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CHILD PSYCHIATRY

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Daniel Carlat, MD
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Learning Objectives
After reading these articles, you should be able to:
1. Discuss the current approach to evaluating and treating college students who present with first episode psychosis.
2. Understand how to most effectively assess psychotic symptoms in children.
3. Summarize some of the current findings in the literature regarding psychiatric treatment for children and adolescents.

Treatment of First Episode Psychosis in College Students: It Takes a Team

Marcia Morris, MD. Psychiatrist at the University of Florida. Author of The Campus Cure: A Parent's Guide to Mental Health and Wellness for College Students, *Rowman & Littlefield Publishers (forthcoming 2018)*

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

You are a psychiatrist working in a college student healthcare center when Anna, a junior, comes to your office escorted by her resident advisor. Anna describes feeling severely depressed. Sleeping excessively, she has missed most of her classes over the last

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In Summary

- The differential diagnosis of first episode psychosis in college students is large and includes depression with psychotic features, bipolar disorder, schizophrenia, drug-induced psychosis, and transient psychotic episodes, among others.
- Getting family involved early in diagnosis and treatment is crucial.
- The NAVIGATE system of manual-based care can improve functional outcomes in young adults with first episode psychosis.

Q&A With the Expert

Evaluating Psychosis in Children
Claudio Cepeda, MD

Clinical associate professor in the Department of Psychiatry at UT Health, San Antonio, TX

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

The author of the Concise Guide to the Psychiatric Interview of Children and Adolescents, *as well as a clinician who has served both inpatient and outpatient pediatric populations for decades, Dr. Cepeda shares his interviewing tips on how to detect signs of psychosis in children.*

CCPR: First of all, how common is psychosis in children?

Dr. Cepeda: It depends on what population you are talking about. It is quite uncommon among all kids who show up at a primary care provider's office. But in a child psychiatric practice, about 3%–5% of children have psychosis, and among children needing hospitalization, the rates are much higher (Cepeda C, *Psychotic Symptoms in Children and Adolescents.* London: Routledge; 2013). It can be difficult to pick up on these symptoms—every so often in my practice, I evaluate a child formerly seen by a child psychiatrist, and it turns out the psychiatrist had missed psychotic symptoms that were present.

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two weeks. For the past week, she has heard voices telling her she is worthless and will never amount to anything. When she walks on campus, she thinks she sees former middle school classmates who used to bully her and wonders if they are going to harm her. She has started to think she would be better off dead, but denies any current plans to harm herself.

Evaluation

Evaluating a first episode of psychosis in college students is challenging—it's not clear from the outset if the episode will represent a one-time occurrence or the start of a lifelong illness. The differential diagnosis is large and includes depression with psychotic features, bipolar disorder, a primary psychotic disorder like schizophrenia or schizoaffective disorder, drug-induced psychosis, and transient psychotic episodes. Here are the five ways I try to narrow down the possibilities during an initial evaluation.

1. Develop an alliance

College students with psychosis who come into my office, whether on their own or encouraged by university personnel, are usually in a great deal of distress. The sources of distress are generally twofold: the experience of psychosis itself and the accompanying academic difficulties. You can best develop an alliance with college students by rapidly acknowledging their distress and informing them you will work together to decrease that distress and improve academic functioning.

When I first met with Anna, she spoke minimally while fearfully staring out the window. I gently asked her if she was concerned about anything outside. She said she had the feeling that classmates from middle school were hiding in the bushes outside and were following her. Afraid to go to class, she had fallen significantly behind in her work. I told Anna I understood how distressed she must be feeling, and that I would work with her to help her feel safe so she could get to class and achieve her academic goals. Anna sighed, looked at me tearfully, and said, "I'll be really glad if you can help me."

2. Ask targeted questions to narrow down the diagnosis

To distinguish between a primary psychotic disorder and mood disorder with psychotic features, ask about the patient's current and past history of depressive, manic or hypomanic, and psychotic symptoms. I asked Anna if her feelings of being followed were new or if she'd had them for a long time. She revealed that she had been cyberstalked and sometimes physically harassed in middle school, but said these events had stopped when she moved to another school; the feelings of being followed had only resurfaced recently. I asked Anna if she had felt either revved up or sad before the voices started. She told me she had been feeling depressed the whole semester, but started feeling worse a few weeks ago and began sleeping all the time. When asked if she had ever been treated for depression before this episode, Anna said she had taken Lexapro during high school for about 6 months. I made a diagnosis of depression with psychotic features based on the recurrence of depression and the new onset of psychotic symptoms during an episode of depression.

3. Consider the developmental and family history

While we often consider psychosis to be mainly a biologically based disorder, it's important to probe for potential developmental aspects. I find it helpful to bring parents into this discussion if possible. Anna's mother confirmed that Anna was severely bullied in middle school. Research has shown that being bullied increases the risk of depression and psychotic symptoms (Wolke D et al, *Psychological Medicine* 2014;44:9(10):2199–2211), and indeed some of Anna's psychotic symptoms centered on bullying. In addition, Anna's uncle had a diagnosis of schizophrenia; having a second-degree relative with schizophrenia increases the lifetime risk of having this disorder to 4%, versus 1% for others (Gejman P et al, *Psychiatr Clini North Am* 2010;33(1):35–66). While Anna's diagnosis was consistent with depression with psychotic features, schizophrenia should be considered in a patient's differential diagnosis.

4. Probe to see if drugs could have played a role in the psychosis

In my experience, psychosis in college students is frequently associated with drug use. Common culprits include overuse of recreational psychostimulants, chronic use of cannabis with high THC content, and regular use of hallucinogens like LSD. In fact, the most complicated episodes of psychosis I have treated are recurrent episodes in students who use one or several drugs. When I inquired about any substance use, Anna denied drinking or using drugs.

5. Rule out medical causes of psychosis

While medical causes of psychosis are rare in the college-aged population, I recommend ordering a standard battery of tests in any case of first episode psychosis. This includes a comprehensive metabolic panel (electrolytes, renal function tests, liver function tests),

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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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glycosylated hemoglobin, thyroid function tests, lipid panel, B12, folate, and urine drug screen. Consider testing for syphilis, HIV, hepatitis B, and hepatitis C if the patient is sexually active and ordering a CT scan or an MRI, as well as a neurology referral, if a student has an unusual clinical picture or describes neurological symptoms like worsening headaches or seizure-like movements.

Comprehensive treatment approach

My approach to treating psychosis in college students is aligned with a comprehensive treatment system demonstrated by the RAISE study to improve functional outcomes in adults (mean age of 23) with first episode psychosis (Kane JM et al, *Am J Psychiatry* 2016;173:(4):362–372). Conducted at community mental health centers over a two-year period, the RAISE study enrolled 223 participants in the NAVIGATE system of manual-based care, and 181 in usual care. NAVIGATE consisted of personalized medication management, family psychoeducation, resilience-focused individual therapy, and supported employment and education. (See *TCPR,* November/December 2015 for a Research Update on NAVIGATE for psychosis.) The NAVIGATE recipients had significantly better outcomes: They were more likely to stay in treatment, had fewer symptoms, and were more likely to participate in work and school.

The NAVIGATE family education and therapy model is particularly relevant to working with college students. After a few introductory sessions, patients and their families meet with a counselor for 10–12 weekly sessions to focus on improved communication among family members, relapse prevention, and suicide prevention. Family members are encouraged to reinforce progress by observing and praising what the patient is doing well in life, which could be volunteering while taking a semester off or registering for a few classes. These weekly sessions are followed by monthly check-ins, either in person or by phone.

The NAVIGATE approach also has a supported education and employment (SEE) specialist working closely with the patient to encourage engagement in work or education. The SEE specialist will regularly meet with the patient to set a goal of finding employment or education within the next three months. The specialist may go with the patient to the job interview or to visit the campus if the patient needs additional support and will continue to provide support even after school or a job begins.

It's important to note that while the RAISE study constitutes an ideal kind of treatment, you might not be able to offer all aspects of it when resources are limited, either in the college setting or after a student takes time off from college. But as orchestra leader, you do what you can to put into place as comprehensive a plan as possible, so you can at least use the RAISE points as guideposts. You can view the manuals for the NAVIGATE system online at http://www.raiseetp.org/studymanuals/index.cfm.

Evaluate safety/level of treatment needed

The first stage of treatment is to decide what sort of treatment environment your patient needs—outpatient, inpatient, or something in between? Concerned about Anna's auditory hallucinations and passive suicidal thoughts, I asked her to describe the voices in more detail. Anna said unknown men's voices told her that she was worthless and her life did not matter. I asked if they ever ordered her to harm herself, and she said no, but she admitted thinking it might be easier if she were dead. She would not harm herself now, she said, but if she continued to experience her current level of depression, she might consider suicide in the future. Although Anna described a potential future risk of suicide, I concluded that she was not in imminent danger of harming herself, and because her mother was able to stay with her, I felt comfortable seeing her as an outpatient. Had there not been a parent nearby, I might have recommended that she stay in a peer respite unit, a supportive inpatient environment that is not as restrictive as a locked psychiatric unit.

Start appropriate medication

To treat psychotic depression, I often prescribe an antidepressant and a low dose of an antipsychotic that is not overly sedating. Good non-sedating options include risperidone, aripiprazole, and lurasidone. I have found lurasidone quite effective for bipolar depression in students, although this medication is costly and insurance companies will not always cover it. For students with psychosis and prominent insomnia, I will often use quetiapine. I prescribed Anna escitalopram as well as a low dose of risperidone.

Get the family involved

Parent support through phone calls or visits can be critical when students are feeling overwhelmed or struggling with suicidal thoughts. Parents can also act as consultants, helping students decide whether to stay in school or facilitating the process of taking a medical leave. I recommended that Anna's mother stay in town for a few days until Anna felt safe and showed some response to her medications. I find this to be a reasonable alternative to hospitalization, which poses its own challenges. Anna confirmed that if her voices escalated to the point that she felt she would hurt herself, she would tell her mother and would agree to hospitalization.

Ensure the patient receives psychotherapy

Encourage your patient to undergo individual and/or group therapy with a therapist who has experience working with people with psychosis. Anna participated in an educational group called the Wellness Recovery Action Plan® (WRAP®) (http://mentalhealthrecovery.com/wrap-is/). Each group session focused on specific aspects of wellness and recovery: identifying wellness tools that could keep her feeling good most days, understanding the triggers that bring on symptoms, and creating action plans for when symptoms return or escalate. Anna developed a plan—if the voices became more threatening, she would at first try to distract herself by spending time with her roommate. Next, she would call her mother or a friend. She would also contact our counseling center on-call system or see me the next day about a medication adjustment. Knowing she had a plan made her feel more empowered to cope with the voices.

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Ensure peer support

Peer support that focuses on wellness and recovery is helpful for young adults with chronic psychotic symptoms. Encourage your patient to join Active Minds (http://www.activeminds.org) or any other peer support group on campus. You can link your patient to community peer support groups offered by organizations like the National Alliance on Mental Illness (http://nami.org) and the Depression and Bipolar Support Alliance (http://dbsalliance.org). Anna obtained peer support in her WRAP group and continued to connect with members even after the group sessions had ended.

Consider vocational rehab

Vocational rehab programs also exist in many communities to link patients who experience chronic mental health issues to meaningful work. Campus case managers can recommend programs if your patient needs to take time off from school.

Work closely with the college

Some students may be unable to remain in college due to psychotic symptoms. They may not be adherent to medication and therapy, they may continue to use drugs that exacerbate their symptoms, or they may have a more severe form of psychosis that is not responsive to treatment. Contacting the dean of students' office or a case manager in the counseling center directly can help with coordinating a reduced course load or other accommodations, or facilitating the patient's transition to more intensive treatment, such as a partial hospitalization or intensive outpatient program.

In Anna's case, I called the dean of students' office and helped Anna and her mother make an appointment with a case manager to decide if she should reduce her course load or medically withdraw from the semester. I told Anna that I could write a letter to support whatever decision she made. Anna thought she would be okay if she dropped two of her classes; she had kept up with work in the other two. I also recommended Anna register with the campus disability resource center so she could get extra support and coaching regarding her school work.

Offer hope

It is critical to offer patients hope. The suicide rate for people with psychotic disorders is highest in the first year after diagnosis (Ventriglio A et al, *Front Psychiatry* 2016;7:116), so you want to throw out the lifeline of hope to attenuate suicidal urges. College students may feel hopeless if they are not able to keep up with academic work due to cognitive difficulties stemming from psychosis or medication. Fortunately, the comprehensive treatment outlined above does improve outcomes. I let Anna and her mother know that I have successfully worked with other students with similar symptoms. Some have had to reduce their course load or take a semester off from school, while others have not had to take any time off at all.

CCPR VERDICT: There is something of a wild card aspect to cases involving psychosis, because you don't know up front if the patient is experiencing a one-time episode or the first sign of a chronic, ongoing condition. Still, regardless of the particular path needed, providing a comprehensive and collaborative approach offers our patients the best chance of a mindset of recovery and purpose.

Expert Interview
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CCPR: And among children who present with psychosis, what are the most common causes?

Dr. Cepeda: About 70% of cases are due to a mood disorder, usually unipolar depression. About 20% are secondary to trauma, including physical and sexual abuse; 4%–5% may be drug related; and the rest are due to a primary thought disorder, such as schizophrenia (van Os J et al, *Arch Gen Psychiatry* 2001;58(7):663–668).

CCPR: How do you suggest we go about evaluating psychosis in kids?

Dr. Cepeda: There are two situations. In some cases, it is obvious, because children come in saying things like they are hearing voices, or they talk about feeling like someone is after them. But in other cases, the child does not present with obvious symptoms, and you have to ask specific questions.

CCPR: It's not easy asking questions about psychosis, especially in younger kids who may not understand the concept of psychotic phenomena. How should we begin that conversation?

Dr. Cepeda: A good entrance into the topic is to explore night behavior. I ask, "Are you scared at night?" If the child says yes, I ask, "What are you scared of?" Children may say they hear weird sounds or scary noises, or say they see things in the dark. I'll proceed from there, asking for more specifics like, "What kinds of noises do you hear?"

CCPR: So you are using "are you scared at night" as a kind of initial screening question.

Dr. Cepeda: Yes, but in many cases you have to be more thorough and systematic than simply asking screening questions. For example, kids may say that they don't hear anything or see anything, but if I still suspect some kind of psychosis, I'll go through a series of very specific questions. For example, I'll ask, "Are you scared of the closet?" In my experience, the closet is a place many psychotic features center on. Kids see it as the hiding place of monsters, or of the devil. Another one is, "Are you scared of the windows?" Some kids think that people are going to come in through the window and hurt them or their family. Other kids will say they are scared of what's under the bed.

CCPR: It sounds like asking about nighttime phenomena is important. But since so many kids have fears about monsters in the closet or under the bed, how do you tell if this signals psychosis?

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Expert Interview
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Dr. Cepeda: Nighttime fear is just the starting point—it gets the conversation going. Then you dig deeper. For instance, if a kid without psychosis says Freddy Krueger's in the closet and his parents assure him that no one is in there, he will eventually settle down and fall asleep. A psychotic child will not be able to fall asleep and will persist in his belief no matter how much reassurance he receives. Another important clue is if the child has these fears during the day or at school. The typical distractions of the day will push away scary thoughts for most children, but not for one who's psychotic. That child will be obsessed. In addition, most kids might be afraid of the bogeyman, but they don't feel they are being watched per se. Children with psychosis will often feel not only that they are being watched, but also that the scary entity is coming to get them. They have paranoid ideation. They might also hear voices—not just "you are ugly" or "nobody loves you," but perhaps also command voices to injure or kill either themselves or others.

CCPR: So it goes beyond nighttime, and beyond an impersonal bogeyman?

Dr. Cepeda: Yes, but all of that said, in most kids, the psychosis is more active at night. It's also not uncommon to feel that there is somebody watching them while they are showering—often with the fear that somebody on the other side of the shower curtain is going to harm them. Some people are surprised at the young ages some of these nighttime hallucinations can begin. In the literature, there are reports of psychosis in 3- or 4-year-olds (Beresford C et al, *Clin Child Psychol Psychiatry* 2016;10(3):429–439). I remember a 3 ½-year-old boy whose parents brought him in because they discovered that he kept knives under his pillow. When I asked him why, he said that he had them because he had seen the "gingle," which was a word he had made up. He said he needed the knives to defend himself against the gingle that was coming to kill him and his family.

> **"It's important to explore paranoia specifically, not just give it passing notice. This is an area of the evaluation that is often missed even by child psychiatrists."**
>
> Claudio Cepeda, MD

CCPR: Let's assume that you ask children whether they are scared at night and they say no. Where might you go from there in the assessment?

Dr. Cepeda: I'll ask some questions that are similar to what we would ask adults. I ask if they ever hear voices talking to them when there is nobody around. I'll ask if they see things that are unreal, like monsters or ghosts. If there is a chance of epilepsy, I explore sensory hallucination: "Do you ever feel someone touching you? Do you smell things others don't smell? Do you ever have a bad taste in your mouth?" It's also important to explore paranoia specifically, not just give it passing notice. This is an area of the evaluation that is often missed even by child psychiatrists.

CCPR: So how do you catch this?

Dr. Cepeda: I recommend that you ask four questions. The first question is, "Do you ever feel like people say bad things about you?" This is frequently felt by kids in general, so a positive response is not strong evidence for psychosis. I'll then ask, "Do you feel people watch you?" This gets more weight. I might hear, "That's why I can't sleep—because someone is watching me. Every time I go to the bathroom, I feel I'm being watched." Ask where it happens, being sure to ask specifically if it happens at school. If children say they feel that they are being watched in the classroom, this increases my suspicion of actual psychosis. Again, if the fears occur during classroom activities, they must be pretty profound. Some kids ask to sit in the back of the room so no one can be watching them from behind.

CCPR: What are the last two questions you ask about paranoia?

Dr. Cepeda: The first of those two is, "Do you feel that you are being followed?" Many kids will say no initially, but they may not really understand what I'm talking about. So I'll explain: "When you are walking, do you need to check to see if someone is behind you?" Many will say yes to that, and that gets a lot of weight in my assessment. Finally, I'll ask, "Do you feel somebody is after you? That someone wants to do something bad to you?" I give the most significant weight to that answer because it says the most about a problem with perception.

CCPR: How do you evaluate kids who are very young, or who are not verbal?

Dr. Cepeda: For kids who lack verbal skills, or for those who are reticent to relate to strangers (as many 4- to 7-year-olds are), you can get the parent to ask the questions. That gives you the opportunity not only to observe how the child responds to the parent's questions, but also to assess how aware the parents are to the presence of symptoms. The other thing I do in younger kids is ask them to create drawings. I start by asking them to draw anything they want. Kids with psychosis usually draw something unusual right away. Whereas a child without psychosis might draw something benign, like a house or a park, a child with psychosis might start by drawing a pistol or a knife. For the second drawing, I ask the child to draw somebody. Next, I ask for a drawing of the opposite sex, then I ask for a drawing of the child's family doing something together. None of these drawings can diagnose psychosis, but they are useful for opening up communication and observing behavior.

CCPR: How do parents respond when they hear you asking these questions about psychosis?

Dr. Cepeda: There's a paradox here. Parents bring their child in because the child has been telling them some of these disturbing things, things the parents know are not right and that the child is too preoccupied with. But when they recognize that the line of questioning is leading to psychosis, they sometimes become defensive. If a child claims to be afraid of monsters, the parents might say, "That's just because he likes to watch scary movies" or, "She just

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Research Updates IN PSYCHIATRY

ADHD

Defining a Role for Nutrition in Managing Children With ADHD
REVIEW OF: Lange KW et al, *Curr Psychiatry Rep* 2017;19(2):8.

Parents of kids with ADHD often ask about the role of diet and nutrition in their child's symptoms, and research has uncovered some interesting possibilities. For example, there is some evidence that concentrations of long-chain polyunsaturated fatty acids (LC-PUFAs, which includes omega-3 fatty acids) may be lower in people with ADHD. Since these PUFAs can potentially affect cognitive functions via effects on the composition of neural membranes, supplementation in those with low levels might help. Zinc, iron, and magnesium are also essential to normal brain function, so it's possible that supplemental doses of these nutrients can help alleviate symptoms and perhaps allow for reductions in medication dosages. A recent review attempted to shed some light on these questions.

A group of researchers from Germany and Japan reviewed the literature on the use of nutritional supplements for ADHD, focusing on studies published from January 2014 to April 2016. They highlighted several intriguing results, especially relating to omega-3 and omega-6 fatty acids.

For instance, a 16-week, randomized double-blind placebo-controlled trial of children with ADHD (N = 95) who received omega-3 fatty acid supplements found improved memory function but no change in behavior. A similar trial of boys ages 12–16 (N = 79) with and without ADHD found that omega-3 supplementation was associated with parent-rated improvements in attention in both groups. A meta-analysis of 10 trials (N = 699) demonstrated a significant treatment effect of omega-3 supplements, albeit modest when compared with standard pharmacotherapy. Another meta-analysis of 13 trials (N = 1,011) found some improvement with combined omega-3 and omega-6 supplementation, but no benefit with either one alone.

Less promising findings come from studies of supplemental use of zinc, iron, and magnesium. Several trials demonstrated a modest effect when zinc or magnesium was added to stimulant therapy, but the slim findings so far have not outweighed the potential for toxicity with extended use of mineral supplements in children, according to the authors.

CCPR'S TAKE
While the authors do not specify doses used, this review adds marginal weight to the argument that supplementation with LC-PUFAs, chiefly omega-3 fatty acids, may play a small role in helping to manage symptoms in children with ADHD. For children with ADHD who are not adequately managed on standard therapy or who could potentially benefit from alternate therapy, you might consider a trial of omega-3 fatty acid supplements. Don't expect miracles, though.

—Jean Baker, MS, RD. Ms. Baker has disclosed that she has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

AUTISM

Is Minocycline Effective When Added to Risperidone for Autism Spectrum Disorder?
REVIEW OF: Ghaleiha A et al, *J Child Adolesc Psychopharmacol* 2016;26(9): 784–791.

The only medication treatments approved for autism spectrum disorder (ASD) are the antipsychotics risperidone and aripiprazole, which are indicated specifically to manage irritability associated with ASD. There's been some interest in minocycline, which is a second-generation tetracycline antibiotic, for various psychiatric disorders, including depression, schizophrenia, and Parkinson's disease. Why would an antibiotic be helpful in psychiatry? Minocycline crosses the blood-brain barrier and may have neuroprotective effects. A recent study tested whether minocycline might be useful as an adjunct to risperidone for ASD.

Ghaleiha and colleagues conducted a 10-week, randomized, double-blind, placebo-controlled trial with 46 children with ASD, aged 4–12. Participants were randomly assigned to receive either risperidone plus minocycline 50 mg twice a day, or risperidone plus placebo. Risperidone was titrated up to 1 mg or 2 mg a day based on the body weight. Each child was evaluated at baseline, week 5, and week 10. Based on the Aberrant Behavior Checklist scale, patients assigned to minocycline plus risperidone showed significantly more improvement on measures of irritability and hyperactivity/noncompliance. There were no differences between the groups in the other measures of ASD, such as lethargy/social withdrawal, stereotypic behavior, inappropriate speech, and side effect profiles. The minocycline group showed at least partial response (> 25% irritability reduction) or complete response (> 50% irritability reduction) when compared to placebo's 65.5% at the end of the study. No serious side effects were reported, and frequency of side effects were comparable between the groups.

CCPR'S TAKE
Adding minocycline 50 mg twice a day to risperidone may help with symptoms of irritability and hyperactivity. And though not tested in this trial, adding the antibiotic might theoretically allow us to use a lower dose of risperidone, leading to potentially fewer side effects. The study was small and needs replication, but given the good tolerability of minocycline, this is a strategy you might want to try for some of your kids with ASD.

—Shirley Y. Tsai, PharmD candidate (2018). Ms. Tsai has disclosed that she has no relevant financial or other interests in any commercial companies pertaining to this educational activity.

CME Post-Test

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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. The NAVIGATE system of manual-based care for first episode psychosis includes which of the following elements? (LO #1)

   [ ] a. Psychodynamic therapy that focuses on past unresolved conflicts
   [ ] b. Resilience-focused individual therapy
   [ ] c. Partnering with a mentor/advisor
   [ ] d. Interpersonal effectiveness skills training

2. The voices of command hallucinations most commonly affect children in which way? (LO #2)

   [ ] a. Holding simultaneous conversations that create overstimulation and confusion
   [ ] b. Telling the child to kill somebody
   [ ] c. Disparaging the child while sounding like familiar voices
   [ ] d. Telling the child to commit suicide

3. Your 15-year-old patient presents with psychosis, and the parents ask you about the most likely cause. You tell them that, in most cases, psychosis in children can be attributed to: (LO #2)

   [ ] a. Trauma
   [ ] b. Drug use
   [ ] c. A mood disorder
   [ ] d. Schizophrenia

4. According to research, there is a correlation between being bullied and psychotic symptoms. (LO #1)

   [ ] a. True
   [ ] b. False

5. According to a recent study, patients with autism spectrum disorder assigned risperidone plus minocycline showed improvement in which of the following areas? (LO #3)

   [ ] a. Inappropriate speech
   [ ] b. Side effect profiles
   [ ] c. Irritability and hyperactivity
   [ ] d. Lethargy and social withdrawal

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Expert Interview
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saw a scary program on TV." That's another reason I might put the questioning into the parents' hands—it can help to ground them in what's going on.

CCPR: Is it always easy to distinguish a childhood fear or fantasy from an actual hallucination or paranoid delusion? Is it all houses and parks versus knives and pistols? Clearly, it's easy enough if the child feels someone is after them and talking to them, and the child can't be calmed down even during the day. But aren't there sometimes gray areas?

Dr. Cepeda: You raise a good point. It's not always easy to decide if the abnormal perception is psychosis or a normal fear. One of the indicators of psychosis is the intensity of affect—these kids will look really scared. It is not simply "interesting" for them. Another thing to ask, particularly if you are skeptical of the story, or if the parents are skeptical and think the child is exaggerating, is, "Are you telling me the truth?" If you put this question directly, many

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This Issue's Focus:
Psychosis in Children and Adolescents

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Expert Interview
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kids with actual psychosis will tell you immediately that they are.

CCPR: Do the types of psychotic symptoms provide clues to the underlying cause?

Dr. Cepeda: To a degree. In general, command hallucinations point you in the direction of a major depressive episode, or more rarely a bipolar depressed presentation. About 90% of the time, the voices of command hallucinations are telling children to kill themselves, and about 10% of the time they are being told to kill someone else (Buccheri R et al, *Psychosoc Nurs Ment Health Serv* 2007;45(9):46–54).

CCPR: How do you discuss medications with parents?

Dr. Cepeda: That's an important question, especially because we are talking about antipsychotics, which are controversial treatments in children because of the significant side effects. I describe the more problematic side effects, which are mainly dystonia and weight gain. There are times when I feel strongly that a child could benefit from medications, and I do push for them. In my experience, parents will readily accept meds for problems such as command hallucinations or paranoia—especially when the paranoia causes behavior issues like bringing weapons to school to avenge a perceived misdeed. They also often accept meds when the child is not sleeping because of psychosis.

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

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