Adolescent Schizophrenia

**What is Schizophrenia?**

Schizophrenia is a major psychiatric illness with symptoms usually beginning late in adolescence or early adulthood. It is one of the most complex of all mental disorders. Specifically, schizophrenia is defined as a severe, chronic, and disabling disturbance of the brain that causes distorted thinking, strange feelings, and unusual behavior and use of language and words. Those who are schizophrenic have difficulty distinguishing between what is real and unreal. The term *schizophrenia* itself means “fragmented mind.”

**Causes**

There is no single known cause responsible for schizophrenia. Many factors are involved in the inheritance of the illness. Causes are typically both genetic and environmental and come from both parents.

**Genetic causes of schizophrenia:**

Schizophrenia has a strong hereditary component. Individuals with a parent or sibling who has schizophrenia have a 10% chance of developing the disorder. This is opposed to the general population of which 1% has the chance to develop the disorder.

Despite this, schizophrenia is only influenced by genetics, not determined by it. While schizophrenia runs in families, about 60% of individuals with schizophrenia have no family members with the disorder. Additionally, individuals who are genetically predisposed to schizophrenia don’t always develop the disease, which indicates that biology does not automatically predetermine the presence of the disorder.

**Environmental causes of schizophrenia:**

Twin and adoption studies suggest that inherited genes make a person vulnerable to schizophrenia and subsequently environmental factors act on this vulnerability to trigger the disorder.

As for the environmental factors involved, more and more research is pointing to stress, either during pregnancy or at a later stage of development. High levels of stress are believed to trigger schizophrenia by increasing the body’s production of the hormone cortisol.

Research points to several stress-inducing environmental factors that may be involved in schizophrenia, including:
• Prenatal exposure to a viral infection
• Low oxygen levels during birth (from prolonged labor or premature birth)
• Exposure to a virus during infancy
• Early parental loss or separation
• Physical or sexual abuse in childhood

Abnormal brain structure:
In addition to abnormal brain chemistry, abnormalities in brain structure may also play a role in schizophrenia. Enlarged brain ventricles are seen in some of those diagnosed with schizophrenia, indicating a decreased volume of brain tissue. There is also evidence of abnormally low activity in the frontal lobe, which is the area of the brain responsible for planning, reasoning, and decision-making.

Some studies also suggest that abnormalities in the temporal lobes, hippocampus, and amygdala are connected to schizophrenia’s positive symptoms. But despite the evidence of brain abnormalities, it is highly unlikely that schizophrenia is the result of any one problem in any one region of the brain.

Symptoms
There are two types of symptoms that can occur with those who have schizophrenia. There are positive symptoms, which are symptoms produced by the disorder itself and there are negative symptoms, which represent personality traits or characteristics taken away by the disease. Below are some common symptoms of the illness:

Positive symptoms:
• Hallucinations or a false perception of at least one of the five senses
• Delusions or irrational beliefs. Typically delusions involve irrational or bizarre ideas or fantasies.
• Disorganized speech
• Disorganized or catatonic behavior

Negative symptoms:
• Reduction of emotional expression
• Lack of energy and motivation
• Loss of enjoyment and interest in activities, including social situations
• Poor grooming
Schizophrenia is diagnosed by the presence of two of the symptoms described above. For a diagnosis of schizophrenia, two of these symptoms must be present for at least six months and must be accompanied by increased difficulty in daily living in areas such as school, friendships and self-care.

There are also symptoms to be aware of that may exist prior to the initial psychotic break. These are known as prodromal symptoms and may occur from two to six years prior to the initial break. These symptoms may easily be confused with aspects of typical adolescence and are difficult to decipher because of their vagueness. Some of these behaviors include:

- Reduced concentration and attention
- Mood changes, such as depression and anxiety
- Sleep difficulties
- Social withdrawal
- Suspiciousness and/or paranoia
- Irritability
- Neglected physical appearance
- Decline in academic performance and abandonment of previous interests

Early warning signs of schizophrenia in children may include:

- Distorted perception of reality (difficulty telling dreams from reality)
- Confused thinking (i.e., confusing television with reality)
- Detailed and bizarre thoughts and ideas
- Suspiciousness and/or paranoia (fearfulness that someone, or something, is going to harm them)
- Hallucinations
- Delusions
- Extreme moodiness
- Severe anxiety and/or fearfulness
- Flat affect (lack of emotional expression when speaking)
- Difficulty in performing schoolwork
- Social withdrawal (severe problems in making and keeping friends)
- Disorganized or catatonic behavior (suddenly becoming agitated and confused, or sitting and staring, as if immobilized)
- Odd behaviors (i.e., an older child may regress significantly and begin acting like a younger child)
Treatment

Treatment for schizophrenia is very complex and typically requires a number of treatments to meet the individualized needs of the child or adolescent with schizophrenia. Treatment is aimed at reducing the symptoms associated with the disorder. Types of treatment that may be helpful to a child or adolescent with schizophrenia may include:

- Medications (also called psychopharmacological management; to reduce the symptoms of schizophrenia)*, including the following:
  - Antipsychotic medications are medications that act against the symptoms of psychotic illness, but do not cure the illness. This specialized class of medications can reduce symptoms or reduce the severity of symptoms, and is used primarily to treat the pervasive, intrusive, and disturbing thoughts of a person with schizophrenia. Antipsychotics that are FDA approved for early onset schizophrenia for youth ages 13-17 include rispiridone (Resperidol), aripipazole (Abilify), quetiapine (Seroquel) and olanzapine (ZYPREXA).
  - Mood stabilizing agents, especially in the initial phase of the illness

*It should be noted that treatment with only medication is not as effective as medication therapy combined with other forms of treatment.

- Psychotherapy
  - Supportive Therapy: This therapy is intended to create an emotional experience corrective in nature, which restores and strengthens the patient’s stability and helps to develop healthy ways of solving problems.
  - Behavior Therapy: In this type of therapy, the focus is on addressing maladaptive behaviors. Therapists aim to replace behaviors that have been learned or conditioned with more desirable behaviors. This type of behavior includes social skills training, which may be helpful for adolescents with the disorder.
• **Cognitive Therapy**: This therapy is a short-term structured therapy that focuses on very specific problems that seek to resolve them through collaborative efforts between the patient and therapist to improve the patient’s thinking skills. This therapy helps to change the negative ways that the patients think of themselves.

• **Group Therapy**: In this type of therapy groups of people address interpersonal and life issues together with the guidance of a psychotherapist. This is a natural setting for adolescents who are more comfortable with their peers than adults. However, it is important to note that this type of therapy may not be appropriate for all adolescents with the illness because some have obvious symptoms or character traits likely to cause others to ridicule them.

• **Family Therapy**: Family therapy involves entire families meeting together with a psychotherapist. This typically is the appropriate treatment for adolescents whose problems are a reflection of dysfunctional families. This type of therapy involves psychoeducation, a procedure by which families are taught better ways to interact with each other.

• Self-help and support groups

• Specialized educational and/or structured activity programs (i.e., social skills training, vocational training, and speech and language therapy) are very important. Children and adolescents with schizophrenia often need adjustments to their educational programs. Typically this would include smaller classrooms with teachers who are experienced with children and adolescents with psychiatric disorders. Their academic work may also need to be modified in order to accommodate problems sometimes associated with schizophrenia such as reduced concentration and attention.
Common Misconceptions about Schizophrenia obtained from http://www.helpguide.org/mental/schizophrenia_symptom.htm

MYTH: Schizophrenia refers to a "split personality" or multiple personalities.

FACT: Multiple personality disorder is a different and much less common disorder than schizophrenia. People with schizophrenia do not have split personalities. Rather, they are “split off” from reality.

MYTH: Schizophrenia is a rare condition.

FACT: Schizophrenia is not rare; the lifetime risk of developing schizophrenia is widely accepted to be around 1 in 100.

MYTH: People with schizophrenia are dangerous.

FACT: Although the delusional thoughts and hallucinations of schizophrenia sometimes lead to violent behavior, most people with schizophrenia are neither violent nor a danger to others.

MYTH: People with schizophrenia can’t be helped.

FACT: While long-term treatment may be required, the outlook for schizophrenia is not hopeless. When treated properly, many people with schizophrenia are able to enjoy life and function within their families and communities.

References

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