Childhood Psychosis

Shawn. S. Sidhu, M.D., FAPA
Assistant Professor, UNM Department of Psychiatry
Attending Physician, Children's Psychiatric Center
Albuquerque, NM

MAIN REFERENCES

Dulcan's Textbook of Child and Adolescent Psychiatry (2010)

Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook, 4th Edition (2007)

CONTENT OUTLINE

HISTORY

TERMINOLOGY

EPIDEMIOLOGY

NEUROBIOLOGY

COURSE

DIAGNOSIS/DIFFERENTIAL

TREATMENTS

History

It wasn’t until the mid-1970s that psychotic disorders in children were studied as a distinct and separate entity from Autism and other Developmental Disorders

Terminology

What is the definition of psychosis in children and adolescents?

What is the definition of Schizophrenia in children and adolescents, and how is this different from psychosis?

Terminology

Psychosis: impaired reality testing, and could potentially have many causes

Schizophrenia: specific diagnosis based on several criteria

Terminology

Childhood Onset Schizophrenia (COS): Onset prior to 13 years of age

Early Onset Schizophrenia (EOS): Onset prior to 18 years of age

EPIDEMIOLOGY

Question 1:

What is the lifetime prevalence of psychotic symptoms in children and adolescents?

A) < 1%

B) 1%

C) 5%

D) 10%

E) 20%

EPIDEMIOLOGY

Answer: E.

Up to 21% of children experience psychotic symptoms over a lifetime. Other estimates have suggested 6-16%, but it is still relatively high.

COS and EOS are both more common in males, and the average age of onset for Schizophrenia in males is 5 years younger than females

NEUROBIOLOGY

Question 2

Which of the following disease processes is most like that seen in Childhood/Early Onset Schizophrenia?

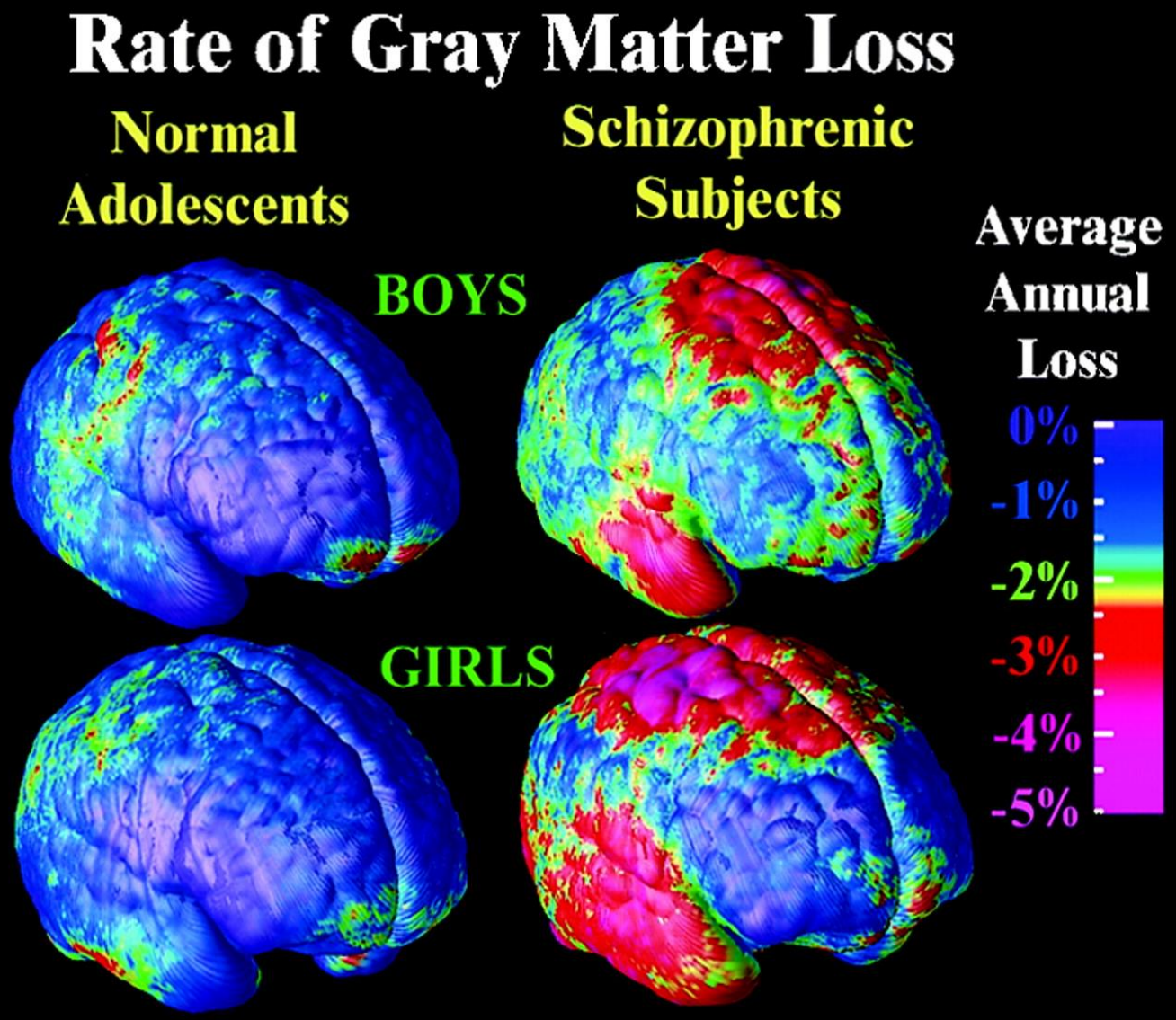
A) Vascular insult like a stroke

B) Impaired metabolism like a glycogen storage disease

C) Low oxygen like in hypoxic brain injury

D) Neurodegenerative process like Alzheimer's

E) Acute medical problem like delirium


Rate of Gray Matter Loss
Normal Adolescents
Schizophrenic Subjects
BOYS
GIRLS
Average Annual Loss
0%
-1%
-2%
-3%
-4%
-5%

www.pnas.org

NEUROBIOLOGY

Rapid gray matter loss in the parietal to frontal pattern may be due to “overpruning” or decreased myelination, resulting in thinned cortical regions

NEUROBIOLOGY

Twin studies support a strong genetic component, although no specific genes have been found (several candidate genes and genomic regions exist)

COURSE

Vast majority of patients present during the acute phase

Efforts are underway to identify prodromal youth; however, results thus far have been inconclusive with regard to predictive reliability

PRESENTATION/DIAGNOSIS

Question 3

How does the diagnosis of Schizophrenia in children differ from that in adults?

A) Children do not require the same duration of symptoms

B) Children require only the presence of three “Criterion A” symptoms while adults require two

C) Children do not typically present with delusions

D) Children are not likely to be disorganized

E) There is no difference between the two

DIAGNOSIS

The same as adults!

Two or more of the following:
Hallucinations
Delusions
Disorganized Speech
Disorganized Behavior
Negative symptoms

Only one of the above if it includes bizarre delusions or hallucinations with (1) a running commentary or (2) two or more voices conversing

COMMON DIAGNOSTIC DIFFERENCES

Children are more likely to have:

- Negative symptoms
- Catatonia and complex delusions are rare
- Auditory hallucinations are the most prevalent type of hallucination
- Slower, longer prodromal phase (can be very fast in adolescence)
- History of cognitive delays, learning problems, behavioral difficulties, social withdrawal, or oddities

DIAGNOSIS/DIFFERENTIAL

Question 4

What is the most common cause of psychosis in children and adolescents?

A) Mood Disorder

B) Delirium

C) Trauma/Stress

D) Substance Abuse

E) Schizophrenia

DIFFERENTIAL

While up to 21% of children and adolescents may experience psychosis across a lifetime, less than 1% of children and adolescents will end up with a diagnosis of Schizophrenia

Trauma/Stress is the most common cause of psychotic symptoms

-More illusions and visual hallucinations

-Auditory hallucinations should be a red flag

DIFFERENTIAL

Delirium:

Substance Abuse:

Affective Psychosis:

Autism Spectrum Disorders:

DIFFERENTIAL

Delirium: Waxing and waning with disorientation and intermittent lucidity

Substance Abuse: Psychosis only associated with intoxication or withdrawal (in theory)

Affective Psychosis: Psychosis only present with a major depressive or manic episode

Autism Spectrum Disorders: social and language problems, repetitive/stereotyped/ritualistic behavior. May have magical thinking and fantasy worlds but should not have frank delusions or hallucinations.

How would your evaluation of a 6 year old presenting with an acute psychotic episode differ from a high schooler?

Younger children have a much more active imagination and are much more likely to experience active fantasy worlds, potentially with imaginary friends. Typically this is strongest from about ages 4 to 6. School age children (6-12 years old) are known for much more concrete and organized thinking, with games that consist of rules with less pretend play. Pretend play is rare in high schoolers outside of those in drama club, etc.

How can you tell between health imagination and psychosis in younger children (4-6 years of age)?

Very difficult question!

Even though kids this age have very active imaginations, they should be able to admit that they are “just pretending.” Similarly, healthy children should be able to tell a very clear difference between fantasy/dream and reality.

Genuine auditory and visual hallucinations are relatively uncommon in kids of all ages (especially command)

Other signs/ symptoms of Schizophrenia, such as negative symptoms and disorganized speech, behavior, and thinking should not be present in “normal” children

TREATMENT

Question 5

Which of the following medications have the support of short term trials in COS/EOS?

A) Risperidone
B) Olanzapine
C) Aripiprazole
D) Chlorpromazine (“Thorazine”)
E) Haloperidol

TREATMENT

Risperidone and Abilify have demonstrated efficacy in adolescents with Schizophrenia

Clozapine has been shown to be superior to both Haloperidol and Olanzapine in youth; however, side effect profile even worse in children.

CBT and Psychoeducation to reduce EE in families