouble and he had to be towed in by the Coast Guard as a storm was coming up. Everyone kept telling her that her dad was lucky to have gotten out of that with his life. Her mom had a scare with breast cancer after a mammogram was

positive, but the biopsy was okay. Laura has basically stopped hanging around with her friends. Now she likes to help around the house. At first her mom was delighted to have some extra help but not anymore. She overheard her daughter tell a friend that she was not allowed to go the show. Not allowed? Well, she didn't want to tell her friend that she just didn't want to go out. Why not? Well, you just never know if you or mom are going to need something and she had a stomach ache. When her Dad comes home he often takes a walk with Laura's mom after dinner. Laura used to be satisfied with just knowing when they are going to be coming home. Now she is pleading with them that they go along the beach and not through the woods. Why would she care? Because she can see them the whole way on the beach but not in the woods. Laura has quit basketball because of away games. She won't go to youth group and quit choir. Her life is slowly slipping away.

Separation Anxiety Disorder can persist into adulthood. As mentioned above, it is very common for a child to start with this and later develop Panic Disorder or Agoraphobia or all three! As far as causes go, the same things cause Separation Anxiety Disorder that cause Panic and agoraphobia. (see above). However, some research now suggests that having a parent with alcoholism significantly increases a child's risk of having Separation Anxiety Disorder. About 14% of children of alcoholic parents will have Separation Anxiety Disorder. (3) The treatments are basically the same and will be covered in the treatment section.

## **Social Anxiety Disorder**

This is one of the most common psychiatric illnesses. Up to 14% of adults have this. About .1% of children have this disorder or one in a thousand. (2)

### **The official criteria for it are as follows:**

- A. A marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way (or show anxiety symptoms) that will be humiliating or embarrassing.
  - B. Exposure to the feared social situation almost invariably provokes anxiety, which may take the form of panic, crying, tantrums, freezing, or shrinking from social situations with unfamiliar people.
  - C. If they are an adult or teenager, the person realizes that the fear is excessive or unreasonable.
  - D. The feared social or performance situations are avoided or else endured with intense anxiety or distress.
  - E. The avoidance, anxious anticipation, or distress in the feared social or performance situations interferes significantly with the person's routine, academic functioning, or social activities.
- A through E must be present.

### **What signs and symptoms do children and adolescents have?**

You can see signs of Social Anxiety Disorder as early as a year old. Children with this problem are less interested in exploring new things. Rather than becoming excited by new things, they are much more likely to be scared. As pre-schoolers, they are shy around strangers and may not speak well to people outside of the family. More children with Social Anxiety Disorder than you would expect have some mild to moderate speech and/or language problem. Others are shy and also have some disfiguring medical problem which makes them more noticeable. However, most have no language or physical problem. Children with this problem almost never are thought to require assessment at this point.

Here are the "top ten" most feared social situations.

Reading aloud in front of class

Musical or athletic performances

Joining in on a conversation

Speaking to Adults

Starting a Conversation

Writing on the blackboard

Ordering food in a restaurant

Attending dances or birthday parties

### **Less Common ones are**

Answering questions in class, Working or playing with other kids, Asking the teacher for help, Gym Class, pictures, inviting a friend over, eating in a cafeteria with kids, walking in the hallway, answering the phone and eating in front of others.

### **Examples**

#### **Grade 1 - Jonathan freezes**

If you could watch Jonathan at home, you would never guess there is a problem. He is happy, loves to play with his cousins and his sister, builds forts, and loves to hunt with his dad. But when you watch him get on the bus, you would think he is being sent to a prison camp. He never looks up. He rarely speaks. He sits and plays his DS the whole way. At school, he had an accident and wet himself because he was too scared to raise his hand to go to the washroom. He would never ask for help. It took a few months for him to say more than a few words. He never did "show and tell", refuses to participate in Christmas concerts, and almost never starts a conversation. Luckily, his cousin is in the other Grade 1 class and is very friendly, so Jonathan does have someone to play with. That is the problem. Jonathan's parents know that his cousin is moving to Alberta in two months, and they can not see how Jonathan will ever make another friend.

#### **Grade 6 - Hilary would rather fail**

Hilary and two other girls have to act out part of a play for all three sixth grade classes. They made costumes, wrote the script from the short story they had to read, and have practiced at home. But now Hilary has found out that this isn't going to just be in their classroom, which sounded bad enough. It is going to be in the auditorium for all the grade six classes. No one can convince Hilary to do it. Hilary doesn't care whether or not she

fails, has no friends, or is tortured on the rack. She will not do it. Not that it surprises her parents. She dropped out of soccer when she found out she would be going to a tournament with lots of parents watching. She stopped piano lessons because there would be a recital, and she will never go up to communion at mass.

### **Grade 11 - Justin is amazingly talented**

Since Justin works cleaning the fish plant at night, not a lot of people see him. Everyone figures he dropped out of school and decided to work. One day, the manager's brother came by in the evening and met Justin. The manager wanted to show his brother the program Justin had put together to help train new employees. The brother was amazed and wondered what Justin was doing working here. Justin answered, "I freak out at school, so I dropped out the minute I turned 16. No one is going to make me go to school again." Justin doesn't have any friends in the real world. He works and goes home and makes programs on the computer. As they walked away, the brother remarked to the manager, "What a waste of talent!" Sadly, the manager bowed his head and agreed.

### **Social Anxiety Disorder's nasty cousin - Selective Mutism**

When children with Social Anxiety Disorder go to school, the problem is more evident. They are more likely to be embarrassed about what they say at school. Often they are embarrassed about how they look. They may be afraid of looking or doing something stupid. This leads to a person doing very little, so to as avoid making errors. One of the most common problems is speaking. I have seen many children who are so embarrassed that they will say something wrong that they do not speak at all in class, even if they have a question. There are teachers who have never seen a child speak in their class, but the minute they are at home or in their neighborhood or with friends, they have very little problem speaking. Children with Social Anxiety Disorder have a circle of people who they will speak with. Sometimes it is as small as the immediate family. More often it extends to other family members and friends. When children have this inability to talk in social settings, it is called *selective mutism*, a disorder that is closely related to Social Anxiety Disorder. The official criteria are:

- A. Consistent failure to speak in specific social situations (in which there is an expectation for speaking, e.g. , at school) despite speaking normally in other situations.
- B. The disturbance interferes with educational or occupational achievement or with social communication.
- C. The duration of the disturbance is at least one month (not limited to the first month of school)
- D. The failure to speak is not due to a lack of knowledge of the spoken language required in the social situation.
- E. The disturbance is not better accounted for by a Communication disorder (e.g., stuttering) and does not occur along with Autism or related disorders.

It is important to make sure that selective mutism is not misdiagnosed. In some studies, almost half of the people who appear on the surface to have selective mutism have been

abused. While anxiety is very common in children with selective mutism, frequently there are other problems. Recent studies show that there is a high frequency of learning problems, language problems, coordination problems and bed wetting in children with selective Mutism. Other disorders which are usually quite uncommon in normal children are more common in children with selective mutism such as Aspergers ( a relative of autism) and mild mental retardation.

Example: Danielle

Danielle is now 8. In grade primary her teacher heard her say "Ouch!" once when she accidentally stepped on her foot. She has never heard her speak in two years. Danielle has trouble in school besides talking. Her reading is a little behind. She refuses to do any sports. Her parents have tried everything they can to convince Danielle to talk in school. At home she talks all the time until a stranger appears at the door. When she came to see me she would not speak and would hardly do anything. Only after her selective mutism was effectively treated did I hear her speak. Then we discovered that even though she talked a lot at home, her speech was not at all clear and more like that of a 5 year old. Besides, we found out there was a reason she didn't like gym class. Her coordination was horrible. But now that she was not so anxious, she was able to work on that and her speech so that after a year she had made good progress in both areas.

Many social phobic children will have selective mutism to a significant degree. However a full diagnosis is only present in about 8%. (3) They may be reluctant to speak in class, and are deathly afraid of bringing attention to themselves by leaving or entering the class while everyone is at their desk, giving a presentation alone to the class, or doing anything which would embarrass them. While no one is keen on getting sick in school, many children with Social Anxiety Disorder will refuse to go to school at the first hint of nausea for fear they will vomit in class, something that is embarrassing for anyone, but devastating for the socially phobic child.

## Specific Phobias

The means you are very nervous about some specific thing.

### **The official definition is as follows:**

A. Marked and persistent fear that is excessive or unreasonable, cued by the presence or anticipation of a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood).

B. Exposure to the phobic stimulus almost invariably provokes an immediate anxiety response, which may take the form of a Panic Attack.

**Note:** In children, the anxiety may be expressed by crying, tantrums, freezing, or clinging.

C. The person recognizes that the fear is excessive or unreasonable. Note: In children, this feature may be absent.

D. The phobic situation(s) is avoided or else is endured with intense anxiety or distress.

E. The avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with the person's normal routine, occupational (or academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.

F. the duration is at least 6 months

Most of us know someone who is particularly afraid of one thing. Rarely does this come to my attention unless the phobia is an everyday occurrence. A fear of elevators in a remote small town is hardly disabling, but a fear of throwing up or dogs is.

### **Example**

#### **Terry is out for the flu season.**

When Terry was 6 years old, a little boy got sick and vomited in the class all over the floor and it splashed up on Terry's shoes and pants. Terry, being sensitive to start with, was petrified. When he gets the flu, he looks like he is going to explode, and very rarely, he will vomit. Of course the fact that he has spent the last 12 hours in the bathroom expecting this to happen makes it a lot more difficult at home, since no one is allowed to use the bathroom. To Terry, flu equals vomiting, and so flu season equals vomiting season. In his mind, the school is full of children vomiting here and there every 15 minutes or so. So Terry doesn't go from about mid December until after the snow is gone. His mother works very hard to make sure any magazine, newspaper, or show about a flu pandemic is kept from Terry. He is still passing, but his mom has to admit that this is more like homeschool than public school.

### **Post-Traumatic Stress Disorder**

The difference between this anxiety disorder and the ones above is here something really bad actually did happen. However, even though the event happened quite a while ago, the person is still very disabled by it.

#### **Here is the official definition**

A. The person has been exposed to a traumatic event in which both of the following were present:

(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others

**the most common examples are physical and sexual abuse, but other frequent causes in children are being in a car wreck, finding a dead parent, dog attacks, house fires, and near ATV accidents.**

(2) the person's response involved intense fear, helplessness, or horror.

**In children, this usually means the children look like they are out of their minds at the time of the trauma.**

B. The traumatic event is persistently reexperienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. **Note:** In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.

**For example this might mean that after the house fire, when the parents want to forget everything, the Barbies and action figures are playing house fire in the new apartment.**

(2) recurrent distressing dreams of the event.

**For children, nightmares without any real connection to the event are common**

(3) acting or feeling as if the traumatic event were recurring this depends on the situation in children.

**A 6 year old girl who was sexually abused may start masturbating all the time. Children may retreat into a fantasy life that is swallowing them up, for example becoming a dog or a superhero from a videogame. They might also hear or see things.**

(4) intense **psychological** distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event .

**for example, a girl might be fine until her teacher has to help her unzip her snow pants, at which she becomes paralyzed with fear as it is just like when she was sexually assaulted.**

(5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

**Just as above, but with physical signs. A child might go to a campfire, and when a log falls out of the fire pit, she can't breathe, as it is like the house fire.**

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma this is unusual in children.

**A child might run out of the room or stop speaking when you ask what happened to their dad.**

(2) efforts to avoid activities, places, or people that arouse recollections of the trauma

**For example, after a car accident in the snow, a child refuses to go anywhere in a car.**

(3) inability to recall an important aspect of the trauma.

**Many children who have been attacked in the face by dogs “black out” the actual attack.**

(4) markedly diminished interest or participation in significant activities. **The overlaps with depression**

(5) feeling of detachment or estrangement from others.

**A child will seem like he is in his own world.**

(6) restricted range of affect (e.g., unable to have loving feelings) . **An example would be a child who refuses to cuddle with the remaining father after the tragic loss of the mother.**

(7) sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span) .

**Children usually have plans about what they are going to be when they grow up. In this situation, these questions just don't get answered.**

D. Persistent [symptoms](#) of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

(1) difficulty falling or staying asleep

(2) [irritability](#) or outbursts of anger

(3) difficulty concentrating

(4) [hypervigilance](#)

(5) exaggerated [startle response](#)

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Traumatized children do not all show the same symptoms. Furthermore, all children who are traumatized will not get PTSD.

## **What Causes Anxiety Disorders?**

Usually it is a combination of genetics and environment. The more family members who have had anxiety disorders, especially as children, the more likely the children will become anxious.

On the other hand, a rough life and bad events make anxiety much more likely, and much harder to treat. Common ones are trauma, psychiatrically ill caregivers, poverty, and multiple separations.

## **Prognosis- Will my Child Get Better?**

**Most children with anxiety do get better, but many will become ill again later in life. Sometimes this comes back as another anxiety disorder, or a mood problem, or substance abuse.**

## **Comorbidity**

This means psychiatric disorders tend to occur together. Not only are children who have one anxiety disorder likely to have another anxiety disorder, many also have one of the following:

### **Tic disorders –**

Tics are sudden rapid movements or sounds. They are more common in nervous children.

### **Attention Deficit Hyperactivity Disorder (ADHD) –**

This is the most common pediatric psychiatry disorder. It occurs in 3-6 % of all children. However, if a child has an anxiety disorder, she has a 20% chance of having ADHD.

### **Depression**

- Most children who have multiple anxiety disorders and many who have just one will develop clinically significant depression later in childhood or adolescence. Some will be chronically depressed for years. Anxiety disorders plus depression greatly increases the risk of suicide and suicide attempts.

### **Bipolar Disorder**

- Adolescents with Panic Disorder are 4-5 times more likely to get Bipolar disorder. That means that almost 20% of adolescents with panic disorder will develop bipolar disorder.(7) Those who do end up having both disorders are more likely to be psychotic (hearing voices, having bizarre ideas) than patients that just have bipolar disorder without panic. This is especially important as the medical treatment of panic attacks can cause mania.

## Example –

Tanya is 14. She went to see a psychiatrist because she couldn't breathe and was almost passing out in school. Her family doctor thought these were panic attacks, but the family wasn't so sure so she went to see a psychiatrist. As a result she didn't want to go to school anymore. When these attacks came she was terrified that she was going to die and would scream at her mother to "do something", run around, and pant. It was quite dramatic. It took quite a bit of time to explain to her and her mother that these were panic attacks. They had a lot of questions, and so the psychiatrist didn't have time to ask about manic symptoms. She put Tanya on Paxil. It helped the panic. Three days later Tanya had no panic and felt great. Six days later she decided to write a play about the history of her town. Ten days later she was controlling the videos on Much Music, never slept, and spoke so fast that no one could understand her.

They forgot to ask her and her mom about manic symptoms, which she had been having in the last 6 months, and family history of bipolar illness. It turns out her aunt had been very manic and hospitalized.

**The lesson?** If you have some bipolar symptoms, don't take medicine for Panic unless you treat the bipolar disorder first.

## What can be done?

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The treatment of these conditions revolves around two things, Medications and Psychological treatments. I will start with Psychological treatments. There are three elements to the psychological treatment of anxiety disorders.

### Behavioral

1. **Graduated Exposure** - It has been found that children, like adults, will be able to overcome phobias with this technique. What you do is gradually expose yourself to the thing that makes you so panicky. Let's take entering the school as an example. If a child is unable to go to school because of agoraphobia, the first thing to do is break it down into little pieces. I would sit down with the family and the child and decide what the first step is. It should be something the child can probably do. For example, Go into the school yard and stand inside the door way for a certain amount of time. Then with time you slowly increase the time and the task until they are in class all day. In Separation Anxiety Disorder, it might mean going outside alone for a certain amount of time. Lots of times this is paired with "carrots and sticks". That is, if you can do your task for today, then you can stay up later. If you can not, I will take away your compact disc player for one day.

**Response Prevention** - The key to this technique is to keep yourself from doing the thing you want to when you get panicky. For example, if a child is in class and wants desperately to raise his hand so that he can go home and call his mother to come and get him, You might try to teach the child to wait 5 minutes before calling.

There is a lot more to this type of therapy. There are many books available on how to do it.

## **Relaxation techniques**

When people start having panic symptoms, or if they have to tolerate separation in Separation Anxiety Disorder, if they have learned some specific techniques they can often ride out the panic much easier. These involve:

- 1. Slow, regulated breathing. By concentrating on breathing in and out, the panic is usually less. This can fairly easily be taught to children over age 7 or 8. Usually you give the child "homework" to do this kind of breathing at home and then have them try it situations which bring on panic. Eventually, they will be able to do this almost automatically when the panicky situation arises.
- 2. Saying things to yourself. This involves having people say something which is a rational instead of a irrational response to the panic. For example, if a girl feels her stomach gurgle, the irrational response is think, "Oh no!, I am going to have diarrhea right here in class! I have got to get to the bathroom right now! " You might teach her to say every time she feels her stomach gurgle a little phrase which she has written with your help and she has memorized like, "Everyone's stomachs gurgle. My stomach gurgles many times a day. I do not need to leave and go to the bathroom"

## **Cognitive Therapy**

This is a technique which was first used in adults with depression but has been used with teenagers and adults with anxiety disorders. This consists of learning about how certain thought patterns are leading to worsening of the anxiety disorder. Each person with anxiety has these. Some common ones are, if I have another panic attack, I will die. If I get nauseated, I will vomit. If my stomach gurgles, I will have diarrhea. When my eyes blur, it means I have a brain tumor. Through homework assignments, reading, writing, and talking with a professional in this technique, you can help to control or eliminate these automatic bad thoughts.

### **The good**

Best for teenagers who want to talk

Can help with many areas outside of panic attacks and agoraphobia

## **The bad**

A child or teenager needs to be motivated, at ease with reading and writing, and able to identify their own thoughts or feelings.

You need to see someone regularly for about 4 months to make this work

It requires waiting quite awhile or paying quite a bit, as it is not cheap or that readily available.

It doesn't work quickly.

There are many other psychological treatments, but they have not been found to be effective. For example, just talking about what your are scared about, discussing your dreams, and getting in touch with yourself and others have not found to be helpful.

## **Medical Treatments**

Often the idea of taking medicines for anxiety disorders makes either one of the parents very nervous or the child. Before discussing the individual drugs, I will discuss the general approach to pediatric psychopharmacology that I use.

### **Why would anyone want to give drugs that affect the brain to children?**

The main reason would be if the non-medical interventions are not working. No one would suggest trying medical treatments before the non-medical interventions are used. It is similar to diabetes in that way. If you have diabetes which is not severe, your doctor will first suggest you try diet control. If that doesn't work, only then will the doctor consider medical treatment. In some situations, a child is very ill, has numerous disorders or there is some urgency. For example, a child has multiple anxiety disorders and depression and is either in the hospital or unable to go to school. Then I consider medications as a first line approach along with other interventions.

### **If the drug works, how will my child be different?**

In cases where the drugs work very well, a child will be able to face situations in which they usually panic with little or no anxiety. Panic attacks should be basically eliminated. Children are usually more carefree, enthusiastic, and less depressed. Each drug works in a different way on the chemical transmitters in the brain.

### **What if it doesn't work?**

Sometimes a medication won't work because the dose is too high or too low. Some people will not respond to one medication for the treatment of this problem but they will respond to another. If the drug doesn't work, of course, it is discontinued, and then you

and I decide what do next. Try something else? Abandon medical treatment? Both are sometimes reasonable options.

### **I have heard that these drugs can do a lot of bad things. Is this true?**

Yes, it is. Like all medical treatments, there are side effects and sometimes people can have pretty bad side effects. There are two types of side effects. One type is the kind that disappears when you stop the drug. The other kind can last long after the drug is discontinued. I do not use any of the drugs which can cause permanent side effects after the drug is stopped.

### **Are they that dangerous??**

Yes, when used improperly they can be quite dangerous. However, when used carefully they can be almost 100% safe.

### **How can that be?**

Each drug has certain problems which need to be watched for. The current medical literature suggests three basic principles when using psychiatric drugs in children. 1) Start low, 2) Go slow, and 3) Monitor carefully

### **What do you mean by Start low?**

This means that you do not start any of these drugs at the usual dose, or the maximum dose. When you have pneumonia, it can be a real emergency. You want to give people plenty of medicine right away, and if there are problems, then you reduce it. Unfortunately, many people use this same strategy in the medical treatment of anxiety. The problem is that big doses can cause big problems, and when the problems affect your mind and personality, this usually means trouble for the person taking the medicines. So I start with the lowest dose possible. For example, if I use a drug called rivotril, for a boy about 60 lb., I know that the dose that will probably work for most boys that size is 2-3mg a day. If I gave him that to start out with, I might win and it would work. But if he happens to be sensitive to that drug, he could have big problems. Although they would be reversible problems, it would probably make most kids and or parents never want to take the drug again. So what do I do? I start with .5 mg a day, about 25% of the usual dose. That way if the child is sensitive to the drug, it causes little problems. I also find that some children respond to drugs at very low doses, far below the usual recommendations.

### **What do you mean, go slow?**

Anxiety disorders are usually not acute illnesses. Less than 10% of the people I see with this need to be treated very quickly. Most people who I see with this problem have had it for months to years. As a result, there is no need to increase the dose quickly. By going slowly, it is a lot easier to manage any side effects because things don't happen suddenly. Also, it is easier to find the lowest effective dose.

## **What do you mean, monitor?**

For each of the medical treatments for anxiety, there are specific side effects which need to be checked regularly. Some common ones (see individual drugs below) are monitoring weight so that people are gaining weight, watch for tics, watch for depression, checking blood pressure and pulse, checking blood tests and EKGs, and making sure parents know what the side effects are of the different medications. In this way, if there is a problem, we can pick it up early and avoid the horror stories, some of which are true, about the medical treatment of this problem.

Here are the specific drugs.

## **Serotonin Reuptake Inhibitors (SRIs)**

In most cases, these are the first choice drugs for all anxiety disorders in pediatrics. These drugs all increase the activity of the serotonin nervous system in the brain. These neurons are involved in the regulation of mood, appetite, sexuality, sleep, aggression, obsessions, and compulsions. The side effects are usually fairly minor, but of course some people will react strongly to them. These drugs can cause restlessness, insomnia, and sometimes stomach upset, nausea vomiting, or diarrhea. They even can make kids more anxious and some can even become suicidal. They can also cause behavioral disinhibition. This can be things like acting silly, saying things that should not be said, increased aggressiveness and irritability. This is always reversible upon discontinuing the medicine. In extremely rare cases, less than 1 in 10,000, these drugs can make people stiff and sometimes have unusual movements. In all the cases I have seen reported, this disappeared within a few months at most. When used for anxiety, the dose needs to be very slowly increased so to avoid worsening anxiety.

### **SSRIs can cause mania**

About 5-10% of children who take these drugs will start to get manic. That is, elevated or irritable mood, hyperactivity, non-stop talking, risky or child-like behavior, thoughts going so fast that you can't follow them, not sleeping, and thinking they can do things that they really can't. This is reversible if you stop the drug early. Everyone who is being put on these drugs should be checked for signs of bipolar disorder.

## **Are there studies in children that show that these drugs work?**

The best studies are those that compare a drug to placebo and the drug works better than placebo. The drugs in this category have been found to work better than placebo, but not every drug has been studied in every childhood anxiety disorder

| <b>Drug</b>  | <b>Brand Name</b> | <b>Usual Dosage</b> | <b>Sizes</b> | <b>Comments</b>   |
|--------------|-------------------|---------------------|--------------|---|
| Fluoxetine   | Prozac            | About 1mg/kg        | 10, 20,      | Long acting, can be dissolved in water.   |
| Paroxetine   | Paxil             | 20-60mg a day       | 10, 20, 30   | Worse withdrawal symptoms, sometimes more likely to cause weight gain. Can't be ground up or dissolved in water |
| Citalopram   | Celexa            | 20-40mg a day       | 20           | Can't be ground up or dissolved in water  |
| Sertraline   | Zoloft            | 3mg/kg max          | 25, 50       | Capsules which can be dissolved in water  |
| Fluvoxamine  | Luvox             | 3mg/kg max          | 50, 100      | Pills are scored and can be ground up   |
| Escitalopram | Cipralext         | 10-20mg/d           | 10, 20       | Very few studies in children  |
| Duloxetine   | Cymbalta          | 30-60mg             | 30, 60       | As of 2008, only a few case reports of use in children. Helps pain syndromes also.                              |

The effect can take 6-8 weeks to become apparent, and sometimes up to three months before the full effect is seen. It is impossible to tell which drug in this class might be tolerated best by a child. It is also impossible to know which drug will work. That means if one is not tolerated or not working, it is reasonable to try another. When used carefully, it is unusual not to find a drug in this family that is moderately effective and well tolerated. When they are used for anxiety they need to be started at very low doses, as sometimes they can make children more anxious at first.

### **Drug Interactions**

The drugs in this family can change how much of other medicines get into your blood stream. Other drugs can also change the amount of these SRI medications in your blood stream. What can happen? Here are the possibilities:

If you start taking a drug that interacts with the SRI, the amount of the SRI in your blood could go **up** enough to give you more severe side effects.

If you start taking a drug that interacts with the SRI, the amount of the SRI in your blood could go **down** and you could become more psychiatrically ill again.

The SRI can result in another medication going up in your system, too. If you were taking other drugs while you were on an SRI, those other drugs might give you more side effects.

Unfortunately, the SRIs are not similar in this regard. Each one has different medications which it interacts with.

Example: Tina has a cough

Tina is 11. She has been taking Prozac now for about a month and she is a lot better. But she has the flu which is going around and so her mom went to the drug store and got some cough syrup. Tina took the cough syrup and got very, very confused. Her mom (already nervous) was worried that Tina was getting meningitis. She took her to the hospital and was glad to find out that it was a drug interaction between dextromethopham, the main ingredient in cough syrup, and Prozac. Still, it took Tina about a week to get over this. (5)

This does not mean that these drugs are dangerous. It does mean that if you are taking an SRI, a doctor should make sure that it will not interact badly with other drugs you might be prescribed. It also means you should check with the pharmacist before you take anything.

## **Benzodiazepines**

This is a group of drug which are commonly called "minor tranquilizers" They work on a certain chemical in the brain called GABA and basically slow down many brain functions. The primary use in children is anxiety disorders or to help with anesthesia. Two are used for seizures. Commonly used ones are Xanax, Ativan, Serax, Valium, Dalmane, Librium and Rivotril.

### **I have heard that these are addictive. Will my son become addicted to these?**

It depends on which one was used. Can a child get addicted to high doses of Xanax? yes. There are two things that determine whether one of these drugs will be addictive and produce withdrawal. The first is how fast it gets into the bloodstream. The second is how fast it goes out. The faster it gets in and the faster it gets out of your system, the more addictive it will be. Valium, for example, goes into your system very fast. It goes out slowly. It has moderate addiction potential. Librium goes in you system slowly and goes out slowly, too. It is not at all addictive. Cocaine goes in and out very fast. It is very addictive. There are two drugs that are commonly used in children with anxiety in this group. These are Rivotril (Clonazepam) and Ativan (Lorazepam).

## **Rivotril (clonazepam)**

- This drug was first used to control seizures in children and still is. Along the way people started using it in anxiety disorders. It lasts a long time in your body after a dose, so it only needs to be given once or twice a day. It is very unlikely to produce withdrawal, and since it goes into your system slowly, it does not make people high nor is it very addictive. It is very safe in children. The dosage is usually .5 mg to 2.5 mg a day. I start with the lowest dose first and slowly increase it up to about 2 mg a day and then watch for a week or two. If it works people are able to do things that they could not before with minimal anxiety. Rarely do all the symptoms disappear, but it can make a big difference in a hurry. The side effects which have been reported are sleepiness, slurred speech, bad balance, and sometimes aggression or agitation. Most people will have one or two side effects to a mild degree, but only at the beginning. However, some people can not tolerate this, as is true with all medications.

## **Ativan (Lorazepam)**

- This drug is similar to rivotril except it does not last as long. It usually is given two or three times a day as a result. It does have the potential to produce some withdrawal symptoms if it is stopped suddenly. Because of this it is my second choice amongst these drugs. However it is very safe and has been used in children for years.

## **Other Drugs**

There are a number of other drugs which have been found to be useful in anxious adults, but have never really been tested in children with panic disorder. They are Effexor, Buspar, Welbutrin, and remeron. I would not use those unless the drugs which have been tested in children did not work.

**With this information in mind, this is how I usually approach the medical treatment of anxiety disorders in children and adolescents.**

**The first choice if it is not an emergency and the child is severely ill**

Serotonin Reuptake Inhibitors plus psychotherapy

**The first choice if Severe anxiety plus depression**

Serotonin Reuptake Inhibitors

## **The first choice if Severe anxiety, Depression, and an emergency**

Serotonin Reuptake Inhibitors plus benzodiazepine

**The first and second choice if there are some manic symptoms and a family history of bipolar disorder**

A good trial of psychotherapy

## **If they have bipolar signs and psychotherapy doesn't work**

Treat the bipolar disorder first.

## **Did someone in the family respond real well to one of these drugs?**

I would try that if it has been found to be safe in children.

## **How long do I have to continue treatment?**

There are very few studies to guide this decision. Overall, I follow the same guidelines as I do with depressed patients. That is-

- Everyone who ends up on medication should take it for at least a year.
- If it took two or three medications to find one that really worked, I would have the child take it two years.
- Similarly, if a child has been psychotic or had a severe suicide attempt, I would have them take it two years.

## **How do you go off the medication?**

Slowly. This is called tapering. That leads to minimal withdrawal and less chance of relapse.

## **What happens if the child relapses after medication is stopped or during the taper?**

Then they go back on the medication for at least two years, maybe more.

## What about psychotherapy?

For the first episode, it is adequate to stop psychotherapy once you are well. For treatment resistant depression and people who have relapsed after they get better, “booster sessions” are a good idea. This is monthly to every three month psychotherapy. When medication is being tapered down, it is also a good idea to go back to psychotherapy for awhile, especially if you have relapsed

Since relapse is so common, it is key to do all that you can to make sure you get well, stay well, and pick up early relapses. Even with the best family, the best luck, and the best care, relapse is common. As a result, once I see a child with panic disorder, I will always see them back in the future if necessary.

## In summary,

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1. Anxiety disorders can be very disabling in children and should be treated.
2. You need to make sure it is not some other medical problem and also see if other psychiatric problems are present, too.
3. Most studies have found the best results when medical and non-medical treatments are combined.

Most children with anxiety disorder should benefit significantly from treatment. It is a crime to do nothing!

## Bibliography

### General

Seidel L, Walkup J, Selective Serotonin Reuptake Inhibitor Use in the Treatment of the Pediatric Non-Obsessive-Compulsive Disorder Anxiety Disorders JOURNAL OF CHILD AND ADOLESCENT PSYCHOPHARMACOLOGY Volume 16, Number 1/2, 2006. 171–179

Practice Parameter for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders J. Am. Acad. Child Adolesc. Psychiatry, 2007;46(2):267-283.

### Social Anxiety Disorder references

1. Hayward, C, Killen JD, et al: Linking Self-Reported Childhood Behavioral Inhibition to Adolescent Social Phobia. (1998) *J Am Acad Child Adolesc Psychiatry* 37(12):1308-1316.
2. Challenging Case: Selective Mutism *Developmental and Behavioral Pediatrics* vol 20 No 1 38-41.
3. Beidel D, Turner SM, et al: Psychopathology of Childhood Social Phobia (1999) *J Am Acad Child Adolesc Psychiatry* 38(6):643-650.
4. Oosterheld Jessica, Shader Richard(1998) *Cytochromes: A Primer for Child and Adolescent Psychiatrists. J Am Acad Child Adolesc Psychiatry* 37 (4):447-450.
5. Ten Eick AP Drug-drug interactions in pediatric psychopharmacology. - *Pediatr Clin North Am* - 1998 Oct; 45(5):1233-64, x-xi
6. Kristensen, H . Selective Mutism and Comorbidity with Developmental Disorder/Delay, Anxiety Disorder, and Elimination Disorder. (2000)*J Am Acad Child Adolesc Psychiatry* 39 (2):249-256.
7. Fluvoxamine for the treatment of anxiety disorders in children and adolescents. The Research Unit on Pediatric Psychopharmacology Anxiety Study Group. *N Engl J Med* 2001 344(17): 1279-85
8. Compton Sn et al Sertraline in Children and adolescents with Social Anxiety Disorder: An Open Trail. *J Am Acad Child Adolesc Psychiatry* 40(5) 564-71.
9. Chavira DA: Combined psychoeducation and treatment with Selective serotonin reuptake inhibitors for youth with generalized social anxiety disorder. *J Child Adolesc Psychopharmacol* 2002 12(1): 47-54.
10. Practice Parameters for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders *J Am Acad Child Adolesc Psychiatry* 1997, 36 (10 Supplement):69S-84S.
11. King NJ: School Refusal in children and adolescents: a review of the past 10 years. *Disorders J Am Acad Child Adolesc Psychiatry* 40(2): 2001, 197-205.
12. Birmaher B: fluoxetine for the treatment of childhood anxiety disorders. *J Am Acad Child Adolesc Psychiatry* 2003, 42(4), 415-23.