

THE CARLAT REPORT

CHILD PSYCHIATRY

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Joshua D. Feder, MD
Editor-in-Chief

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Learning Objectives

After reading these articles, you should be able to:

1. Describe the challenges in diagnosing and treating co-occurring ADHD and bipolar disorder.
2. Assess ways for clinicians to manage the ADHD prognosis in children and adolescents to optimize future academic success and functionality.
3. Summarize some of the current findings in the literature regarding psychiatric treatment for children and adolescents.

Evaluating and Treating Co-Occurring ADHD and Bipolar Disorder

Candace Good, MD. Child & adolescent psychiatrist, SunPointe Health, State College, PA, and a contributing writer for the Carlat newsletters.

Dr. Good has disclosed that she has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

Early into the evaluation of a 10-year-old boy, you note the following symptoms: inattention, hyperactivity, impulsivity, sleep problems, racing thoughts, and moodiness. The boy's parents came to your office convinced that their son has ADHD, but thinking through the case, you recognize that the same symptoms could signal bipolar disorder (BD). You have less than 45 minutes left; what's your next step? How do you decide if this child really has ADHD, BD, or both?

This case example presents a common problem for child psychiatrists. We

In Summary

- Approximately 40% of children and adolescents with bipolar disorder (BD) also have co-occurring ADHD.
- Detailed information about mood variations during the clinical interview as well as standardized rating scales can help clinicians assess patients with symptoms of both BD and ADHD.
- When BD and ADHD co-occur, prioritize pharmacologic treatment of the BD.

routinely see children with ADHD symptoms that don't respond to treatment as usual. Numbers vary, with 0.5% of children with ADHD having BD and about 42% of those with BD having ADHD, according to ——— *Continued on page 2*



Becoming Successful Despite ADHD

Mark Katz, PhD

Clinical psychologist and director of Learning Development Services, San Diego, CA. Author of On Playing a Poor Hand Well and Children Who Fail at School and Succeed at Life (both published by W. W. Norton and Company).

Dr. Katz has disclosed that he has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

CCPR: Dr. Katz, how did you get interested in this topic?

Dr. Katz: There's a body of research exploring the lives of those who overcame a range of adverse childhood experiences, including learning-related challenges. I've always been interested in this work. Parents at our center are often surprised to learn that successful adults in every profession have struggled with lifelong attentional, executive function, learning, and other related challenges.

CCPR: What's the most common issue you encounter?

Dr. Katz: There is still confusion about ADHD, especially the name itself. People with ADHD can pay attention well when they're interested in what they're doing. Not knowing this, it's easy to see why so many people still don't believe the condition is real. Another concern is that people with ——— *Continued on page 3*



Evaluating and Treating Co-Occurring ADHD and Bipolar Disorder

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recent studies (Arnold LE, *Bipolar Disord* 2011;13(5–6):509–521). Culture matters too; there is far more diagnostic overlap in the US than in the UK. In this article, we'll discuss some tips to help you distinguish between the two conditions. We'll also give you some commonsense advice on how to approach medication treatment in kids who present with symptoms of both ADHD and BD.

Interviewing and evaluation tips

While there is some overlap between DSM-5 criteria for ADHD and BD, in general, ADHD is more a chronic problem of cognition and impulsivity, whereas BD is

primarily an episodic mood disorder. Additionally, age of onset is typically younger for ADHD. (See the table “Is It ADHD or Bipolar Disorder?” below.)

How do we efficiently differentiate between these disorders? A detailed family history of BD, including who had symptoms and what worked and did not work in managing those symptoms, is helpful but not diagnostic per se.

Another piece of the picture is the clinical interview. I've noticed that children with mania may be disorganized in their thought process and behavior yet still appear well-groomed, because their caregivers are overseeing their activities of daily living. This may be true for parents of kids with ADHD as well. You can informally gauge the child's level of function by considering how much the parents have to do to make up for the child's deficits. Kids with ADHD are fast talkers and change topics quickly, but they can usually be interrupted—whereas those with mania will tend to talk over you. Kids with both ADHD and BD are daredevils and accident-prone, but manic patients may have unusual thoughts underlying the activity. For example, riding a bike too fast may be a symptom of impulsivity in ADHD, but it may be a quasi-psychotic, grandiose symptom in manic patients, who might be convinced they can fly. Other risky behaviors—such as sexting or viewing online porn—while sadly common in teens with ADHD, may signal frank hypersexuality in a manic child.

Families commonly interpret various “mood swings” as a sign of BD, but it's important to carefully evaluate the kinds of mood variations that are taking place. Ask about the triggers or the duration of episodes. Children with ADHD may “crash” or “rebound” as their medication wears off in the afternoon, and they may “snap” when a limit is set. In BD, there may be no trigger for a mood shift that lasts hours or days. Regarding sleep, children with ADHD often function on less than the 9–11 hours typical of other school-aged kids. In mania, you will see episodic changes or greater severity of sleep disturbances.

Working with teachers

It's rare for clinicians to talk directly with a teacher during a routine office assessment, but there are some standardized rating scales used in schools that can be helpful in diagnosis. For example, several studies have assessed the Child Behavioral Checklist (CBCL), which is often completed as part of the multidisciplinary evaluation process. If available, CBCL forms have ADHD-related scales and can also show a “deviant” profile indicating significantly increased risk for BD (Biederman J et al, *J Clin Psychiatry* 2009;70:732–740).

Additional testing

Research studies use detailed semi-structured interviews (K-SADS, WASH-U K-SADS) that aren't practical in typical clinical practice. However, the Young Mania Rating Scale (YMRS) and the Disruptive

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This CME/CE activity is intended for psychiatrists, psychiatric nurses, psychologists, and other health care professionals, with an interest in the diagnosis and treatment of psychiatric disorders.

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Is It ADHD or Bipolar Disorder?	
Symptoms More Characteristic of ADHD	Symptoms More Characteristic of Bipolar Disorder
Increase in energy or being “on the go,” but energy not unlimited	Seemingly unlimited energy
Frequently interrupts others	Pressured speech and racing thoughts may lead to interrupting others
Mood changes are situational	Mood changes are random or cyclical and include depression
Fails to take precautions	Hypersexual
Stays up late, tired the next day	Little or no need for sleep
Few good peer matches	Difficulty connecting with any peers due to being consumed by mood states
Responds to stimulants	Responds to mood stabilizers but not to stimulants alone
Present from early childhood	Develops over time, usually in teens or early 20s
Not often suicidal	Frequent suicidal intent

Sources: <https://www.additudemag.com/adhd-vs-bipolar-a-guide-to-distinguishing-look-alike-conditions>
https://www.webmd.com/add-adhd/childhood-adhd/bipolar_disorder

Evaluating and Treating Co-Occurring ADHD and Bipolar Disorder

Continued from page 2

Behavior Rating Scale (DBRS) can help you track severity of symptoms. Computerized continuous performance tests (CPTs) are not helpful in distinguishing between ADHD and BD, because both conditions cause restlessness and hyperactivity that drive errors of omission and commission. Newer computer tests, such as the Quotient ADHD system, include motion tracking that may provide additional data, such as scoring micro-movements as more consistent with ADHD. However, more research is needed on whether this approach can accurately differentiate ADHD from Bipolar Disorder I or II.

Pharmacologic treatment

When the diagnostic picture seems muddled in a new patient who is already on multiple medications, consider weaning the patient off existing medications to reestablish a baseline. This may require more frequent appointments or regular phone updates. Stopping meds, even if they don't seem to be working, can be scary for families. Explain the risks of polypharmacy and document the discussion as well as the rationale for each medication.

Expert Interview

Continued from page 1

ADHD—both children and adults—often know what to do but are inconsistent and unpredictable in doing it. They have trouble executing. We have adults with ADHD who've taken course after course on how to be organized. They could write a book on organization, yet they still leave their day planners at our center! With help and support, families, teachers, and others often learn to see the role that understanding can play in rising above a difficult past, and the role that misunderstanding can play in prolonging one.

CCPR: What has been the traditional view of prognosis in ADHD, and what challenges have arisen due to that view?

Dr. Katz: ADHD was once thought of as a childhood condition that kids would outgrow. That's no longer true. We now view ADHD from a lifespan perspective. ADHD symptoms often do not disappear, and yet people can learn to compensate for the symptoms in a variety of ways.

CCPR: This point of view also helps us legitimize ADHD and decrease the associated stigma, doesn't it?

Dr. Katz: Absolutely. Stigma is an important and overlooked factor in prognosis. Children and adults with ADHD feel profound shame and embarrassment. The stigma can be harder to bear than the condition itself. If we can help patients and their families learn to legitimize rather than stigmatize the condition, I think we can dramatically improve quality of life.

CCPR: Can you share a case that illustrates this?

Dr. Katz: Sure. I have a 17-year-old patient, "Jeremy," who was diagnosed with ADHD at age 10. He is currently managing his ADHD symptoms very well, in large part due to his school counselor, who's helped him learn how to better advocate for himself. As part of his 504 accommodation plan, Jeremy has access to audio recordings of his textbooks, which helps him with comprehension, and copies of class lecture notes, which helps him navigate around his long-standing note-taking difficulties. Jeremy also meets twice daily with another student, who acts as a peer assistant. Before classes begin, they walk through his tasks for organizing and managing the day and then meet again briefly at the end of the day to ensure homework was turned in, assignments were written down, etc. Jeremy is also a peer assistant to a freshman whom he helps specifically with science-related projects.

CCPR: That's a very creative approach. I would assume these ideas would be applicable to college students as well?

Dr. Katz: Yes. For example, I have another patient with ADHD, "Sarah," who had dropped out of college, convinced that she would never be able to master her courses. We found a number of difficulties, including ADHD and executive function challenges, but also a range of impressive intellectual, learning, and other strengths which Sarah was completely unaware of. Once Sarah became more knowledgeable about her strengths and challenges, she knew how and what to ask for to level her academic playing field. She learned about different strategies and technologies that other students are using to navigate challenges similar to her own. She now earns "A" grades and has outstanding recommendations from her professors. We're currently writing a letter

You will sometimes have to make medication decisions even when the diagnosis is uncertain—typically, this happens when kids are doing poorly in school and there is pressure to quickly treat ADHD symptoms. If you suspect a mood component, use stimulants with caution, as they may disrupt sleep and trigger or exacerbate mood instability. Similarly, some non-stimulant ADHD medications, such as FDA-approved atomoxetine or off-label bupropion, could destabilize mood and worsen mania. Rather than starting with stimulants, consider ADHD meds that are less likely to cause mood instability, such as centrally acting alpha-2 agonists (clonidine, guanfacine).

When a mood disorder is part of the diagnostic picture, give it treatment priority over other conditions. For Bipolar I or II, it is preferable to start with an agent that has FDA approval for treatment in this age group. Several second-generation antipsychotics are FDA-approved for adolescents (starting ages vary): aripiprazole, quetiapine, risperidone, olanzapine (Bipolar I), and lurasidone, as well as lithium (ages 12–17). If ADHD symptoms

persist, it's OK to add a stimulant. In the 8-year follow-up to the Multimodal Treatment of ADHD Study (MTA), rates of mania remained low, suggesting that stimulants themselves don't trigger mania (Molin B et al, *J Am Acad Child Adolesc Psychiatry* 2009;48:484–500). Other trials support the safety and utility of adding stimulants in populations already treated with a mood stabilizer (Scheffer RE et al, *Am J Psychiatry* 2005;162:58–64; Findling RL et al, *J Am Acad Child Adolesc Psychiatry* 2007;46(11):1445–1453). Some side effects of stimulants, like appetite suppression, can actually be favorable for youths with BD, as they may limit the weight gain typically seen with mood stabilizers like divalproex sodium, lithium, or antipsychotics.

CCPR VERDICT: Dig a little deeper to differentiate ADHD from bipolar and other mood disorders, as a significant number of patients meet criteria for both. Prioritize treating the mood disorder and proceed carefully from there.

Expert Interview

Continued from page 3

on Sarah's behalf to explain to graduate school admissions personnel that a GRE score will not accurately convey Sarah's ability to perform in real-world settings.

CCPR: How should we think about the relationship between academic success and adult function in children with ADHD?

Dr. Katz: Children with ADHD are at risk of falling behind in school. But even if they do well, as adults they are at increased risk for driving accidents, work-related challenges, money management problems, and other relational conflicts. Conversely, kids with ADHD who do poorly in school can have excellent function as adults, including in higher education, especially when they are passionate about their career. We need to help them raise their expectations while helping them learn ways to level their academic and personal playing fields.

CCPR: That makes sense—could you elaborate?

Dr. Katz: Recently, we assessed three law school students with ADHD to help them receive accommodations; another law school graduate with ADHD to help her receive extra time on the bar exam; a dentist with ADHD to assist him with the tools to navigate executive function challenges; and two physicians, each of whom suspected that their inability to complete patient notes in a timely manner was related to undiagnosed neurodevelopmental challenges. It's a new world for those impacted by ADHD, with new possibilities and new pathways to a brighter future.

CCPR: What research is there on adult success in children with ADHD?

Dr. Katz: Dr. Paul Gerber and colleagues studied factors associated with workplace success among adults with ADHD and learning disabilities. McGill University Professor Dr. Lily Hechtman identified resilient qualities among a group of adults with ADHD who were adapting well. In the Kauai Longitudinal Study, Dr. Emmy Werner and Dr. Ruth Smith identified factors associated with later-life adult success among a group of children with learning disabilities. Starting in 1955, they followed the developmental trajectories of two groups of resilient individuals, each exposed to several risk factors associated with negative life outcomes. One-third of these children "beat the odds," never succumbing to the learning, behavioral, emotional, and/or life adjustment problems expected. Those in the other group had trouble but rebounded decades later, eventually leading meaningful and productive lives. Researchers have identified protective processes in the lives of resilient individuals who currently lead meaningful and productive lives, despite exposure to multiple risks and adverse experiences during childhood.

CCPR: Can you detail some of these protective processes?

Dr. Katz: Sure. Positive parental attitudes and the child's sense of mastery or locus of control were identified as key factors in those who improved (Werner EE and Smith RS, *J Am Acad Child Psychiatry* 1979;18(2):292–306). One very important factor is our ability to see adversity in a new light. It's not easy, especially when those we're close to do not shift their perspective with us. Another is an awareness of how context can impact a child's life. We know children with ADHD who struggled mightily in one school, yet thrived when moved to a different school, where they feel they belong and have something important to contribute. Developing a sense of mastery is another protective process. Mastery is the mindset that if we try hard and learn from our mistakes, we'll achieve our goals. This requires exposure to experiences that we can succeed at if we try our best. In the past, children with ADHD and other learning challenges may not have had an abundant supply of these experiences. The good news is that things are changing. In my recent book, I describe other protective processes and ways to help children, families, and schools access them.

CCPR: What advice can we give parents of children with ADHD to help them best support their children?

Dr. Katz: *"There's never anything so wrong with us that what's right with us can't fix."* Those who rise above adverse childhood experiences are living proof that our strengths are more than capable of overriding whatever lifelong weaknesses we might be struggling with. We have a universal need to feel we belong and to have something important to contribute. Work with teachers and others at school to provide the child with meaningful roles and responsibilities and ensure that universal need is being met. There are many different ways of being smart, some of which can't be measured by how well the child does in formal academic work.

CCPR: So important, seeing things in a better light.

Dr. Katz: Hope is contagious. Try to surround yourself with those who can see ADHD in a hopeful new light. Some who overcame difficult childhood experiences—children with attention, executive function, and learning challenges included—have learned to transform the pain of their past into meaningful action on behalf of others. We help struggling school-age children eventually to do the same.

CCPR: What resources do you recommend?

Dr. Katz: We recommend that parents of children with ADHD, as well as college students and young adults with ADHD, join Children and Adults With ADHD (CHADD) (<http://www.chadd.org>). I view CHADD as the public health voice for ADHD. For children and teens impacted by ADHD, as well as parents, we often suggest a short YouTube video by David Flink, co-founder of Eye to Eye (https://www.youtube.com/watch?v=q_TmyYY6HAA). Eye to Eye is a college-based mentoring model that pairs successful college students with ADHD and/or learning disabilities with younger students (<https://eyetoeyenational.org>). Parents, children and teens are also encouraged to log on to the Child Mind Institute's Speak Up For Kids (<https://speakupforkids.org>) and view some of the institute's short video clips of well-known people sharing thoughts about their learning or other challenges.

CCPR: Thank you for your time, Dr. Katz.

“Children with ADHD who do poorly in school can have excellent function as adults, especially when they are passionate about their careers. We need to help them raise their expectations while helping them learn ways to level their academic and personal playing fields.”

Mark Katz, PhD

Assessing and Treating Violence in Patients

School shootings keep happening in the US, and most of us have wondered at times whether one of our patients might carry out a violent act, shooting or otherwise. This article will help you assess and treat violent youth and advise families who are grappling with these issues.

Most people with mental health conditions do not hurt others—our patients are more likely to be victimized. About a fifth of adult psychiatric patients (19%) report having been assaulted, while rates of patients committing violent acts are comparable to the general population: about 4% (Rueve ME and Welton RS, *Psychiatry (Edmont)* 2008;5(5):34–48). Still, some teens and kids do hurt others, particularly those who have had adverse childhood experiences, are doing poorly in school, and have access to weapons.

Some specific questions to ask in the interview and to pose with family and other collateral sources include:

1. How has the child/teen been getting along with peers? Have there been any violent incidents in the past?
2. Is the child/teen hanging around with other kids who are in trouble?
3. How far has the child/teen progressed in the hierarchy of aggression (oppositonality, threats, breaking things, hurting others)?
4. Why is the child/teen doing this? Are there specific triggers or circumstances, such as bullying or learning problems? Is there a specific syndrome, such as ADHD, bipolar disorder, or a psychosis, that can be targeted for treatment?

Level of care

Based on the answers to these questions, you must decide what level of care your patient needs to maintain safety and receive effective intervention. Outpatient care can be relatively safe if the youth is in good control, under supervision, and can't access firearms. Intensive outpatient treatment is needed for more assertive medication changes or if patients require frequent therapy. Partial hospitalization helps if a youth needs to be out of school to stabilize symptoms. Hospitalization is appropriate when there is an acute risk for violence. Some teens

require new school placement with increased supervision. Lastly, residential placement may be necessary for teens not responding to treatment.

For high-risk individuals, communities may integrate youth services and criminal justice systems to reduce violence. Typically, programs work with teenagers/young adults to ensure engagement with supports/services (schooling, jobs) while steering them away from violence through supervision by social services and probation officers.

Pharmacological treatment

Many psychiatric disorders are associated with impulsive aggression. When in distress, the ability to read the intent of others can be narrowed to self-preservation, causing the person to misread even neutral communications as threats and react accordingly. Beyond helping the person to be calmer and more regulated, research on treating aggression in children and teens has focused on the disruptive behavior disorders: ADHD, oppositional defiant disorder (ODD), and conduct disorder (CD).

Stimulants are first-line treatment for ADHD. Multiple studies show improved aggression in children with ADHD and comorbid ODD/CD:

Clonidine (Catapres). For youth with ADHD and ODD/CD, clonidine has demonstrated efficacy in decreasing aggression, and guanfacine improves frustration tolerance and irritability (Connor DF et al, *CNS Drugs* 2010;9(24):755–768).

Risperidone (Risperdal). When added to stimulants, risperidone has been shown to improve aggression in children with ADHD and aggression, and in children with CD for up to 1 year (Armenteros JL et al, *J Am Acad Child Adolescent Psychiatry* 2007;46:558–565). While improvements were noted from baseline, the groups did not differ significantly, suggesting that long-term treatment may not be more effective than stimulant/behavioral intervention alone (Gadow KD et al, *J Am Acad Child Adolescent Psychiatry* 2016;55(6):469–478).

Molindone (Moban). Molindone has been studied for impulsive aggression in ADHD with an eye toward an FDA indication (Brittain S et al, *Neurology* 2016;86(16 sup):6.214). It also has limited research supporting its use in impulsive aggression.

Quetiapine (Seroquel). In one small study, quetiapine was shown to improve behaviors associated with CD. However, while clinicians noted improvements, parents did not report similar results (Connor DF et al, *J Child Adolesc Psychopharmacol* 2008;18(2):140–156).

Lithium. Limited studies demonstrate the benefits of lithium for CD (Campbell M et al, *J Am Acad Child Adolesc Psychiatry* 1995;34(4):445–453). However, in a trial of lithium for severe mood dysregulation without ADHD or ODD/CD, lithium did not decrease irritability or aggression (Dickenstein DP et al, *J Child Adolescent Psychopharmacology* 2009;19(1):61–73).

Valproate. Valproate has also been studied for children with ADHD, ODD/CD, and aggression and has shown effectiveness in small trials.

For patients with autism spectrum disorder (ASD) who become aggressive, both aripiprazole and risperidone are FDA-approved for treating irritability. But youths with ASD have different and often slower processing, so check for sensory problems and whether people are giving your patient enough time to respond to requests.

For psychotic aggression in childhood schizophrenia or bipolar illness, treat the underlying illness. If the child fails to respond, monitor antipsychotic levels and consider long-acting injections. Consider clozapine for those who do not respond despite adequate adherence to treatment.

Working with families

Always ask whether there are firearms in the house and, if so, how they are secured. I strongly advise families to store guns off-site, locked away, unloaded, and separate from ammunition. Ask about exposure to violence at home or in the child's community, including gangs, shootings, and bullying. Check how closely the child is supervised. Some kids have free rein to roam the city via subways; others have several unstructured hours after school. Even school lunch or recess can be an opportunity for trouble. Has the youth been exposed to violence in the community (eg, gang activity or domestic violence)? Organized activities

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Research Updates
IN PSYCHIATRY

CANNABIS

Is Cannabis Bad for Cognition?

REVIEW OF: Cobb SJ et al, *JAMA Psychiatry* 2018;75(6):585–595

Our patients typically tell us that, according to the internet, weed is perfectly safe and does not affect their ability to think or function. Thirty states and the District of Columbia have laws legalizing cannabis, supporting the notion that people have begun to think of marijuana as relatively harmless. Rates of marijuana use in young adults are rising (Hasin DS, *Neuropsychopharmacology* 2018;43(1):195–212). Moreover, a recent study reported that cannabidiol (CBD), a “non-psychoactive” component of marijuana, may reduce psychotic symptoms (Arain M et al, *Neuropsychiatr Dis Treat* 2013;9:449–461).

Given that the brain continues to develop into a person’s mid-20s, how dangerous is marijuana use in adolescence and young adulthood? And what do we tell our young patients who are regular users? A new meta-analysis

attempts to answer part of that question as it relates to the impact of cannabis use on cognitive function in adolescents and young adults.

The meta-analysis assessed cognitive effects in young adults and adolescents whose primary clinical problem was cannabis use. The analysis included 69 studies of 2152 regular cannabis users and 6575 people with minimal use of cannabis. After combining the results from all of these studies, the authors concluded that cannabis does have a mild negative correlation with various aspects of cognition. Specifically, studies showed that use of the drug is negatively associated with executive functioning, speed of information processing, delayed memory, working memory, and attention. But in the aggregate, effect sizes range from -0.21 to -0.33, indicating minimal impact on cognition. Verbal language, visuospatial functioning, and motor functioning were relatively spared. Studies that required at least 72 hours of cannabis abstinence before testing reported no significant effect on cognitive function.

CCPR’S TAKE

At first glance, these results may seem reassuring. Cognition was minimally impacted, and the effects did not extend beyond active use. However, many of the studies were small, measurement of cannabis use and potency varied, and significant publication bias was noted. Also, the meta-analysis focused solely on neurocognitive effects and ignored other clinically pertinent outcomes. A new study looking at 3826 seventh graders found neurotoxic effects of cannabis on memory and inhibitory control (Morin JG et al, *Am J Psychiatry* 2018 Oct 3:appiajp201818020202). Moreover, we have ample evidence that marijuana use is associated with poor academic and social function, that the tetrahydrocannabinol (THC) component of marijuana is associated with an overall doubling of psychosis risk in youth, and that this increased psychosis risk is dose-dependent. So however you interpret this analysis, THC is clearly not off the hook.

—*Jessica Goren, PharmD, BCPP.* Dr. Goren has disclosed that she has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

News of Note

Jornay PM Nighttime Stimulant for Next-Morning Effect

Prescribing bedtime stimulants sounds like a recipe for a bad night’s sleep. But the FDA recently approved Jornay PM, which is an extended release (ER) formulation of methylphenidate that is, in fact, dosed at night.

Approved for kids age 6 and older, Jornay PM has an extremely delayed onset of effect of 10 hours. This means kids can take it at around 8 pm and it won’t actually kick in until about 6 am, so symptom control appears early in the morning. Jornay PM is cleverly formulated. The methylphenidate is delivered using a technology called “Delexis,” a 2-layer drug delivery system that allows no more than 5% of the drug to be absorbed within the first 10 hours. After this initial lag period,

controlled release of the drug occurs between 10–24 hours after administration, with peak levels around 14 hours post-dose.

Approval was based on 2 trials. The first was a 6-week study of 43 kids already taking methylphenidate who were switched to Jornay PM (Wigal S et al, 29th Annual US Psychiatric and Mental Health Congress poster 2016). Over 1 week, the Jornay dose was optimized (mean dose 65.6 mg), and then kids were randomized to either continue Jornay or switch to placebo. After 6 weeks, the kids in the Jornay group showed significantly more improvement compared to placebo in both teacher and parent ratings. The second study was a 3-week, randomized, double-blind study in 161 kids with ADHD that also showed significant improvement

with Jornay over placebo (Pliszka SR et al, *J Child Adolesc Psychopharmacol* 2017;27(6):474–482).

Side effects were similar to other methylphenidate formulations, although insomnia was reported in 41% of patients in the open-label phase of the first trial. Moving forward, it will be important to see whether sleep and appetite are problematic vs other medications or placebo. Jornay PM will be available in 20 mg, 40 mg, 60 mg, 80 mg, and 100 mg ER capsules with a dosing range of 20–100 mg QPM. Pricing information is not yet available as the medication won’t hit pharmacy shelves until early 2019.

—*Talia Puzantian, PharmD, BCPP.* Dr. Puzantian has disclosed that she has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

CME Post-Test

To earn CME or CE credit, you must read the articles and log on to www.TheCarlatChildReport.com to take the post-test. You must answer 75% of the questions correctly to earn credit. You will be given two attempts to pass the test. Tests must be completed within a year of each issue's publication date. As a subscriber to *CCPR*, you already have a username and password to log onto www.TheCarlatChildReport.com. To obtain your username and password, please email info@thecarlatreport.com or call 978-499-0583.

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Below are the questions for this month's CME/CE post-test. This page is intended as a study guide. Please complete the test online at www.TheCarlatChildReport.com. Note: Learning Objectives are listed on page 1.

1. According to research studies, what is the outcome of adding a stimulant if patients are currently being treated with a mood stabilizer? (LO #1)
 - a. Rates of mania increased by 10% in patients being treated with both a stimulant and a mood stabilizer
 - b. Rates of mania increased by approximately 24% in patients being treated with both a stimulant and a mood stabilizer
 - c. The safety and utility of adding a stimulant in patients being treated with a mood stabilizer was supported
 - d. The safety and utility of adding a stimulant in patients being treated with a mood stabilizer was inconclusive
2. In a 2018 meta-analysis assessing the cognitive effects of cannabis use in young adults and adolescents, verbal language, visuospatial functioning, and motor functioning were relatively unaffected. (LO #3)
 - a. True
 - b. False
3. Which of the following statements about ADHD is true? (LO #2)
 - a. Children and adolescents with ADHD who change schools end up with poorer grades because they have trouble adapting to a new routine
 - b. If ADHD is diagnosed during early childhood, most kids will eventually outgrow it as they become adults
 - c. Poor performance during a child's school years is predictive of poor functioning as an adult
 - d. Overactivity symptoms of ADHD tend to decrease with age
4. The computerized continuous performance test (CPT) is helpful in distinguishing between symptoms of ADHD and bipolar disorder in children and adolescents. (LO #1)
 - a. True
 - b. False
5. Among children and adolescents taking the newly FDA-approved extended release formulation of methylphenidate (Jornay PM) at bedtime to provide ADHD symptom control in the morning, ____ reported insomnia during the open-label phase of the first trial. (LO #3)
 - a. Under 10%
 - b. 26%
 - c. 41%
 - d. 58%

Assessing and Treating Violence in Patients

Continued from page 5

may promote positive peer relationships and limit the youth's access to corrupting activities (Eisman AB et al, *J Youth Adolesc* 2018;47(10):2231–2242). Supervise and limit screen time and access to violent media, and monitor the child's social media use.

Since children model their behavior after what they experience, use non-physical forms of discipline such as loss of privileges. Some families use alarm systems to prevent teens from leaving at night. Talk with families about when to call 911 and what to expect when the police or paramedics arrive. This usually helps everyone calm down—an important lesson that the teen is not in charge and that the community will keep everyone safe. If things do not settle down following a 911 call, parents should understand

that the child will be typically transported for psychiatric assessment or, rarely, taken into custody for violent behavior or evidence of planning such behavior.

Documentation

Documentation is critical when there are questions about potential violence. Malpractice companies look for statements within the clinical encounter that speak to the risk patients pose to themselves or others, such as, "The patient does not currently pose an acute risk to himself or to others." The chart needs to support these statements by documenting such things as good impulse control, non-labile affect, and lack of suicidal or homicidal ideation. If we get in the habit of looking at these things, we will be in better shape to take action when the situation warrants it.

CCPR VERDICT: Always screen for the risk of violence, and when a patient is at risk, prioritize safety first. Decide what level of care is appropriate and treat specific disorders with a focus on helping the patient be calm, regulated, and less reactive. Medications may be helpful for aggression in ADHD, CD, and ODD, but hard evidence is sparse at best. Use of antipsychotics for aggression is more likely to work with diagnosed conditions for which they have more clear benefit, such as psychotic, bipolar, or autism spectrum disorders. Make a habit of documenting risk for violence during all clinical encounters so you do not overlook children who are at risk.

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This Issue's Focus:
**ADHD in Children and
Adolescents**

**Next Time in *The Carlat Child Psychiatry Report*:
Anxiety in Children and Adolescents**

Note From the Editor-in-Chief

In this issue we tackle a range of challenges, including differentiating ADHD from bipolar disorder, understanding suicide risk in college students, managing assertions about the safety of weed, and assessing and treating violent behavior in our patients. How do we think about the future of kids with ADHD? Dr. Mark Katz offers a hopeful approach. We also take a quick look at a newly released overnight ADHD medication—will it really work?



And brand-new this fall, check out our *Child Medication Fact Book for Psychiatric Practice*. Clear, concise fact sheets and tables give you just what you need during the moment-to-moment rush of daily practice, and the book is tabbed to make it faster to look up things than I ever could online. Plus, it features great appendices that cover blood pressure, growth, screening for abnormal movement, lab monitoring, pregnancy, informed consent, and more. As an informed consent nerd, I love using that appendix to drive process within a care-enhancing structure. The book is now available on the Carlat website.

Regards,
Josh Feder, MD
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