

Title: Schizophrenia, Understanding the Struggle

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Date: Jan 9, 2008

Key words: Schizophrenia, positive symptoms, negative symptoms, hallucinations, delusions

Abstract: Schizophrenia is a deteriorative psychological disease that mentally and physically strains the patients who manifest the disease and their families. The etiology of the disease is excess Dopamine, a neurotransmitter. There are two categorization of Schizophrenia; positive symptoms, and negative symptoms. Patients who suffer with positive symptoms experience hallucinations, delusions, and have rambling, incoherent speech. Patients who suffer with negative symptoms have flat affect, decreased mood, and are socially withdrawn.

Current treatments for Schizophrenia include neuroleptics and atypical antipsychotics. Both drug categories aim to decrease Dopamine availability at the receptor site. Side effects of these drugs lead to major noncompliance issues. These major side effects include: tardive dyskinesia, Parkinsonian tremor, nausea, and weight gain.

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What is Schizophrenia?

A brain disorder characterized by:

- Hallucinations
 - o Auditory (hear voices)
 - o Visual (see things/people who aren't there)
- Delusions
 - o False belief not held true by others
- Social isolation
- Cognitive impairment
 - o Memory decline
 - o Rambling speech
 - o Decrease in problem solving ability

Pt's with schizophrenia cannot control their own thoughts, and do not recognize their symptoms (hallucinations/delusions) to be unreal.

Source of the Problem

An interplay of genetic, neurobiologic, and environmental factors. **Underlying cause is excess neurotransmitter called Dopamine.**



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Primary Care Clerksip

Fall 2007

Patient Education Tool

SCHIZOPHRENIA

Understanding

The

Struggle

PERMANENT CHANGES PICKED UP ON IMAGING:

- Smaller frontal cortex
 - o Important for reasoning and judgement
- Smaller temporal lobes
 - o Source of auditory hallucinations
- Smaller hippocampus
 - o Important in memory formation
- Larger Ventricles
 - o Expanding fluid filled space inside brain compress on other important structures

Symptoms to Look For

There are two types of symptoms for Schizophrenics. Patients will typically have one or the other, and rarely a combination from both categories. Initial symptoms can begin at any point in a person's life. However, most cases are recognized in during the late teens and early in the second decade of life. The cluster of symptoms that patients display are categorized as either positive or negative symptoms

POSITIVE SYMPTOMS:

- *Hallucinations*

- *Delusions*
 - o *Usually paranoid*
- *Rapid speech*
 - o *Rambling*
 - o *Incoherent*
- *Disorganized*
 - o *Decline in person hygiene*
 - o *Decreased purposeful behavior*
 - o *Dress oddly*

NEGATIVE SYMPTOMS:

- *Social withdrawal*
- *Flat affect*
 - o *Slowed speech*
 - o *Decreased motivation*

Schizophrenia with negative symptoms is harder to diagnosed and thus are picked up later in life.

Diagnosis

Diagnosis made by physician. Symptoms must be present over a duration of 6 months.

Important things to rule out before diagnosis can be made:

- Mood disorders
- Substance abuse
- General Medical condition (hypothyroid)

Treatment

PHARMACOLOGIC:

****ANTAGONIZE EXCESS DOPAMINE****

Neuroleptics: Haloperidol, Fluphenazine

Atypicals: Clozapine, Risperidone, Olanzapine

Medications hard to titrate to appropriate dose, and side effect profile makes compliance challenging.

Side Effects: nausea, tremor, painful muscle cramps, restlessness, involuntary muscle spasms (Parkinson's), weight gain

BEHAVIORAL:

-Family support: therapy to help patients cope with hallucinations and delusions.

Goals are: help patient increase social interactions, increase thought coherence, independent daily living

-30% do recover near pre-diagnosis mental status.

-Majority of patients find the disease difficult to live with, and the treatment hard to bear.

Relapse prevention:

- strict medication compliance
- Avoid stressful life changes

