Chapter 8
ADHD and Anxiety Disorders

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Case Example

Chloe, an 11th grader, who complains that it is hard to focus because she has constant worries running through her head about her upcoming calculus midterm (e.g., Will I fail the exam? And, what if I fail the class? If I don't pass the class, I'm never going to get into college). Chloe's math teacher already knows that she has a 504 Plan for attention-deficit/hyperactivity disorder (ADHD), so she may think that Chloe is "zoning out" when in fact it is her anxiety that is making it difficult for Chloe to pay attention.

Background

All teens experience some amount of anxiety at times. Feeling anxious is as much a part of adolescence as final exams, first dates, and puberty. In a 2013 survey conducted by the American Psychological Association (APA), teens reported their stress level was 5.8 on a 10-point scale compared with 5.1 for adults [1]. Approximately 31% of teens reported feeling overwhelmed, and 30% reported feeling depressed or sad as a result of their stress. More than one-third of teens complained of fatigue or feeling tired, and nearly one-fourth of teens reported skipping a meal due to stress [1].

Anxiety is a normal reaction to the stresses of our everyday lives. In fact, stress can help teens deal with overwhelming or threatening situations. Stressful situations trigger a cascade of stress hormones. As a fight-or-flight response, the body

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mobilizes and prepares to take action—you begin breathing faster, your heart pounds, and your entire body becomes tense. You can see why it can be easy to overlook anxiety because we all experience it in some way, shape, or form.

An anxiety disorder, by contrast, can be debilitating. Highly anxious teens have an overactive fight-or-flight response that perceives threats when often there are none. For these teenagers, anxiety is not protecting them but rather preventing them from fully engaging in typical activities of daily life including school, friendships, and academics. Their anxiety may be terrifying—and, at times, incapacitating—or it may be relatively mild but pervasive for seemingly no reason. According to the National Institute of Mental Health, approximately 32% of adolescents develop an anxiety disorder between the ages of 13 and 18 [2].

It is normal for teens to feel anxious or to worry. Adolescents with anxiety disorders stand out from their peers whose anxiety is more typical: symptoms are more frequent and interfere with their everyday lives.

Epidemiology of ADHD with Anxiety Disorders

Like ADHD, there is no single cause of anxiety. Anxiety most likely results from a complex interplay of genetic vulnerabilities, biological factors, temperamental qualities, early negative stressors, and sociocultural factors. We know that anxiety runs in families at an unusually high rate. We also know that ADHD tends to run in families. Thus, it is not surprising that ADHD and comorbid anxiety disorders have been shown to occur together in first-degree relatives like children, parents, and grandparents [3]. Family genetic studies show that first-degree relatives of children with comorbid ADHD and anxiety have a similar risk for ADHD but a much higher risk for anxiety than relatives of children with ADHD only [4]. We also think that maternal anxiety or stress during pregnancy may increase the risk for comorbid ADHD and anxiety. Findings have been inconsistent with regard to the gestational age at which these effects are most pronounced, but we think that the first 8–24 weeks of pregnancy are critical [4].

Any subtype of ADHD may co-occur with any anxiety disorder.

It is important to know that any anxiety disorder, like social anxiety disorder or generalized anxiety disorder, may occur with ADHD. We once thought that the inattentive subtype of ADHD had a higher association with anxiety disorders than the combined and hyperactive/impulsive subtypes, but that no longer appears true.

Recent research shows the rates of comorbid anxiety disorders are similar across subtypes of ADHD [4]. That means that the youngster given detention for goofing off in class with their friends may be just as likely to have an anxiety disorder as the teen who sits anxiously in class hoping not to be called on—aware that they didn't prepare for class or fearful of having the wrong answer.

While we know that anxiety disorders affect significantly more females on average, we think that males and females with ADHD are affected by anxiety disorders at similar rates. The research is conflicting, with some evidence indicating that females with ADHD report higher levels of anxiety than males [5, 6] and other research suggesting just the opposite—that males with ADHD have a higher risk for anxiety than females [7]. The take-home message is that the risk for developing an anxiety disorder appears to be about the same for both females and males with ADHD.

Clinical Course of ADHD with Anxiety

Anxiety symptoms typically wax and wane from childhood into adolescence and even adulthood. They are dynamic and can evolve into other anxiety disorders and conditions like depression. For instance, shyness or behavioral inhibition in very young children may continue into adolescence and progress into an anxiety disorder. In many cases, anxiety disorders persist from teenage years into early adulthood. Interestingly, a large majority of adults with anxiety disorders report that their disorder started in adolescence [8].

Despite the fluctuating nature of anxiety, there is a typical age of onset for the various types of anxiety disorders. For instance, separation anxiety disorder and certain specific phobias, like a fear of dogs or becoming ill, usually start before the age of 12 [8]. These disorders typically begin to decrease in adolescence and continue to do so in adulthood. Social anxiety disorder develops in late childhood or adolescence and very rarely after the age of 25. Agoraphobia, panic disorder, and generalized anxiety disorder usually emerge in adolescence or early adulthood and persist into adulthood [8].

Little is known about the long-term course of comorbid ADHD and anxiety disorders. However, there is literature to support the chronic nature of ADHD and anxiety disorders alone. We can speculate that when these disorders co-occur, they may be likely to persist into adulthood. Studies of anxiety disorders, like panic disorder and generalized anxiety disorder, suggest that the course of the disorder may be influenced by factors like stressful life events, sensitivity, and other comorbid disorders [8]. We also know that teens with anxiety disorders are at a higher risk of developing problems with depression and substance abuse in adulthood [8]. With this in mind, the earlier we can identify these problems and intervene, the better.

Anxiety: Signs and Symptoms

There are many different types of anxiety disorders, including generalized anxiety, social anxiety, separation anxiety, obsessive-compulsive, phobias, and panic. All of these disorders are known to cause significant distress and impair functioning within the home, school, and social settings.

Adolescents with ADHD and anxiety tend to be "worriers"—they worry about school, social situations, their athletic performance, and their behavior. Some teens may not be willing to try new activities and are afraid of taking risks. Other teens may be more likely to engage in risky behaviors like substance abuse or risky sexual behavior to help ease their constant worries. They may seek excessive reassurance from parents or friends and ask "What if?" questions over and over again. Worried teens tend to do less well in school, and this can affect their self-esteem, placing them at risk for depressive disorders. Adolescents often feel that their symptoms are beyond their control, making things feel even more unmanageable.

Some common signs of anxiety in a teenager include:

- Excessive fears and worries
- Feeling nervous or "on edge"
- Feelings of inner restlessness
- Tendency to be wary and vigilant

Many teens also experience physical symptoms of anxiety like muscle tension, stomachaches, headaches, diarrhea, pain, and fatigue. They may visit the nurse's office regularly or ask to see their primary care provider for relatively minor medical complaints. Also common in this age group are sleep disturbances: problems falling asleep, midnight awakening, and nightmares.

> For some adolescents, physical symptoms coincide with anxiety-provoking situations like tests, oral presentations, and athletic competitions, resulting in teenagers missing school or other events on important days.

It's not surprising that anxiety can greatly impact a teenager's social world. Anxious teens uneasy in social situations may experience difficulty participating in school activities (e.g., working in groups, answering questions in front of the class) or avoid social situations (e.g., joining school clubs or sports teams). This can result in teens becoming increasingly isolated and withdrawn, placing them at risk for depressive symptoms.

Again, there are several different types of anxiety disorders that occur in adolescence, including some of the most common anxiety disorders.

Generalized Anxiety Disorder (GAD)

The hallmark of generalized anxiety disorder (GAD) is excessive anxiety or worry about things related to personal health, school, social interactions, and everyday routine life circumstances. A teenager that complains frequently about physical symptoms, like stomachaches, diarrhea, headaches, and muscle tension, may have GAD. The fear and anxiety associated with GAD causes significant problems in areas of the teen's life, such as social interactions, academic performance, and extracurricular activities.

Panic Disorder

Panic disorder is characterized by discrete episodes of excessive fear for no particular reason. Episodes occur seemingly "out of the blue," and teens describe feeling like they are losing control even when there is no actual danger. Adolescents may complain about their heart racing, not being able to catch their breath, and an inability to stop shaking. Adolescents might be fearful of traveling on bridges or roads. It is important to keep in mind that not every teen that has panic attacks will develop panic disorder. Some adolescents develop something called "agoraphobia," a fear and avoidance of places or situations that they worry may cause them to panic.

Social Anxiety Disorder

Adolescents with social anxiety disorder (also called social phobia) have a marked fear of humiliation in social situations. Symptoms may include a fear of meeting and talking to new peers or adults, avoidance of social situations, and having few friends outside of the family. Teens may avoid class presentations or talking to their friends for fear of saying something embarrassing.

When to Seek Help
If any of the following symptoms are reported by a teen, seek immediate assistance from a mental health professional:

- Self-harm or thoughts about death and dying
- Threats of harm to others
- Substance abuse
- Severe aggression
- Hallucinations (e.g., hearing or seeing things) or paranoid thinking

The Interplay Between Anxiety and ADHD

Thinking back to our case example, Chloe, it can be difficult to detect an anxiety disorder in a teenager with ADHD because of overlapping symptoms. Inattention, a core symptom of ADHD, is also a common symptom of adolescent anxiety. For teens with ADHD and anxiety, inattention is often a major concern and can be mistakenly attributed to ADHD only. Fidgety behavior seen in ADHD may be similar to physical restlessness associated with anxiety. Some parents may attribute this solely to ADHD when it may be a telltale sign of anxiety. This is why it is important to have an open conversation with the teen about their symptoms instead of making assumptions based on what we already know.

There is some research to suggest that the presence of an anxiety disorder may actually "protect" against certain symptoms associated with ADHD. For instance, research has shown that children with ADHD and anxiety reliably do better on tasks of inhibitory control [9]. For certain teens, anxiety enhances their performance on tasks that require response inhibition. Some researchers have also found that children with ADHD and anxiety do better on tasks of sustained attention [9]. Unfortunately, these findings have not been widely replicated outside of the laboratory. For many teens with ADHD and anxiety, attentional issues may be even more pronounced than in teens with ADHD alone [10].

We also think that the combination of ADHD and comorbid anxiety may make some things harder for teens. Teenagers with ADHD and comorbid anxiety perform worse on tasks with high demands for remembering and learning information that requires effort and attention. Within the school setting, children with anxiety and ADHD show more impairment in certain areas of functioning. For instance, children with comorbid anxiety have double the frequency of placement in special classes and higher rates of extra help [11]. Low self-esteem has also been associated with anxiety and ADHD [12]. Children with concurrent anxiety disorders report higher levels of co-existing stressful life events than children with ADHD only [13]. Adolescents with anxiety and ADHD may also be at an increased risk for substance abuse problems.

Diagnostic Assessment

Just like ADHD, there is no blood test or x-ray to diagnose anxiety at this time. This means that a careful history and assessment is required by a mental health professional or medical provider. A diagnosis of comorbid anxiety may be made by a mental health clinician (e.g., psychologist, social worker, guidance counselor) or medical provider (e.g., psychiatrist, psychiatric nurse practitioner, pediatrician, developmental behavioral pediatrician, pediatric nurse practitioner). This involves a clinical interview with the adolescent and their parent/guardian as well as collateral feedback. A history should be obtained from both the parent and the adolescent, but

it is imperative for the clinician to meet with the adolescent individually if possible. Parents may be better informants than adolescents about externalizing behavior associated with ADHD, but adolescents are usually better able to report their own internalizing symptoms. As we mentioned previously, teens can be good at hiding their thoughts and feelings, making an anxiety disorder difficult to identify.

The clinical interview involves a review of family history, birth and developmental history, medical history, and social history. Given the heritability of anxiety disorders, the evaluation should include a review of any mental health concerns in the immediate and extended family, including a history of anxiety disorders and whether family members received any formal treatment. When considering treatment for a teen, it is helpful to know if their family members have ever received any formal treatment for anxiety (e.g., medication or therapy) and how they responded to this treatment. The developmental history may reveal long-standing patterns of avoidance or shy and inhibited temperament in early childhood. A comprehensive medical history and review of symptoms can help rule out any underlying medical problems that could be causing or contributing to a teenager's anxiety. A clinician may ask targeted medical questions: Has your child had a history of a head injury? Have they seen a neurologist in the past? This is good time to inquire about any reported physical symptoms such as headaches or stomachaches. It also is important to disclose any repeat visits to the school nurse, primary care provider, or emergency department for these or other symptoms in the past. A provider may also ask about appetite changes and whether a teen is getting adequate sleep. Not only can sleep disturbances (e.g., nightmares, difficulty falling asleep, or inability to sleep alone) be symptomatic of anxiety, but sleep problems are also known to intensify anxiety symptoms. Certain medical conditions, like hyperthyroidism, and medications, such as corticosteroids or albuterol, can also mimic anxiety symptoms. Substance use, including abuse of cannabis and alcohol, can also induce anxiety symptoms in teens [14].

In addition to a comprehensive history and clinical interview, clinicians often use rating scales to help diagnose anxiety. These are usually pen-and-pencil scales (or Internet-based scales) that ask the teen about anxiety symptoms. For some of these scales, a parent version is also available. Ratings are summed to help determine whether an anxiety disorder may be likely or to estimate the severity of anxiety symptoms. Some adolescents with ADHD and anxiety will not voice their worries spontaneously and are more likely to be open when asked to complete rating scales (Table 8.1).

Table 8.1 Commonly used rating scales for assessment of anxiety in teenagers

Anxiety Rating Scales
Multidimensional Anxiety Scale for Children, 2nd Edition (MASC2)
Screen for Child Anxiety and Related Emotional Disorders (SCARED)
Revised Children's Manifest Anxiety Scale, Second Edition (RCMAS-2)

Collateral feedback with teachers, staff, and other adults close to the adolescent is an important part of a comprehensive assessment. This information can help provide a richer perspective of the teen's school and social life as well as clarify any discrepancy between reports from the teen and their parents. This may include reaching out to an extended family member, coach, or tutor.

Treatment

An effective treatment plan is tailored to the teenager and their family. The first step is to identify the problem or symptom causing the greatest level of impairment. For some teens, this may be inattention or impulsivity secondary to ADHD. For others, it may be the excessive worries or gastrointestinal symptoms of anxiety. How do you know what condition is most impairing? Parents, teachers, and healthcare providers may not be aware to the extent of the adolescent's anxiety. The best place to start is by asking the teenager first. A teen may be able to provide very important insights into the course of treatment. When the primary symptom or set of symptoms are under better control, treatment for the secondary condition should begin.

There are certain instances in which treatment for the primary concern may prove too challenging, in which case it is better to start treatment for the secondary problem. For example, if a teen's anxiety symptoms, such as phobia of swallowing pills, are impairing their ability to engage in a treatment intervention (e.g., swallowing medication for ADHD), it will be important to treat the other condition first (e.g., start exposure therapy to help the teen overcome their pill swallowing phobia). On the other hand, if ADHD symptoms are impairing a child's ability to engage in psychotherapy (e.g., if a teen is unable to attend long enough to participate in therapy sessions), then treat the attentional problem first. We know that the course of the disorders is variable, and each may require short-term, intermittent, or long-term treatment and follow-up.

My kid's anxiety is better, but my pediatrician won't start a stimulant for ADHD.
This is, unfortunately, a big misunderstanding among many healthcare professionals. Though your pediatrician or primary care provider may think that stimulants make anxiety worse, the research tells us that this is not necessarily the case.

Anxiety disorders in teenagers are generally treatable. Early identification and treatment can prevent future difficulties, such as loss of friendships, failure to reach academic potential, and feelings of low self-esteem. Additionally, early intervention may help reduce the risk of persistent symptoms into adulthood [2]. Both psychotherapy and medication have been shown to be effective for anxiety problems in

adolescence. However, we generally recommend a "multi-modal approach" to treatment for anxiety. This may include a combination of the following interventions, including individual therapy, family therapy, behavioral treatments, medications, and consultation to the teen's school.

For anxiety symptoms that are considered "mild or moderate," in that they do not severely limit the teen's ability to function, first-line treatment includes education (*psychoeducation*) about anxiety disorders, psychotherapy, parent guidance, and consultation to the school to help inform treatment planning and coordination of care.

Behavioral Treatment for Anxiety

Cognitive behavioral therapy (CBT) has gained the most attention for treatment of anxiety in teens because it is the most effective form of therapy and it is as effective if not more effective than medication.

> CBT helps teens identify the link between their thoughts and behaviors and learn effective strategies to minimize anxiety.

The treatment can be administered in an individual or group format. CBT involves several different treatment components including psychoeducation about anxiety, identification of difficult emotions, learning relaxation strategies (e.g., progressive muscle relaxation, diaphragmatic breathing), making the connection between thoughts and feelings, cognitive restructuring strategies, problem-solving, challenging negative emotions, and building positive emotions. For all teens, CBT involves regular practice outside of therapy appointments including weekly homework. Parents also play an important role in treatment as they may meet separately with a therapist to learn about anxiety and develop skills to manage anxiety at home.

There is some research to show that CBT for youth with ADHD and anxiety may require some modification to take into account challenges associated with ADHD. The Child-Adolescent Anxiety Multimodal Study (CAMS), a study funded by the National Institutes of Health, showed that anxious youth with ADHD fared worse than youth with anxiety alone when treated with CBT alone [15]. These findings suggest that CBT for this population may need to be adapted or prolonged to accommodate difficulties associated with comorbid ADHD. This has led some to develop CBT interventions specifically designed for youth with ADHD and comorbid anxiety. A research team in Australia developed a CBT intervention to help reduce levels of anxiety in teens with ADHD and found a significant decrease in anxiety symptoms with this 8-week program [16].

Medication Treatment for Anxiety

For moderate to severe symptoms of anxiety, a combination of therapy and medications is considered the gold standard. The CAMS study shows that youth who received combined medication and CBT treatments had a greater reduction in anxiety symptoms than youth who received medication or CBT alone [17].

> Medication should almost never be used alone and always combined with therapy.

Selective serotonin reuptake inhibitor (SSRI) medications are considered to be first-line medication treatment for anxiety in teens (Table 8.2). There is no strong evidence to suggest one particular SSRI over another. Instead, an SSRI is selected based on a combination of side effect profile, duration of onset, drug-to-drug interactions, and family response. An adequate trial of SSRI involves 4–6 weeks at a therapeutic dose. If a teen does not respond to the first SSRI trial, a second trial of an SSRI is often recommended. After two failed SSRI trials, consideration should be given to a non-SSRI medication, usually a serotonin and norepinephrine reuptake inhibitor (SNRI), along with continued utilization of therapy interventions. SNRIs include Effexor (venlafaxine) and Cymbalta (duloxetine). Cymbalta has been approved for treatment of GAD in children and has been increasingly used for treatment of anxiety in teens [18].

Once effective treatment has been established, medication should be continued for at least 6–12 months to avoid symptoms from returning [14]. We usually recommend that the medication be gradually tapered after this time frame. If any symptoms of anxiety re-emerge, we know that we need to consider restarting the medication at the lowest effective dose or boosting the dose back up to the level that seemed most helpful. Because some anxiety disorders may wax and wane, continuous assessment is needed. In some cases, children might need higher doses around the beginning (August–November) or end (April–June) of the school year [19].

All SSRIs and many other medications used for anxiety have a black box warning on their packaging label. This warning indicates that there is a risk of increased suicidal thoughts and behavior when beginning treatment with the medication. It

Table 8.2 Selective serotonin reuptake inhibitors

Brand name	Generic name
Prozac®	Fluoxetine
Zoloft®	Sertraline
Lexapro®	Escitalopram
Celexa®	Citalopram
Luvox®	Fluvoxamine
Paxil®	Paroxetine

will be important to monitor for worsening sadness, withdrawal, restlessness, elated mood, hostility, agitation, and suicidal ideation. Risk of suicidality may be especially high for patients with a family history of bipolar disorder or attempted suicide. It is important to develop a plan of action in advance should suicidality or aggression develop. Although the risk is small, it is important for parents and providers to take this into account and weigh the risks with the implications of untreated anxiety in the teen.

Atomoxetine, a selective norepinephrine reuptake inhibitor, is often considered for co-occurring anxiety with ADHD. This medication is the first non-stimulant approved for treatment of ADHD in children, adolescents, and adults. The role of atomoxetine in treatment of anxiety disorders has not been studied, but research shows reduction in anxiety and ADHD symptoms with atomoxetine [20]. Because atomoxetine cannot be abused, it may be a good medication for adolescents who are at risk for or have a history of substance abuse. Atomoxetine usually takes a few weeks to see its full benefit, and it may take up to 6 weeks to get to an effective dose.

We typically do not recommend long-term treatment of anxiety with benzodiazepines due to high risk for abuse and addiction.

Other anxiety medications that may be helpful include anxiety-breaking agents called benzodiazepines, such as Ativan (lorazepam), Klonopin (clonazepam), and Xanax (alprazolam). Side effects of these medications include disinhibition and sedation as well as a potential for abuse and addiction. In general, we are careful with these medications in teens, because they are already at an increased risk for substance abuse and these medications can be highly addictive. Buspar (buspirone) is another medication that is used for everyday anxiety, whereas medications like propranolol or vistaril (hydroxyzine) are used for acute episodes of anxiety.

*How do I talk to my child about medication***?**
Adolescents can be difficult because they may be distrustful of medication based on stories they've heard from friends or in the media. It is important to have an honest and open conversation with your teen.

One of the major reasons for medication failure in adolescents is non-adherence. Teens should be involved in their treatment from the early stages of assessment and onward. They should be educated about what to expect from the treatment and to recognize common side effects. By educating and empowering your teen, they are more likely to participate in their treatment.

Some tips to improve medication adherence include:

- Simplify the regimen (e.g., switch from twice-per-day dosing to single-day dosing)
- Set an alarm on your cell phone or use a medication reminder app
- Request school nurses to administer medication at school

Common problems that interfere with compliance in a teen:
They may think that they don't have a problem.
They may think that their problem doesn't necessitate medication.
They may be worried that the medication will change their personality.

Treatment of Anxiety: The Role of the School

Anxious teens may benefit from special accommodations at school to help minimize symptoms. Children spend most of their time in school, approximately 1000 h/year, so the school setting can be an important place for intervention. Every adolescent has different needs, so no one plan will work for every teen. Given the wide range of symptoms experienced by adolescents with anxiety disorders and ADHD, it is important to identify the teen's unique needs and develop a plan accordingly. Accommodations may change over time and regular check-ins with the treatment team are recommended to help assess what is working and what isn't (Table 8.3).

Special Considerations for Treatment of ADHD with Anxiety

We previously thought that teens with ADHD and comorbid anxiety responded differently to treatments for ADHD, but recent research shows that this is not true for most. The MTA study reported that children with ADHD and anxiety responded just as well to a program of medication and CBT for ADHD as children without an anxiety disorder [21, 22]. It was long believed that stimulants were less effective for treatment of ADHD in teens with comorbid anxiety compared with ADHD alone.

Table 8.3 Examples of school accommodations for adolescent anxiety

School accommodations for adolescent anxiety
Regular check-ins with the school guidance counselor or psychologist to help monitor anxiety and provide a "safe space" to discuss difficult feelings
Taking a break from class to get a drink of water or stretch can help reduce building pressure throughout the day and help the teen reenter class feeling calmer
Extended time on tests may help alleviate anxiety, and just knowing that the time is available may be enough for some teens
Having access to a separate and quiet environment for tests can ease stress and reduce distraction

Specifically, it was felt that the response to stimulants was blunted in this population making researchers question whether ADHD and anxiety constituted an entirely different subtype of ADHD [4]. However, data from longer-term studies show that children with and without anxiety have similar rates of improvement in ADHD symptoms with stimulants [4, 23]. One study showed that the presence of an anxiety disorder predicted better response to treatment as measured by teachers [24].

In the case that a teen develops worsening anxiety on stimulants, the first-line medication treatment for ADHD, a trial of atomoxetine or an alpha agonist may be helpful. The short-acting alpha agonists, Tenex (guanfacine) and Catapres (clonidine), may be preferred over the long-acting agonists, Intuniv (guanfacine) and Kapvay (clonidine), or vice versa. In general, non-stimulants are thought to be less effective than the stimulants in treating ADHD symptoms, but they do provide coverage throughout the day with fewer side effects in some cases.

Case Revisited

It can be tricky to disentangle teen inattention from anxiety, but Chloe makes it easier by telling us the content of her thoughts. Chloe's evaluation should include a comprehensive update of her academic, social, and emotional functioning. Current ADHD symptoms should be reviewed, understanding that untreated ADHD symptoms might contribute to her current anxiety. Using a rating scale will help gather her symptoms in a standardized manner. Chloe may benefit from behavioral treatments for anxiety, such as from cognitive restructuring and relaxation techniques. If her anxiety persists, escalates, or interferes with function, Chloe may also benefit from an SSRI.

Tips

- Screen for anxiety occurring with ADHD from a young age. Early intervention may help reduce the risk of persistent symptoms into adulthood.
- Though anxiety disorders affect significantly more females on average, males and females with ADHD are affected by anxiety disorders at similar rates.
- Medication is often not the first intervention for anxiety with ADHD in teens. Consider behavioral or other therapies and school accommodations.

Conclusions

Anxiety disorders are very common in adolescents and occur even more frequently in teens with ADHD than teens without the diagnosis. Early identification and treatment of anxiety may improve functioning in youth with ADHD and reduce the

persistence of anxiety disorders into adulthood. The assessment of anxiety disorders and ADHD involves a careful history and assessment including a detailed history of the presenting problems, developmental history, medical history, social history, and family history. It is essential to remember that teens may be better able to report symptoms of anxiety than their parents and should be involved in their treatment from the very beginning. Both disorders should be considered in the treatment plan, and the teen should help identify which problem areas should be addressed first. The course of treatment may vary from teen to teen, and it is important to monitor treatment effects for both disorders.

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