



## **First-Episode Psychosis: Q&A With Ann Shinn, MD**

By the Carlat Psychiatry Report

**TCPR: Dr. Shinn, when we see patients with a first episode of psychosis, it can be difficult to know what the diagnosis is and how to proceed with treatment. What’s the approach of your program at McLean Hospital?**

**Dr. Shinn:** We start with a good diagnostic assessment. We elicit a patient’s history, talk to family members (patient permitting), and review prior medical records. It’s important to realize that psychosis can result from many different non-psychiatric conditions—for example, substance use, electrolyte imbalances, thyroid abnormalities, systemic infections, nutritional deficiencies, brain tumors, and seizures, among others. By the time we see them, patients have usually already had a basic medical evaluation in an inpatient hospital or emergency room, and most non-psychiatric medical causes have been ruled out. If an adequate first-episode workup has not been done, we order labs and studies, including a toxicology screen, complete blood count, comprehensive metabolic panel, thyroid stimulating hormone, folic acid, vitamin B12, RPR, ceruloplasmin (to rule out Wilson’s disease), and possibly serologies for diseases like Lyme and HIV. We may also order a brain MRI and/or EEG if there is high suspicion of a structural brain lesion or if there are seizures in the clinical history.

**TCPR: After organic causes of psychosis have been ruled out, how do you think about the diagnosis?**

**Dr. Shinn:** I think of psychotic disorders as fitting into two broad categories: primary or secondary. Primary psychotic disorders include schizophrenia, schizoaffective disorder, and schizophreniform disorder. In primary psychotic disorders, psychotic symptoms are the principal problem and are more or less present throughout the course of illness. By contrast, psychosis can be secondary, occurring in the context of other conditions. In addition to organic causes, which I already mentioned, a number of psychiatric conditions can present with psychosis. Mood disorders like bipolar disorder or major depressive disorder, also known as “affective psychoses,” are among the most common of these. In affective psychosis, psychotic symptoms are present only when a person is manic or depressed. There are no psychotic symptoms inter-episode, ie, in the periods between mood episodes.

**TCPR: But then there’s that gray zone of “schizoaffective disorder.”**

**Dr. Shinn:** Right. There can be significant overlap in symptoms. Evidence suggests that these disorders are not biologically discrete, but rather lie on a continuum. A patient with schizoaffective disorder will have episodes of psychosis with depression and/or mania, but will be more like a patient with schizophrenia in that the psychotic symptoms are persistent, continuing even after the symptoms of depression or mania have resolved.

**TCPR: Given that schizophrenia, schizoaffective disorder, and psychotic mood disorders share so many symptoms, how can you distinguish among them?**

Dr. Shinn: Schizoaffective disorder and psychotic bipolar disorder can be particularly hard to distinguish when someone presents acutely with both prominent mood and psychotic symptoms. In such instances, we rely on information about the person's longitudinal course. When there is little past psychiatric history to guide us, as is typically the case with new-onset psychosis, we have to follow the patient's course over time to be more certain about the diagnosis.

**TCPR: That makes sense. Can you give us a specific example?**

Dr. Shinn: Yes. We saw a young man who experienced his first psychotic episode at the start of his senior year in college. He was easily distracted, heard voices, and had ideas of reference, such as thinking that his professor was lecturing specifically about him. His roommates, teachers, and coaches became concerned, and the patient was forced to leave school. He went to live at his parents' house, where he could not sleep, had racing thoughts, and ended up smashing some cars with a baseball bat thinking that Martians were invading Earth and that he had to lead a revolution against them. He was hospitalized at a community psychiatric hospital, and diagnosed with unspecified psychosis (formerly termed "psychosis not otherwise specified"). After hospitalization, he became severely depressed; he was prescribed antidepressants at his local clinic, but did not improve. That is when he was referred to our program. After seeing the patient and going through his medical records, we diagnosed him with bipolar disorder with psychotic features and started him on lithium, and he's done quite well.

**TCPR: Under what circumstances might this patient have been diagnosed with schizoaffective disorder?**

Dr. Shinn: If there were periods when manic and depressive symptoms were absent, but he continued to have psychotic symptoms.

**TCPR: You recently reported on a series of patients who have come to your clinic with first-episode psychosis. It would be interesting for us to get a sense of the diagnostic breakdown of these patients.**

Dr. Shinn: Yes, we reported on the patients we treated during the first 2.5 years of our program's existence. Among the 89 patients who presented to our clinic with first-episode psychosis, 33% had a primary psychotic disorder, 44% had affective psychosis, and 21% had psychosis NOS at the time of referral.

**TCPR: So you followed these patients for a while. Did you find that the original diagnosis was accurate, or did you get more information over time that prompted you to change the diagnosis?**

Dr. Shinn: We found that diagnostic change is common in early psychosis. Half the patients had their diagnosis change. For example, among patients we initially diagnosed with schizophrenia, 55% kept that diagnosis, 11% changed to the NOS category, and 22% changed to schizoaffective disorder.

**TCPR: So let's say we've diagnosed a patient with some type of psychosis. Why is early intervention thought to be so important?**

Dr. Shinn: By providing intensive treatment soon after a first episode, we are trying to change the patient's trajectory so

that the patient can return to school, work, and relationships rather than down a road toward disability. Like medical conditions such as cancer and heart disease, psychosis progresses through stages of severity, and if you treat early, you may slow or prevent progression.

**TCPR: That’s interesting. What are the stages of psychotic illness?**

Dr. Shinn: Patrick McGorry, Michael Berk, and others developed the concept of psychiatric staging. According to their models, stage 0 is actually no illness: The individual has no symptoms and is simply at risk, possibly because there is a family history of psychosis in a first-degree relative. Stage 1 corresponds to the prodromal period, when an individual may experience nonspecific or sub-threshold symptoms, along with some decline in academic, work, or social functioning. This is where you might see attenuated positive symptoms (APS) or brief limited intermittent psychotic symptoms (BLIPS), which are recurring episodes of frank psychotic symptoms that spontaneously go away and last no more than a week. Stage 2 is full-blown psychosis, ie, the first episode. Stage 3 consists of incomplete remission from the first episode or recurrence. Stage 4 is severe, persistent, or unremitting illness. Patients usually present to our program in stage 2 or early stage 3, and we say we provide early intervention to these patients. But in actuality, the first psychotic episode, when a person has converted to full-blown psychosis, is already considered a relatively late stage.

**TCPR: How would we ascertain that a patient is in a very early stage of the prodrome, even before the patient has any APS or BLIPS?**

Dr. Shinn: There are symptoms more subtle than APS and BLIPS, called basic symptoms, that are among the first symptoms to appear in the schizophrenia prodrome. Unlike APS and BLIPS, which are just milder or briefer psychotic symptoms, basic symptoms are qualitatively different from hallucinations, delusions, and other full-blown psychotic symptoms.

**TCPR: So if basic symptoms are not frank psychotic symptoms, how do you recognize them?**

Dr. Shinn: Basic symptoms are subtle, subjective disturbances of experience, especially self-experience. Psychiatrists usually associate disorders of self with borderline personality disorder. While in borderline personality disorder, the self-disturbance tends to be in the third-person perspective or narrative sense of self, basic symptoms reflect disturbances of first-person perspective, involving more fundamental and immediate experiences like experiencing oneself as continuous in time and immersed in one’s body and the world. Thus, a person might wonder about self-evident things like why our hands have five fingers or why the grass is green. The person may experience derealization and depersonalization—these are terms that psychiatrists typically associate only with trauma spectrum disorders like PTSD, but they are very common in early psychosis. A person may perceive a subtle change in the environment, like an atmospheric shift, and experience the world as surreal or illusory.

**TCPR: These sound like very subtle, even esoteric experiences. How do you ask patients about them?**

Dr. Shinn: You’re right, they are subtle. Unlike frank psychotic symptoms, they are rarely observable and usually only accessible by self-report. The only way to assess if they are present is to ask patients about them. The difficulty is that patients may not always have the words to describe what they are experiencing. A person might just report feeling perplexed or anxious or say, “Something is wrong; I don’t have the words for it.” Josef Parnas and his colleagues developed a semi-structured interview called the Examination of Anomalous Self-Experiences (EASE) (Parnas J et al, *Psychopathology* 2005;38(5):259– 267). An interview tool like the EASE can help clinicians explore some of these very

subtle experiences with patients. I provide some screening questions that your readers might find helpful (Editorial note: see accompanying table). But mere recognition by a patient is not enough. The key is to use open-ended questions and engage in a dialogue that allows patients to describe their experiences using, as much as possible, their own words.

### **TCPR: How do we know if patients with these experiences will develop a psychotic disorder?**

Dr. Shinn: It's hard to know, in part because adolescence, which is usually when prodromal symptoms occur, is normally a period of a lot of change. Not everyone with basic symptoms will necessarily transition to full-blown psychosis. According to one study of 160 prodromal patients, basic symptoms predicted transition to schizophrenia with a probability of 70% over almost 10 years of follow-up (Klosterkotter J et al, *ArchGen Psychiatry* 2001;58(2):158–164).

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~ Ann Shinn, MD

### **TCPR: Is there evidence that intervening at the early stages can decrease the likelihood of developing a full-blown psychotic disorder?**

Dr. Shinn: The results are mixed and depend on the intervention. CBT (eg, Ising HK et al, *Psychol Med* 2015;45(7):1435–1436) and intensive psychosocial treatment involving things like family education, home visits, social skills training, and help with substance abuse (Nordentoft I et al, *Schizophren Res* 2006;83(1):29–40) seem to reduce or at least delay conversion to full-blown psychosis. Supplementation with omega-3 fatty acids (Amminger GP et al, *Arch Gen Psychiatry* 2010;67(9):146–154) has also been shown to help. On the other hand, there is little evidence for treating at-risk individuals with antipsychotics. At least two randomized controlled trials of atypical antipsychotics in preventing psychosis have been negative (see Preti A and Cella M, *Schizophren Res* 2010;123(1):30–36 for review).

### **TCPR: And what sort of interventions do you recommend for first-episode patients, such as those you see in your clinic?**

Dr. Shinn: First, while medications are usually necessary, use “gentle” pharmacology, meaning the lowest effective dose to minimize risk of side effects. Remember that most first-episode patients are drug-naïve. You want to engage a person in treatment and not have the person's first experience with meds be negative. We know from the CATIE trial that about 75% of patients over an 18-month period stop medications, either because of side effects or because the medications were not very effective. Second, medications are important, but not sufficient—a more integrated approach is key. A recent paper in *AJP* (Kane JM et al, *Am J Psychiatry* 2016;173(5):535–536) showed that an integrated team-based approach is more effective than treatment as usual. This includes individual therapy, family psychoeducation, and employment and education support—in addition to medication. Traditional treatment approaches focus on symptomatic recovery, using antipsychotics to target positive symptoms. But to really help patients with psychosis get back on track with their lives, we need to do more to help people develop good coping skills and social skills, and help them navigate school, work, and relationships.

TCPR: Thank you, Dr. Shinn.