16 Early Onset Schizophrenia and Other Psychotic Disorders

Essential Concepts
Screening Questions

- Have you had any experiences like dreaming when you're awake?
- Do you ever hear or see things that other people can't hear or see?
- Do you feel that people are saying bad things about you?
- Do you feel that there is anyone who is out to get you?

A body seriously out of equilibrium, either with itself or with its environment, perishes outright. Not so a mind. Madness and suffering can set themselves no limit.

—George Santayana

CLINICAL DESCRIPTION

Early onset schizophrenia (EOS), with an onset prior to age 18, is an often debilitating disorder characterized by deficits in affect, cognition, and the ability to relate socially with others. This is a rare, but serious disorder, often associated with significant morbidity, chronicity, and psychosocial impairment.

The first important point is that psychosis and schizophrenia are not interchangeable. Psychosis is a general term referring to disordered processing of thoughts and impaired grasp of reality. As such, psychosis or psychotic-like symptoms can occur as a part of many psychiatric syndromes other than schizophrenia, including

- Depression
- Mania
- Schizophreniform disorder
- Psychotic disorder NOS
- Overwhelming stress (brief psychotic disorder)
- Dissociative disorders

- Anxiety disorders (especially PTSD and OCD)
- Substance intoxication or withdrawal
- Personality disorders (PDs)
- Delirium or dementia
- Autistic disorder

Intermittent psychotic symptoms may be frequently observed in children ill enough to require psychiatric hospitalization for a number of disorders. The evaluation of psychotic symptoms in children is complicated as well, as childhood is a natural time for fantasy, imaginary friends, and other illogical thoughts. Differentiating an "overly rich imagination" from a thought disorder may occasionally be difficult. Illogical thinking, social isolation, and inappropriate affect may be seen in autistic disorder, but very early onset, developmental history, and clinical features of lack of social reciprocity as well as the lack of positive symptoms of schizophrenia (such as hallucinations) differentiate the two disorders. Brief psychotic symptoms may be seen during times of stress for a number of children with a variety of vulnerabilities. The symptoms may respond positively to environmental modifications to decrease stress. The take-home point: Evaluate every patient for psychotic symptoms, but don't rush to a diagnosis of early onset schizophrenia.

KEY POINT

Positive symptoms of schizophrenia include the symptoms that are actively experienced by the individual—florid hallucinations, delusions, and thought disorder. *Negative symptoms* describe a lack of normal experiences, and include flat affect, anergia (lack of energy), and poverty of speech and thought.

In children with early onset schizophrenia (EOS), hallucinations, thought disorder, and flattened affect are the most consistent symptoms (Table 16.1). It is important to distinguish between psychotic thought processes and developmental delays or language disorders.

The types of schizophrenia include paranoid, disorganized, catatonic, undifferentiated, and residual. Schizophreniform disorder includes the same symptoms as schizophrenia, but the episode lasts between 1 and 6 months, whereas schizophrenia lasts for 6 months or more including the prodromal, active, and residual phases. Good prognostic features of schizophreniform disorder are rapid onset of psychotic symptoms,

TABLE 16.1. DSM-IV-TR Criteria for Schizophrenia

Requires two symptoms for 1 month, plus 5 months of prodromal or residual symptoms.
Mnemonic: **D**elusions **H**erald **S**chizophrenic's **B**ad **N**ews
Delusions
Hallucinations
Speech disorganization
Behavior disorganization
Negative symptoms (flat affect, paucity of speech, or avolition)

Adapted from American Psychiatric Association (2000), Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Text revision. Washington, DC. American Psychiatric Association.

confusion, good premorbid social and occupational functioning, and absence of blunted or flat affect.

Epidemiology

The usual onset of schizophrenia is late adolescence to early 30s, with men affected on average 5 years earlier than women. It is estimated that 1% of adults suffer from this disorder. Childhood onset schizophrenia is a rare disorder, thought to have a prevalence of 1 to 2 per 1,000. Boys tend to be affected about twice as often as girls. The onset tends to be insidious in most children. There is either a deterioration or failure to reach the expected level of interpersonal, academic, or social achievement. Cognitive functioning tends to be in the low average to average range. Schizophrenia interferes with a child's ability to acquire new information and skills, and he or she tends to fall behind peers academically.

Etiology and Risk Factors

Schizophrenia is a neurobiological illness of complex etiology. As a heterogeneous disorder, no single model of genetic inheritance has been found. It is likely that susceptibility genes act in conjunction with developmental and environmental factors to cause this disorder. Heritability is substantial, with the lifetime risk of developing schizophrenia 10 times higher in first-degree biological relatives of affected individuals when compared to the general population. Other risk factors include obstetrical complications, neurological and seizure disorders, and viral or autoimmune factors.

Neurobiological abnormalities have been found in EOS, including deficits in smooth pursuit eye movements and

autonomic responsivity, as well as anatomic and functional changes in brain neuroimaging. Increased ventricular volumes, abnormal hemispheric asymmetries, reduced temporal limbic structure volumes, and abnormal morphology of temporal and frontoparietal cortices have been reported.

We no longer believe that psychological or social factors cause schizophrenia. However, in the context of vulnerability, environmental stress, including high expressed emotion (EE) within the family, may affect the timing, severity, and course of the illness. Thus, psychosocial interventions are critical to prognosis.

KEY POINT

Family high EE has been demonstrated in adult schizophrenic patients to be a risk factor for relapse and poor functioning. EE is the tendency of a family to be highly emotional, loud, and reactive. Family psychoeducation and therapy may improve prognosis by helping family members communicate less emotionally.

CLINICAL VIGNETTE

You are on the Children's Psychiatric Unit of a hospital admitting an 11-year-old boy for threats to kill himself with a knife and then running after his younger brother with a knife threatening to kill him. The boy appears agitated and illogical, although you are finally able to help him calm down and discuss the incident of the day. He reports that his "voices" were telling him to get the knife and "kill." As you get further history, you find that he has never mentioned hallucinations before. He has had episodes of moodiness, threats to kill himself, and socially isolated and irritable behaviors intermittently for several years. You learn that he was started on an antidepressant medication about 3 weeks ago to treat his depression and suicidal thoughts. What further workup is needed to clarify the nature of the psychotic symptoms?

The presentation is likely irritable mania with psychotic features. Hospitalize for safety. Stop the antidepressant medication. Get a medical workup to rule out substance use and thyroid problem, and get general screening labs. Get a more thorough history—talk to outpatient treaters, school, and child and family. Get more thorough family history. Antipsychotic medication may be indicated initially, but you may try

to taper after mood stabilizer is at therapeutic level. Discharge planning should consider school, needed intensity of outpatient services, and close medication and safety follow-up.

Assessment

When assessing the child or adolescent for whom you suspect a psychotic disorder or early onset schizophrenia, it is important to consider other psychiatric disorders, as well as potential for comorbidities (Table 16.2).

TIP

Ask about substance experimentation, and follow up with toxicology screens for all new onset psychosis.

TABLE 16.2. Assessment Essentials for Early Onset Schizophrenia

1. A systematic psychiatric history focusing on a longitudinal understanding of the patient's current and past symptomatology should be obtained.
2. Thorough inquiry about family history of psychiatric disorders and medical illnesses. A cultural history is also needed because cultural and religious beliefs taken out of context may seem psychotic.
3. Multiple informants about child's history and functional level (e.g., child, parents, teachers, past treatment providers) should be included in the evaluation process.
4. Psychoeducational testing is suggested.
5. A comprehensive physical examination is necessary to rule out organic causes of psychotic symptoms. There are no specific laboratory tests, neuroimaging procedures, or other medical workup that is diagnostic. However, EOS is quite rare, and neuroimaging, EEG, and laboratory tests to rule out structural brain abnormalities, seizures, or autoimmune, infectious, thyroid, substance-induced, or other etiologies are often indicated.
6. Younger children may better communicate their psychosis and perceptual disorganization through drawings or play techniques.
7. Baseline and follow-up rating scales that assess positive and negative symptoms and psychosocial functioning are helpful in monitoring the effectiveness of treatment interventions (e.g., Positive and Negative Syndrome Scale for Schizophrenics [PANSS]; Symptom Onset in Schizophrenia [SOS]).

Treatment

Treatment of children with schizophrenia is assumed to be the same treatments that are effective in adults, with modifications for developmental stage and environmental circumstances. A multimodal, multisystems approach that is set up for a long-term course is required. Treatment of nonschizophrenic psychotic disorders requires many of the same services. The medications to treat psychosis are similar, but if the psychosis emanates from a mood or other disorder, antipsychotics may be used adjunctively to treat the psychotic symptoms, but it may not be the mainstay of psychopharmacological treatment. Family therapy and pharmacotherapy combined with social skills training has demonstrated effectiveness in adult patients. Table 16.3 gives the essentials of treatment.

Antipsychotic medications are the foundation for the treatment of psychotic disorders. With childhood-onset schizophrenia, the child will likely require medications for a very

TABLE 16.3. Essentials of Multimodal Treatment of Schizophrenia

1. Psychoeducation of parents and child about the nature of the illness, necessity for treatment compliance, and to provide support and hope for the child and family about the potential to improve with treatment.
2. Psychosocial treatments, including social skills training, supportive psychotherapy, behavior modification, and cognitive-behavioral therapy of dysphoria are all appropriate and should be considered as needed for an individual patient.
3. School interventions may be required to ensure that any special learning needs are addressed. Additionally, children who are quite disabled by the disorders may require special education services and a therapeutic educational program in order to learn.
4. Medications
   1st line: Atypical antipsychotics: risperidone, olanzapine, quetiapine, aripiprazole, ziprasidone
   2nd line: Typical antipsychotics: haloperidol, thiothixene, chlorpromazine, trifluoperazine, molindone
   3rd line: Clozapine, augmentation with lithium or other mood stabilizer, electroconvulsive therapy

Note: Recommendations are drawn from the adult literature and clinical consensus as controlled trials are not yet available justifying the atypical agents as first-line treatments in youth.

prolonged period of time. There is evidence that psychosis left untreated for substantial amounts of time may have a worse prognosis than illness that is treated in its prodromal or early phases. For this reason, judicious use of antipsychotics in a timely manner is recommended. The potential longer-term side effects of the medications (tardive dyskinesia, weight gain or diabetes, cognitive blunting) need to be weighed against the medication effectiveness. Using the smallest amount of medication possible to control the symptoms, exercise and nutrition plan, and close medication monitoring are required. Typical antipsychotics may be as effective as atypical antipsychotics and cause less weight gain. However, dystonias and the potential for tardive dyskinesia and negative symptoms may be of higher risk.

TIP

Be sure to take a careful assessment of the child's strengths, weaknesses, and environmental resources when devising a treatment plan. Focus on enhancing strengths, while intensively treating the most disabling symptoms.

17 Eating Disorders: Anorexia Nervosa and Bulimia Nervosa

Essential Concepts
Screening Questions

- How is your appetite?
- What do you think about your current weight?
- When you look in a mirror, what do you think about how you look?
- Do you ever make yourself throw up after you eat?

CLINICAL DESCRIPTION

Eating disorders in adolescence and young adulthood are quite common, especially in women. Dieting is very frequent, and attempts to be "as thin as possible" may evolve into a serious, disabling, and even life-threatening disorder. An estimated 10% of individuals with serious eating disorders die from complications of the disorder, and another 5% die from suicide.

The two primary eating disorders are anorexia nervosa, with extreme weight loss, and bulimia nervosa, marked by binge eating and often, although not necessarily, with purging (Tables 17.1 and 17.2).

KEY POINT

Individuals with eating disorders may be secretive about the disorder because they fear intervention or are ashamed. Typically, individuals with anorexia nervosa hide the fact that they are not eating for fear that they will be "forced" to eat more calories. Individuals with bulimia nervosa are often embarrassed about the disorder and will binge in secret. The clinician should always ask about eating and, with adolescents, also ask the family about their observations of a change in eating patterns or weight. Approximately 10 to 15% of eating-disordered individuals are male, with an especially high prevalence in gay men. Therefore, screening questions for eating disorders should be included in all interviews.