

## **Childhood schizophrenia**

### **Overview**

Childhood schizophrenia is an uncommon but severe mental disorder in which children and teenagers interpret reality abnormally. Schizophrenia involves a range of problems with thinking (cognitive), behavior or emotions. It may result in some combination of hallucinations, delusions, and extremely disordered thinking and behavior that impairs your child's ability to function.

Childhood schizophrenia is essentially the same as schizophrenia in adults, but it starts early in life — generally in the teenage years — and has a profound impact on a child's behavior and development. With childhood schizophrenia, the early age of onset presents special challenges for diagnosis, treatment, education, and emotional and social development.

Schizophrenia is a chronic condition that requires lifelong treatment. Identifying and starting treatment for childhood schizophrenia as early as possible may significantly improve your child's long-term outcome.

### **Symptoms**

Schizophrenia involves a range of problems with thinking, behavior or emotions. Signs and symptoms may vary, but usually involve delusions, hallucinations or disorganized speech, and reflect an impaired ability to function. The effect can be disabling.

In most people with schizophrenia, symptoms generally start in the mid- to late 20s, though it can start later, up to the mid-30s. Schizophrenia is considered early onset when it starts before the age of 18. Onset of schizophrenia in children younger than age 13 is extremely rare.

Symptoms can vary in type and severity over time, with periods of worsening and remission of symptoms. Some symptoms may always be present. Schizophrenia can be difficult to recognize in the early phases.

### **Early signs and symptoms**

Schizophrenia signs and symptoms in children and teenagers are similar to those in adults, but the condition may be more difficult to recognize in this age group.

Early signs and symptoms may include problems with thinking, behavior and emotions.

Thinking:

- Problems with thinking and reasoning
- Bizarre ideas or speech
- Confusing dreams or television for reality

#### Behavior:

- Withdrawal from friends and family
- Trouble sleeping
- Lack of motivation — for example, showing up as a drop in performance at school
- Not meeting daily expectations, such as bathing or dressing
- Bizarre behavior
- Violent or aggressive behavior or agitation
- Recreational drug or nicotine use

#### Emotions:

- Irritability or depressed mood
- Lack of emotion, or emotions inappropriate for the situation
- Strange anxieties and fears
- Excessive suspicion of others

#### Later signs and symptoms

As children with schizophrenia age, more typical signs and symptoms of the disorder begin to appear. Signs and symptoms may include:

- **Delusions.** These are false beliefs that are not based in reality. For example, you think that you're being harmed or harassed; that certain gestures or comments are directed at you; that you have exceptional ability or fame; that another person is in love with you; or that a major catastrophe is about to occur. Delusions occur in most people with schizophrenia.
- **Hallucinations.** These usually involve seeing or hearing things that don't exist. Yet for the person with schizophrenia, hallucinations have the full force and impact of a normal experience. Hallucinations can be in any of the senses, but hearing voices is the most common hallucination.
- **Disorganized thinking.** Disorganized thinking is inferred from disorganized speech. Effective communication can be impaired, and answers to questions may be partially or completely unrelated. Rarely, speech may include putting together meaningless words that can't be understood, sometimes known as word salad.

- **Extremely disorganized or abnormal motor behavior.** This may show in several ways, from childlike silliness to unpredictable agitation. Behavior is not focused on a goal, which makes it hard to do tasks. Behavior can include resistance to instructions, inappropriate or bizarre posture, a complete lack of response, or useless and excessive movement.
- **Negative symptoms.** This refers to reduced or lack of ability to function normally. For example, the person may neglect personal hygiene or appear to lack emotion — doesn't make eye contact, doesn't change facial expressions, speaks in a monotone, or doesn't add hand or head movements that normally occur when speaking. Also, the person may avoid people and activities or lack the ability to experience pleasure.

Compared with schizophrenia symptoms in adults, children and teens may be:

- Less likely to have delusions
- More likely to have visual hallucinations

### **Symptoms may be difficult to interpret**

When childhood schizophrenia begins early in life, symptoms may build up gradually. Early signs and symptoms may be so vague that you can't recognize what's wrong. Some early signs can be mistaken for typical development during early teen years, or they could be symptoms of other mental or physical conditions.

As time goes on, signs may become more severe and more noticeable. Eventually, your child may develop the symptoms of psychosis, including hallucinations, delusions and difficulty organizing thoughts. As thoughts become more disorganized, there's often a "break from reality" (psychosis) frequently requiring hospitalization and treatment with medication.

### **When to see a doctor**

It can be difficult to know how to handle vague behavioral changes in your child. You may be afraid of rushing to conclusions that label your child with a mental illness. Your child's teacher or other school staff may alert you to changes in your child's behavior.

Seek medical care as soon as possible if you have concerns about your child's behavior or development.

### **Causes**

It's not known what causes childhood schizophrenia, but it's thought that it develops in the same way as adult schizophrenia does. Researchers believe that a combination of genetics, brain chemistry and environment contributes to development of the disorder. It's not clear why schizophrenia starts so early in life for some and not for others.

Problems with certain naturally occurring brain chemicals, including neurotransmitters called dopamine and glutamate, may contribute to schizophrenia. Neuroimaging studies show differences in the brain structure and central nervous system of people with schizophrenia. While researchers aren't certain about the significance of these changes, they indicate that schizophrenia is a brain disease.

### **Risk factors**

Although the precise cause of schizophrenia isn't known, certain factors seem to increase the risk of developing or triggering schizophrenia, including:

- Having a family history of schizophrenia
- Increased immune system activation, such as from inflammation
- Older age of the father
- Some pregnancy and birth complications, such as malnutrition or exposure to toxins or viruses that may impact brain development
- Taking mind-altering (psychoactive) drugs during teen years

### **Complications**

Left untreated, childhood schizophrenia can result in severe emotional, behavioral and health problems. Complications associated with schizophrenia may occur in childhood or later, such as:

- Suicide, suicide attempts and thoughts of suicide
- Self-injury
- Anxiety disorders, panic disorders and obsessive-compulsive disorder (OCD)
- Depression
- Abuse of alcohol or other drugs, including nicotine
- Family conflicts
- Inability to live independently, attend school or work
- Social isolation
- Health and medical problems
- Being victimized
- Legal and financial problems, and homelessness
- Aggressive behavior, although uncommon

## Prevention

Early identification and treatment may help get symptoms of childhood schizophrenia under control before serious complications develop. Early treatment is also crucial in helping limit psychotic episodes, which can be extremely frightening to a child and his or her parents. Ongoing treatment can help improve your child's long-term outlook.

## Diagnosis

Diagnosis of childhood schizophrenia involves ruling out other mental health disorders and determining that symptoms aren't due to alcohol or drug use, medication or a medical condition. The process of diagnosis may involve:

- **Physical exam.** This may be done to help rule out other problems that could be causing symptoms and to check for any related complications.
- **Tests and screenings.** These may include tests that help rule out conditions with similar symptoms, and screening for alcohol and drugs. The doctor may also request imaging studies, such as an MRI or CT scan.
- **Psychiatric evaluation.** This includes observing appearance and demeanor, asking about thoughts, feelings and behavior patterns, including any thoughts of self-harm or harming others, evaluating ability to think and function at an age-appropriate level, and assessing mood, anxiety and possible psychotic symptoms. This also includes a discussion of family and personal history.
- **Diagnostic criteria for schizophrenia.** Your doctor or mental health professional may use the criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), published by the American Psychiatric Association.

## Challenging process

The path to diagnosing childhood schizophrenia can sometimes be long and challenging. In part, this is because other conditions, such as depression or bipolar disorder, can have similar symptoms.

A child psychiatrist may want to monitor your child's behaviors, perceptions and thinking patterns for several months or more. As thinking and behavior patterns and signs and symptoms become clearer over time, a diagnosis of schizophrenia may be made.

In some cases, a psychiatrist may recommend starting medications before making an official diagnosis. This is especially important for symptoms of aggression or self-injury. Some medications may help limit these types of behavior.

## Treatment

Schizophrenia in children requires lifelong treatment, even during periods when symptoms seem to go away. Treatment is a particular challenge for children with schizophrenia.

### Treatment team

Childhood schizophrenia treatment is usually guided by a child psychiatrist experienced in treating schizophrenia. The team approach may be available in clinics with expertise in schizophrenia treatment. The team may include, for example, your:

- Psychiatrist, psychologist or other therapist
- Psychiatric nurse
- Social worker
- Family members
- Pharmacist
- Case manager to coordinate care

### Main treatment options

The main treatments for childhood schizophrenia are:

- Medications
- Psychotherapy
- Life skills training
- Hospitalization

### Psychotherapy

In addition to medication, psychotherapy, sometimes called talk therapy, can help manage symptoms and help you and your child cope with the disorder. Psychotherapy may include:

- **Individual therapy.** Psychotherapy, such as cognitive behavioral therapy, with a skilled mental health professional can help reduce symptoms and help your child learn ways to deal with the stress and daily life challenges of schizophrenia. Learning about schizophrenia can help your child understand the condition, cope with symptoms and stick to a treatment plan.
- **Family therapy.** Your child and your family may benefit from therapy that provides support and education to families. Involved, caring family members can be extremely helpful to children with schizophrenia. Family therapy can also help

your family improve communication, work out conflicts and cope with stress related to your child's condition.

### **Life skills training**

Treatment plans that include building life skills can help your child function at age-appropriate levels when possible. Skills training may include:

- **Social and academic skills training.** Training in social and academic skills is an important part of treatment for childhood schizophrenia. Children with schizophrenia often have troubled relationships and school problems. They may have difficulty carrying out typical daily tasks, such as bathing or dressing.
- **Vocational rehabilitation and supported employment.** This focuses on helping people with schizophrenia prepare for, find and keep jobs.

### **Lifestyle and home remedies**

Although childhood schizophrenia requires professional treatment, it's critical to be an active participant in your child's care. Here are ways to get the most out of the treatment plan.

- **Follow directions for medications.** Try to make sure that your child takes medications as prescribed, even if he or she is feeling well and has no current symptoms. If medications are stopped or taken infrequently, the symptoms are likely to come back and your doctor will have a hard time knowing what the best and safest dose is.
- **Check first before taking other medications.** Contact the doctor who's treating your child for schizophrenia before your child takes medications prescribed by another doctor or before taking any over-the-counter medications, vitamins, minerals, herbs or other supplements. These can interact with schizophrenia medications.
- **Pay attention to warning signs.** You and your child may have identified things that may trigger symptoms, cause a relapse or prevent your child from carrying out daily activities. Make a plan so that you know what to do if symptoms return. Contact your child's doctor or therapist if you notice any changes in symptoms, to prevent the situation from worsening.
- **Make physical activity and healthy eating a priority.** Some medications for schizophrenia are associated with an increased risk of weight gain and high cholesterol in children. Work with your child's doctor to make a nutrition and physical activity plan for your child that will help manage weight and benefit heart health.

- **Avoid alcohol, recreational drugs and nicotine.** Alcohol, recreational drugs and nicotine can worsen schizophrenia symptoms or interfere with antipsychotic medications. Talk to your child about avoiding drugs and alcohol and not smoking. If necessary, get appropriate treatment for a substance use problem.

## **Coping and support**

Coping with childhood schizophrenia can be challenging. Medications can have unwanted side effects, and you, your child and your whole family may feel angry or resentful about having to manage a condition that requires lifelong treatment. To help cope with childhood schizophrenia:

- **Learn about the condition.** Education about schizophrenia can empower you and your child and motivate him or her to stick to the treatment plan. Education can help friends and family understand the condition and be more compassionate with your child.
- **Join a support group.** Support groups for people with schizophrenia can help you reach out to other families facing similar challenges. You may want to seek out separate groups for you and for your child so that you each have a safe outlet.
- **Get professional help.** If you as a parent or guardian feel overwhelmed and distressed by your child's condition, consider seeking help for yourself from a mental health professional.
- **Stay focused on goals.** Dealing with childhood schizophrenia is an ongoing process. Stay motivated as a family by keeping treatment goals in mind.
- **Find healthy outlets.** Explore healthy ways your whole family can channel energy or frustration, such as hobbies, exercise and recreational activities.
- **Make healthy lifestyle choices.** Maintaining a regular schedule that includes sufficient sleep, healthy eating and regular physical activity is important to mental health.
- **Take time as individuals.** Although managing childhood schizophrenia is a family affair, both children and parents need their own time to cope and unwind. Create opportunities for healthy alone time.
- **Begin future planning.** Ask about social service assistance. Most individuals with schizophrenia require some form of daily living support. Many communities have programs to help people with schizophrenia with jobs, affordable housing, transportation, self-help groups, other daily activities and crisis situations. A case manager or someone on the treatment team can help find resources.