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CHILD PSYCHIATRY

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UNBIASED INFORMATION FOR CHILD PSYCHIATRISTS

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IN THIS ISSUE

Behavioral Disorders

Learning objectives for this issue:
1. Understand how the presence of callous-unemotional (CU) traits impacts the treatment of children with conduct disorder (CD). **2.** Explain the pros and cons of four new antipsychotic medications. **3.** Effectively treat violent and antisocial children and adolescents. **4.** Understand some of the current findings in the literature regarding psychiatric treatment.

What you Need to Know About Callous-Unemotional Traits and Disruptive Behavioral Disorders

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Dr. Harris has disclosed that she has no relevant relationships or financial interests in any commercial company pertaining to this educational activity.

Recently, researchers in the field of conduct disorder (CD) have proposed including a specifier to the diagnosis of CD in DSM-5 based on the presence of callous-unemotional (CU) traits. Where does this idea come from, what is the evidence to support it, and why is it controversial? (Alphabet soup alert to readers: be forewarned that I will be using a lot of acronyms in this article, hopefully in the service of making the article more readable.)

Aggression in Disruptive Behavior Disorders

CD, along with oppositional defiant disorder (ODD) are known as disruptive behavior disorders. These disorders are often characterized by "bad," typically aggressive, behavior. As we have noted in previous issues of *CCPR,* aggression can be driven by a host of things, such as PTSD, anxiety, mood problems (both depressed and manic), and ADHD. Common sense implies that when the underlying disorder remits, so will the aggression, and the experience of most clinicians bears that out.

This treatable type of aggression is classified as "REDI" aggression: Reactive, Affective, Defensive, or Impulsive. These are the impulses that lead to so-called crimes of passion. "Proactive aggression" is different, in that it is planned and calculated.

In practical terms, REDI aggression is much easier to treat than proactive aggression: it responds to many medications (see *CCPR,* May 2010) as well as psychosocial treatments. It tends not to be stable over time, and in most

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How Effective Are the Newest Antipsychotics?

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Four new antipsychotics are beginning to gain some traction in the adult market. To be absolutely clear, among these only paliperidone (Invega) has been approved for use in children and adolescents (those age 12 and older). None of the other medications have been tested in this age group. But for those of us who see transitional age youth to whom we prescribe antipsychotics, here is a quick low down on paliperidone, iloperidone (Fanapt), lurasidone (Latuda), and asenapine (Saphris).

Paliperidone (Invega) is the oldest of the set, and is the active metabolite of risperidone (Risperdal). It has been touted as having fewer side effects than risperidone, but it seems to have outlived its honeymoon period: the literature abounds with case reports of the usual trouble-makers (weight gain, sedation, hyperprolactinemia) and serious side effects (dystonia, tardive dyskinesia, neuroleptic malignant syndrome). Thus, it appears to have much the same effect—both for better and for worse—as risperidone. The good news is that any patient who has been on risperidone in the past has already been exposed to paliperidone, so it's reasonably safe (as safe as risperidone), though much more expensive than its mother compound.

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Callous-Unemotional Traits and Disruptive Behavioral Disorders

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patients gradually fades away by early adulthood.

Proactive aggression, on the other hand, is extremely difficult to treat, and so the field has begun looking for ways to better understand people who engage in such behaviors.

The Significance of Callous-Unemotional Traits

To understand the concept of CU traits, you must first understand some of the modern ideas about CD. It turns out that there is a big difference between people whose CD begins in childhood and those whose CD begins in adolescence. In particular, childhood onset CD (COCD) is more severe than adolescent-onset CD (AOCD).

Kids with COCD are more likely to continue antisocial behavior into adulthood, and they have more neuropsychiatric and cognitive deficits, and more impulsivity and poor emotional regulation. COCD kids are also more likely to come from unstable homes and experience poor parenting strategies. Kids with AOCD, interestingly enough, are more likely to be rebellious and to reject conventional values, but beyond that they turn out "better" than their COCD counterparts.

The bottom line is that the earlier the CD begins, the worse the prognosis, which is not all that surprising to most of us. But the plot thickens, because within the group of COCD kids, there is an even more important dividing line, between kids who have high levels of CU traits and those who don't. CU traits are defined broadly as "a callous and unemotional interpersonal style characterized by a lack of guilt and empathy and the callous use of others" (Frick P and Viding E, *Devel Psychopathology* 2009;21:1111–1131).

These CU traits can be measured in many different ways, but most commonly by combining aspects of self-assessment and parent-assessment questionnaires, such as the Antisocial Process Screening Device parts of ASEBA (Achenbach System of Empirically Based Assessment). Youths who score high on CU traits are not good at recognizing fear and distress in others (Frick P and White SF, *J Child Psychol Psychiatry* 2008;49(4):359–375). They are also less sensitive to punishment cues, and tend to have a fearless thrill-seeking and behaviorally uninhibited temperament (Cornell AH and Frick P, *J Clin Adolesc Psychology* 2007;36:305–318).

Conduct disordered kids with high CU scores tend to respond less well to treatment, and are more aggressive than other kids, showing both proactive and reactive aggression. In comparison, conduct disordered kids with low CU traits tend to have primarily reactive aggression, which is more treatable (Frick and White, op.cit).

Potential Causes and Interventions for Callous-Unemotional Behavior

Thus, the perfect storm for bad behavior and poor outcomes is the combination of COCD and high CU traits. What causes this devastating behavioral brew? This is where the controversy comes in. Some researchers have maintained that CU traits are biologically determined, while others argue that parenting factors lead to these traits. Yes, it's one of psychiatry's classic nature vs nurture debates.

Thus far, research findings can be interpreted in different ways. In one type of study, researchers begin with a cohort of COCD kids, and then measure temperament and retrospectively assess parenting styles. Such researchers tend to fall into the nature group, noting that studies of children with high levels of CU traits suggest that "this group of children may have a unique temperamental style, characterized by low levels of fear and lack of sensitivity to punishment" (Cornell and Frick op.cit). Others have started by measuring the quality of early bonding and attachment, and have concluded that poorly attached children are more likely to display antisocial behavior—the nurture viewpoint (see the

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Early Child Attachment and Later Conduct Problems

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Dr. Mills-Koonce has disclosed that he has no relevant relationships or commercial interests in any companies related to this educational activity.

Is it possible that poor attachment in early childhood, most often to one's parents, can cause callous-unemotional traits?

The research is sparse, but suggestive. We know, for example, that children with high CU traits are less likely to display empathy towards others (Blair RJR et al, J Abnormal Child Psychology 2001;29(6):491–498), and we also know that empathy has developmental roots in early attachment security.

The term "attachment disorganization" has become popular in psychodynamic circles. This refers to a profound disconnect between a parent's wishes and the child's ability to organize his or her behavior around these wishes. This may prevent children from learning to understand and appreciate the mental states of others—otherwise known as empathy. Lack of empathy theoretically lays the foundation for conduct problems at later ages (Lyons-Ruth K, *Psychoanalytic Inquiry* 2006;26(4):595–616).

Finally, in a recent study, children with insecure attachments in infancy had greater conduct problems in elementary school, and parental discipline in such children predicted later antisocial conduct (Vando J et al, *J Child Fam Stud* 2008;17(5):615–628). Negative parental behavior did not cause bad outcomes in children who were securely attached to their parents.

How Effective Are the Newest Antipsychotics?

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Invega At-A-Glance	
Generic name	Paliperidone
Manufacturer	Janssen Pharmaceuticals, Inc
Approval date	December 19, 2006
Approval indication	Schizophrenia in adults; schizophrenia in adolescents (ages 12 to 17); schizoaffective disorder in adults as monotherapy and as an adjunct to mood stabilizers and/or antidepressants
Dosages available	Extended release tablet, 1.5 mg, 3 mg, 6 mg, 9 mg
Target dose	For adults, 3 mg/day to 12 mg/day. Adolescent dose based on weight
Average cost	$564 for one month at target dose
Advantages over existing antipsychotics	Much the same effect as risperidone

Fanapt At-A-Glance	
Generic name	Iloperidone
Manufacturer	Novartis Pharmaceuticals Corp
Approval date	May 6, 2009
Approval indication	Schizophrenia in adults
Dosages available	1 mg, 2 mg, 4 mg, 6 mg, 8 mg, 10 mg, 12 mg
Target dose	12 to 24 mg/day administered twice daily, achieved by daily dosage adjustments, alerting patients to symptoms of orthostatic hypotension
Average cost	$515 for one month target dose
Advantages over existing antipsychotics	Lower risk of EPS than Haloperidol, less akathisia than ziprasidone

Iloperidone (Fanapt) is FDA-approved for the treatment of schizophrenia in adults. There are four studies available on this drug: three short-term studies demonstrating comparable effect to haloperidol (Haldol) in treating acute psychosis in adults with schizophrenia, and one continuation study lasting 46 weeks (after a six week acute study) measuring side effects and time to relapse. The news is disappointing for relapse: while it was found "non-inferior" to haloperidol, median time to relapse was 50 days on iloperidone and 78 days on haloperidol; not statistically different. Further, iloperidone causes significant weight gain—in this study, 10.6 lbs as compared to haloperidol's average 6.6 lbs. A disconcerting fact is that six people in the iloperidone group died—though only one of these deaths was attributed to the medication (Kane JM et al, *J Clin Psychopharmacol* 2008;28(2):S29–S35). Cognitive measures were not studied, but some hypothesize that it will improve cognition via serotonergic action, particularly at 5-HT7 receptors (Kane JM ibid).

Lurasidone (Latuda) is FDA-approved to treat schizophrenia in adults. It works at 80 mg daily, and perhaps at 40 mg daily, with no increased benefit at doses higher than 80 mg daily. Time to onset of effect is three to seven days. The encouraging news is that it does not seem to make people fat or increase lipids or glucose, nor does it increase prolactin or cause QTC prolongation (L Citrome, *Int J Clin Pract* 2011;65(2):189–210). Studies of rats suggest it could cause cognitive enhancement, but the one study looking at cognitive measures in humans after treatment with lurasidone failed to clearly differentiate from ziprasidone (Geodon), and from the practice effect (Harvey PD, *Schiz Res* 2011;127:188–194). The study may not have been sufficiently powered, however. The down side of lurasidone is that it caused akathisia in 22% of study patients, with a number needed to harm of six.

Asenapine (Saphris) is FDA-approved for both schizophrenia and bipolar disorder in adults, at 5 mg twice a day and 10 mg twice daily respectively. It has the disadvantage of requiring sublingual administration, since its bioavailability is less than 2% if swallowed. Patients say the pill leaves a bad taste under the tongue, but there is now a black currant flavor that is a little better. Suggest to your patients that they chew a strong-flavored mint or gum before taking it, or suck on an ice cube. Patients must avoid any food or drink for 10 minutes after taking a dose. Furthermore, any meal eaten up to four hours after ingestion reduces the bioavailability by approximately 20%.

Asenapine causes some drug interaction mischief. It is metabolized by CYP 1A2, and so is subject to CYP1A2 inhibitors like fluvoxamine (Luvox). In addition, it inhibits CYP2D6, and can thus increase the serum levels of drugs metabolized by that system, such as paroxetine (Paxil).

Like lurasidone, asenapine seems to cause fewer metabolic problems than other atypicals. On the downside, it frequently causes sedation and akathisia (but less EPS than haloperidol), and infrequent elevations in prolactin. It also causes oral numbing in 4% of patients. Weight gain is primarily a problem in relatively skinny patients (BMI less than 23). Mild QTC prolongation occurs, but a more frequent cardiac side effect is reflex bradycardia (slow heart rate) with sinus pause. Although benign and self-limiting, this could easily frighten a patient. Efficacy studies were sufficient for FDA approval, but overall are unimpressive, with no increased efficacy over comparator drugs, and some studies failed to find a difference from placebo (Citrome L, *Int J Clin Pract* 2009;63(12):1762–1784).

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Latuda At-A-Glance	
Generic name	Lurasidone
Manufacturer	Sunovion Pharmaceuticals, Inc
Approval date	October 28, 2010
Approval indication	Schizophrenia in adults
Dosages available	20 mg, 40 mg, 80 mg
Target dose	Maximum recommended dose 80 mg once daily
Average cost	$536 for one month at target dose
Advantages over existing antipsychotics	Does not seem to cause weight gain, increase lipids or glucose, increase prolactin, or cause QTC prolongation

Q&A With the Expert

Expert Interview

Treating Violent and Antisocial Children and Adolescents

Alan Kazdin, PhD

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Dr. Kazdin receives book royalties from a number of publishers. Dr. Fisher has reviewed this article and found no evidence of bias in this educational activity.

CCPR: Dr. Kazdin, tell us about your background in treating violent and antisocial children and adolescents.
Dr. Kazdin: I am a professor in psychology and child psychiatry at Yale University and do research on children who are very aggressive and engage in violent and antisocial behavior. I also help parents with the normal challenges of parenting in everyday life through the Yale Parenting Center.
CCPR: How do you approach the child who is disruptive, aggressive, and getting into trouble?
Dr. Kazdin: We really do not know the etiology of what makes a child violent or antisocial. But there are so many successes in medicine—leukemia, many of the cancers—where we do not know etiology yet, but we still have effective treatments. We know that medications are not particularly helpful for violent and antisocial children, but we do know on the other hand, there are things we can do that can effect enormous change.
CCPR: And what are those things that you can do for these children?
Dr. Kazdin: First, we always do diagnosis to learn the range of problems a child has. The average number of disorders one of these children has is 2.4, with some children having up to five (Kazdin AE and Whitley MK, *J Consult Clin Psychol* 2006;74(3):455–467). Then we get down to work on parent training, or in the absence of a parental figure, training the children.
CCPR: And how does that work?
Dr. Kazdin: Parent management training is based on research on how to change human behavior, and this involves how you set up the behavior to occur, how you carve and sculpt and craft the behavior, and then the consequences you provide at the end.
CCPR: This is very different than just counseling parents, right? It's not simply handing out parenting advice.
Dr. Kazdin: Professional parenting advice is often very comforting to parents, but it does not change practices. That is not how human behaviors change. For example, let us say you want to play the piano better. I could give you advice about how to do that; I could tell you what the scales are made up of and how they work. But when I am done, you are no better at playing the piano. But parent management training is based on practice, practice, practice. In that example I would show you the scales and you would practice them until you were better. Then you move on to practicing different keys, simple songs, and finally work your way up to Rachmaninoff. We know that repeated practice, and small changes in behavior, will get you there (Kazdin AE. *Parent management training: Treatment for oppositional, aggressive, and antisocial behavior in children and adolescents.* New York: Oxford University Press;2009).
CCPR: So this sounds like it should be simple. Why is it not?
Dr. Kazdin: First, the brain is hard-wired to pick out the negative. So it is natural for a parent to run into the living room and say to her two children, "Why can't you two get along? Every time you fight I am going to turn this TV off if you do not stop." We have to train the parents to run in that room when the kids are *not* fighting and say "I'm so proud of you; you two are really good!"
CCPR: But parents will tell us all the time, "Rewards do not work, I've already tried that," or "Why should I reward them for what they ought to do anyway?"
Dr. Kazdin: First of all, this is not about rewards. It is about getting the behavior to occur. And the other thing is, parents often just do not do it right. If you want to change behavior, the praise has to be very special and delivered in a very particular way. We are not interested in winning an intellectual or moral battle with parents. We just want to help them.
CCPR: So how exactly does this work?
Dr. Kazdin: There are several detailed techniques we focus on. These relate to how one initiates behavior, how one crafts small segments of the behavior to build larger units and enduring habits, and the consequences one provides afterwards. These techniques fall into three domains: antecedents, behaviors, and consequences. We identify concrete techniques (eg, how to deliver instructions that are likely to get the child to comply), and role play in the sessions how to implement them. The key is practice of these very specific skills. Parents practice them extensively in the session and then implement these same techniques under our supervision in the home. Practice and crafting of these has them doing the interventions well on their own and of course without our supervision. The analogy to playing the piano is still applicable. Early instruction and practice can lead to playing on one's own.
CCPR: There is another method you use called cognitive problem solving skills training. What is that?
Dr. Kazdin: When we first began this program, I was in charge of a child psychiatry intensive care service for extremely disturbed children. And there we had some children with no parents, they were either in prison, or prostitutes, or otherwise did not have parental rights over the children. So we developed a treatment that did not require an adult to work with us: problem solving skills training.

CCPR: And how does this work?

Dr. Kazdin: Research suggests the thinking patterns of aggressive and violent children are quite different from those of children who do not have those problems. And, more importantly, if you change that thinking, it changes how they engage in their interactions in everyday life (JR Weisz & AE Kazdin (Eds). *Evidence-based psychotherapies for children and adolescents, 2nd ed.* New York: Guilford Press;2010). The bottom line is that these children read ambiguous social situations as aggressive. So for example, imagine a child who is not having any particular aggression problem and he is at a locker in the middle of school and someone bumps him and says, "I'm sorry, excuse me"; our child turns around and says, "Oh, yeah, okay," and it's over. But put a child who is aggressive and has antisocial behavior in the same situation, he interprets that bump as being an outright aggressive act and might turn around and punch that child in the face, for example. This is called an attributional bias. Another feature is that these children are not able to think of alternative ways of responding to situations. If you say to one of these children, "Your sister took your toy and you want to get it back. What could you do?" they can't come up with non-violent options, like "tell my mom" for example. The ability to generate solutions is closely related to aggressive and antisocial behavior.

The average number of disorders a violent or antisocial child has is 2.4, with some children having up to five.

Alan Kazdin, PhD

CCPR: So how do you address these differences in thinking to help these kids to be more functional?

Dr. Kazdin: First, we train them to generate more solutions and then to act those solutions out, which can reduce aggressiveness tremendously. We play games with them and simulate social situations where they can come up with alternative ways of reacting.

CCPR: What do you do with a kid who says, "I do not want to stop hitting people. It is useful. It works."

Dr. Kazdin: There is an old cliché: no one is going to change if they are not motivated to change. This is absolutely false. Yes, it is lovely when someone says, "I want to change," but you do not need them to want to in order to effect change. Very few people begin exercise because they want to; it is often because they have to. And after a year or two of being around them they are annoying because if they miss a day of exercise now it is like an addiction. Motivation can be there before behavior, but it often comes after.

CCPR: So all you really need is the parent or child to engage with you.

Dr. Kazdin: Really all you need is the child in front of you. Let's say mother calls us up and says, "Billy does not want to come to his session, so we're not coming in." But I say, "Not so fast." I want her to just bring Billy physically to the office, not even for a session but just to sit in the waiting room and play a game if he wants.

CCPR: And what do you accomplish with that?

Dr. Kazdin: So they come in. We see the mom and leave the child in the waiting room. The therapist comes out again and says, "Hey Billy, are you sure you do not want to come back for a session?" And Billy says yes or no, whatever. This is called "response priming." If, when Billy's mom called, we said, "Okay, stay home," there would be no chance of having a session. If we bring Billy into the clinic and promise him no session, two things will happen. First of all, the cues of the clinic will increase the likelihood that he wants and actually agrees to having a session. And if not, oh well. His mom still had a session, but more often than not, once he is there he will have the session.

CCPR: So what is your bottom line advice for psychiatrists who are dealing with kids who are aggressive, violent, or have antisocial behavior?

Dr. Kazdin: There are now at least seven evidence-based treatments for aggressive behavior that go from very young children to older adolescents who have been convicted of multiple crimes including sexual violence. [Editor's Note: See the sidebar for more information on each type of therapy.] The issue for psychiatry, psychology, social work, and nursing is that it is very rare that any of these is included in training. So when you ask the mental health professional "How do I help this child?" they are going to try medication, which has a weak evidence base, or they are going to try some traditional family therapy, which does not work for these

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Evidence Based Therapies for Violent and Antisocial Behavior		
Therapy	Summary	For more information
Parent Management Training	Addresses parent-child interactions in the home, particularly eliminating coercive interactions.	http://childconductclinic.yale.edu
Multisystemic Therapy	Focuses on the interrelationship between individual, family, and community dynamics to support the patient in prosocial behaviors.	http://mstservices.com
Multidimentional Treatment Foster Care	Engages both the foster home and original home in behavioral treatments; tries to integrate home and community life.	www.mtfc.com/index.html
Cognitive Problem-solving Skills Training	Individual therapy that works on how the child understands social interactions cognitively and emotionally and teaches additional interpretations and responses in interpersonal situations.	http://childconductclinic.yale.edu or for related programs, https://www.ncjrs.gov/pdffiles1/172847.pdf
Anger Control Training	School or group-based group intervention that works on cognitive problem solving skills but also incorporates PMT.	http://workingwithgoldstein.com/mart2.php
Functional Family Therapy	Family therapy that uses both systems theory and behavior mod to change interaction styles and problem solving skills in family members.	http://www.fftinc.com
Brief Strategic Family Therapy	Family therapy that focuses on family interactions, alliances, boundaries, and scapegoating to improve interactions using concrete strategies to address maladaptive interactions.	http://bsft.org

Research Updates IN PSYCHIATRY

STEALING

Does Stealing in Childhood Predict Future Psychiatric Illness?

Stealing is a criterion of conduct disorder in DSM-IV. But we can probably all agree that stealing alone is not necessarily a sign of mental illness—sometimes it's just bad behavior. A group of researchers in Finland recently looked at how well stealing predicted future pathology among males, including substance abuse, completed and attempted suicide, and criminal behavior.

Data were collected from a huge population-based study in Finland of all males born in 1981. This study sample included 2,592 males with reports on stealing behavior at age eight, with follow up to age 25. This study set the threshold for what is considered "stealing" quite low, including things like taking candy without asking at home.

Parents and teachers independently completed questionnaires related to stealing behavior and frequency. Parents, teachers, and the boys were also asked about behaviors such as aggression, hyperactivity, and depression.

One out of 10 boys in the sample had stealing behavior at age eight, according to parent and/or teacher reports. The majority stole only minor things of small value (such as candy and pencils from home) and among the boys who stole, it most often happened very infrequently. Most of the boys in the study who stole (almost 63%) did not meet other criteria for conduct disorders.

After adjusting for various confounding variables, stealing behavior was a predictor of future substance abuse, antisocial behavior, criminal activity, and suicide. Among the boys who stole, 7% had future substance use disorder (vs 1% of those who didn't steal), 9% had future antisocial behavior (vs 2% of those who didn't steal), and 11% had more than five criminal offenses by age 25 (vs 3% of those who didn't steal). Three percent of males who had stolen at age eight either committed suicide or had a suicide attempt requiring hospitalization, compared to 1% of males who did not steal.

This risk was greatest among boys who had frequent aggressive behavior in addition to the stealing behavior. For example, by age 25, 60% of boys who had stolen *and* had aggressive behavior had at least one negative outcome: psychiatric disorder, crime, or suicide. Among boys who stole but were "never" aggressive, that number was 25% (Sourander A et al, *Soc Psychiatry Psychiatr Epidemiol* 2011;November:online ahead of print).

CCPR's Take: Stealing is never good, but according to this study, stealing in combination with aggression is a sign of more bad things to come. There are some limitations to consider in this study—for example, it only looked at stealing at age eight. Perhaps if we looked at age 12, 13, or 14, results would have been far different. Furthermore, not everyone would consider taking candy from home to really be stealing. Nonetheless, when you see a young male patient who has stealing behavior with aggression, you should keep in mind that these things put him at greatly increased risk of antisocial behavior, suicide, and substance abuse.

CARDIOLOGY

Most Kids' Chest Pain Does Not Have Cardiac Causes

Many parents are justifiably worried about the effects of medication on their children, including the cardiac effects of stimulants. Strong public health messages about the symptoms of heart attack have focused the minds of the general public on chest pain as an indicator of heart attack. Meanwhile clinicians are haunted by newspaper reports of teen athletes falling over dead during games and practices, generally from undiagnosed cardiac conditions. However, chest pain is rarely an indicator of heart attack in children and adolescents.

In this study, the charts of 3,700 children and adolescents who presented to Children's Hospital in Boston for initial workup of chest pain were reviewed and evaluated for pertinent medical history, family history, and diagnosis after workup. Then the patient records and public databases were searched for a subsequent outcome of death. In essence, the study asks the question: how often were the referring physicians wrong?

The median age was 13.4 and the median follow up was 4.4 years. Of the 3,700 patients, 1% had chest pain of cardiac etiology. Of these, pericarditis or myocarditis were the most common diagnoses presenting with chest pain at rest. Tachyarrhythmia was the most common cardiac cause of chest pain on exertion. Three patients had right coronary anomalies that required intervention, and two patients required a pacemaker for their tachyarrhythmia with syncope.

In this study, 99% had non-cardiac causes of their chest pain, including musculoskeletal, gastrointestinal, and pulmonary, with GERD and asthma being prominent among them.

Three patients in the study died, but none from cardiac causes: two from suicide and one from a retroperitoneal bleed. The study cites several primary studies indicating the incidence of sudden cardiac death in children is from 0.6 to 6.8 per 100,000 (Saleeb SF et al, *Pediatrics* 2011;128(5):e1062–e1068).

CCPR's Take: While this study shouldn't cause us to stop sending our patients to their primary care clinicians for chest pain, it may help psychiatrists and parents sleep a little better at night. In fact, it looks like primary care physicians may need our help to work up chest pain more than we need theirs.

CME Post-Test

CME Notice: The test below is intended to be for **practice only.** All subscribers must take their tests online at www.thecarlatchildreport.com. If you cannot take your test online, please call 866-348-9279 or email info@thecarlatreport.com.

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Below are the questions for this month's CME 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. What combination of factors make it most difficult to treat children with conduct disorder (CD) (Learning Objective #1)?
   [ ] a) childhood onset conduct disorder (COCD) and high callous-unemotional (CU) traits
   [ ] b) adolescent-onset CD and high CU traits
   [ ] c) adolescent-onset CD and low CU traits
   [ ] d) COCD and low CU traits

2. What is the highest daily dosage beyond which there is no proven increased benefit when prescribing lurasidone (Latuda) to treat schizophrenia in adults (LO #2)?
   [ ] a) 40 mg [ ] b) 60 mg [ ] c) 80 mg [ ] d) 100 mg

3. According to Dr. Alan Kazdin, what is the most effective treatment for violent and antisocial children (LO #3)?
   [ ] a) Medications [ ] b) Traditional family therapy
   [ ] c) Traditional talk therapy [ ] d) Evidence-based psychosocial treatments

4. Functional family therapy is family therapy that uses both systems theory and behavior modification to change interaction styles and problem solving skills in family members (LO #3).
   [ ] a) True [ ] b) False

5. Sourander et al found that by age 25 what percent of boys who had stolen and had aggressive behavior had at least one negative outcome, such as a psychiatric disorder, crime, or suicide?
   [ ] a) 50% [ ] b) 61% [ ] c) 70% [ ] d) 87%

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Expert Interview

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kids, or they are going to try traditional talk therapy, which again, does not really work (PE Nathan & JM Gorman (Eds). *A guide to treatments that work,* 3rd ed. New York: Oxford University Press;2007).

CCPR: Thank you, Dr. Kazdin.

To learn more about Dr. Kazdin's work, visit the website of the Yale Parenting Center at www.yaleparentingcenter.org or Dr. Kazdin's website awww.alankazdin.com

Callous-Unemotional Traits and Disruptive Behavioral Disorders

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sidebar "Early Childhood Attachment and Conduct Problems" for more on this).

Those believing that the CU traits are an inborn temperament argue that these children have a harder time developing appropriate levels of guilt and empathy, because they are less likely to get bothered when punished or when they see that others are distressed. They advise that these kids may respond better to a more structured style of parenting. Why? Because research has shown that kids' level of CU traits over time were more likely to decrease with more positive parenting, more parental involvement, and better monitoring and supervision (Hawes DJ et al, *J Clin Child Adolesc Psychology* 2011;40(4):507–518).

CCPR'S VERDICT: Assess for CU traits in patients with antisocial behavior. The worse such traits are, the more important it is to help parents find ways to provide the style of parenting that these children need to thrive.

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Saphris At-A-Glance	
Generic name	Asenapine
Manufacturer	Merck & Co, Inc
Approval date	August 13, 2009
Approval indication	Schizophrenia and bipolar disorder
Dosages available	Sublingual tablets: 5 mg and 10 mg
Target dose	For acute treatment of schizophrenia in adults, recommended dose 5 mg twice daily; maximum dose 10 mg twice daily; For treatment of biopolar disorder in adults, 10 mg twice daily
Average cost	$676 for one month at target dose
Advantages over existing antipsychotics	Seems to cause fewer metabolic problems than other atypicals

CCPR'S VERDICT: None of these newer agents have been adequately tested in children, and should be avoided in the pediatric age group. When you must use antipsychotics, we suggest sticking to the tried and true, such as aripiprazole (Abilify), which has a low side effect profile, and risperidone (Risperdal), which works especially well for aggression.

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Next Time in *The Carlat Child Psychiatry Report:* Eating Disorders, with a review of the Maudsley Method (aka family-based treatment) and an interview with Debra Katzman of the Hospital for Sick Children.

This Issue's Focus:
Behavioral Disorders