

A Case of Prolonged Duration of Untreated Psychosis: Barriers to Treatment and Strategies to Improve the Outcome

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Abstract

Several factors may contribute to increase in duration of untreated psychosis (DUP). In most cases, early intervention, namely psychopharmacological or psychosocial intervention, is done after first-episode psychosis. It is important to know what factors can contribute to duration of untreated psychosis. During this phase, patients often display unspecific symptoms such as anxiety and depression, personality disorders, and abuse of alcohol or drugs. These symptoms could go unrecognized and, hence, cause a delay in seeking treatment. In addition, functional and social decline frequently occurs in the prodromal phase or in the early course of schizophrenia. The purpose of this paper is to highlight barriers that cause delay in treatment and to review early detection and specific treatment strategies that may help to improve outcomes leading to psychosocial recovery.

Key Words: Antipsychotic, First Episode, Psychosis

Introduction

Duration of untreated psychosis is defined as the time from appearance of the first psychotic symptom to initiation of an adequate antipsychotic treatment (1). Understanding the causes and consequences of untreated psychosis in the first episode of schizophrenia is essential for planning preventive and therapeutic strategies.

The underlying psychopathology, including nonspecificity of the prodromal symptoms, considerable overlap of the prodromal symptoms with other psychiatric disorders, denial of illness, and insidious onset, may delay the initiation of treatment (2, 3). Other barriers to treatment include psy-

chosocial issues such as access to healthcare, view of mental illness and stigma, religious philosophies against treatment, poor family support, denial of ethno-cultural factors, and cultural explanations of the illness (see Table 1). It has been hypothesized that prolonged duration of untreated psychosis may lead to worsening of the neurodegenerative process that is implicated in the pathophysiology of schizophrenia and to poor clinical outcome (2, 4).

Nevertheless, identifying factors that may delay the initiation of treatment in the first episode of schizophrenia, and building specific strategies that possibly modify this duration of untreated illness, could enhance the likelihood of secondary prevention and reduce the risk of foreseeable morbidity.

This report highlights a case whose psychiatric symptoms were initially nonspecific and neurological-like signs were predominant to the point that they delayed a diagnosis of psychotic disorder. When treatment was initiated, patient's denial of illness and resistance to receive treatment prolonged the duration of untreated psychosis and, subsequently, worsened his clinical outcome.

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Table 1 Barriers to Treatment in First Episode of Psychosis*

Individual Factors	Familial Factors
Age	Poor or inadequate family support
Sex	Negative attitudes toward illness
Poor premorbid and social functioning	Perceived stigma of mental illness and resistant to starting medications
Insidious onset of illness	Conflicts in family
History of substance use	Lack of awareness of mental health problems
Nonadherence to medications	System Factors
Impaired insight	Lack of specificity of symptoms in <i>DSM-IV</i> for early onset psychosis
Perceived stigma of mental illness	Lack of early recognition of symptoms at primary care level
Longer duration of untreated illness	Deficiencies in continuum of care from hospital to clinic-based treatment
Atypical presentation and severity of illness	Inadequate familial contact during hospitalization

*see references #9–12

Case Report

The patient is a 30-year-old man, American with South-east Asian descent, who had a normal childhood and upbringing. He enjoyed social and leisure activities. He was an “A” student with a bachelor’s degree in finance. He went to medical school in Mexico and completed four years, but upon return to the U.S., he could not pass his license examination. In addition to his academic decline, he was noted to be withdrawn, suspicious, and exhibiting bizarre body gestures for a few years without any medical or psychiatric evaluation. The subpsychotic symptoms appeared gradually and the time frame was unclear.

The patient had his first psychiatric hospitalization at the age of 29 following an argument with his father when he tried to jump out of the car. He was hospitalized and he presented with episodes of shaking his entire body, lying on the floor and inability to stop his trembles. During the episodes, he was trying to pull his head backward, stating that he wanted to break his neck or someone was pulling him. During hospital stay, the patient was disorganized, paranoid, and believed that he was being judged by the public. He was socially isolative with flat affect and neglecting his personal hygiene. He denied any perceptual disturbances. There was no history of mood symptoms, substance use or medical illness. The patient never self-medicated with drugs. There was no family history of neurologic condition or psychiatric illness. His physical examination was unremarkable. Neurology consultation revealed nonspecific tic movements. EEG was noncontributory and seizure disorder ruled out. Organic pathology was excluded with normal CT head, MRI brain, blood work and negative urine toxicology. The psychiatric team felt that his body gestures and shaking movements were stereotyped and of a psychotic nature. Interestingly, these episodes responded well to olanzapine. The patient was discharged to an outpatient clinic; however, he was noncompliant with his medication and appointments

after discharge. This resulted in one other hospitalization with similar presentation.

Following discharge, he presented to our outpatient clinic. He responded fairly well to olanzapine, with a noticeable decrease in his shakes, paranoia, and social isolation. Within the next two months, despite increasing olanzapine, the patient complained of a new symptom which he called “pelvic thrusts.” This involved shaking of the pelvic area accompanied with tremors and upper body movements. His compliance with medication was questionable. As per family, the patient was agitated, pacing the house, sleeping poorly, and exhibiting frequent episodes of bizarre body gestures. Quetiapine was added and titrated with some benefits. He was also tried on lorazepam and clonazepam to relieve his anxiety and help his sleep. A referral to a movement disorders outpatient clinic was made; nevertheless, the patient did not follow through. Eventually, he stopped all his medications and refused to come for appointments.

Discussion

The patient’s initial symptoms of gradual onset of social withdrawal, suspiciousness, and decreased functioning certainly suggest a prodrome. It is apparent that these symptoms had been present for many years, but unfortunately, remained unrecognized and untreated. A number of factors have delayed early recognition and treatment of this phase of illness. These factors include: 1) patient and family were resistant to seeking treatment because of denial of illness; 2) history of good premorbid functioning; and, 3) patient’s body gestures and shaking movements dominated the clinical picture and obscured the subtle psychotic symptoms.

Patient’s symptoms progressed to include progressive decline in functioning, negative and positive symptoms, and abnormal body movements. His shaking movements and trembles could be mistaken for a neurological condition;

however, his neurological workup was inconclusive. Negative neuroimages and normal lab results ruled out organic brain pathology and possible medical conditions that might have contributed to these symptoms. His social isolation and poor sleep suggested a depressive disorder. Though, what makes depression a less likely diagnosis in this patient is the absence of suicidal thoughts, sense of hopelessness, poor appetite, guilt feeling, and loss of interest in activities. Studies have shown that social withdrawal and anhedonia could be initial symptoms in the development of psychosis (5). Conversion disorder was a diagnostic possibility. Patients with conversion disorder, however, report physical or neurological symptoms that are concluded to be associated with psychological factors which were not exhibited by this patient.

Decline in social and academic functioning, social isolation, poor self-care, paranoid thinking, and disorganization make the diagnosis of psychotic disorder likely. A differential diagnosis of psychotic symptoms in this patient includes: substance-induced psychotic disorder, brief psychotic disorder, and schizophrenia. Negative urine toxicology and duration of illness would exclude the first two diagnoses. The insidious onset and progressive course of illness suggest schizophrenia. Further, his tics, stereotypies, and bizarre gestures were suggestive of catatonic behavior. Nevertheless, when the patient entered treatment he did not show significant improvement to the psychotropic medications. His denial of illness influenced his adherence to medications and aftercare follow-up. This led to clinical deterioration and repeated hospitalization. It has been clear that the patient's cultural background influenced his clinical presentation. Neither the patient nor his family offered any cultural explanations for the illness except shame. The patient and the family were resistant to seeking early treatment because of denial of the illness, unusual presentation and history of good premorbid functioning.

Retrospective studies have found that the average duration of psychotic symptoms before the initiation of treatment is 2 to 6.5 years (6). The Scale of Prodromal Symptoms (SOPS) (16) and the Structured Interview for Prodromal Syndromes (SIPS) (17) are designed to help clinicians identify the prodromal symptoms. In addition, Comprehensive Assessment of At-Risk Mental States Scale (CAARMS) is designed to help recognize individuals at high risk (18). Literature has shown that patients who meet the criteria of the CAARMS and SIPS/SOPS are considered at-risk mental states (ARMS), and have a high rate of conversion to psychosis (6). Longitudinal studies have shown that a prolonged period of untreated psychosis in the first episode of schizophrenia is associated with unfavorable illness outcomes in regard to severity of symptoms, number of hospitalizations, remission and relapse rates, social and cognitive functioning, and response to treatment (3). Further, a ten-year follow-up study of 109 cases of first-episode psychosis has reported that neurological-like symptoms at onset of illness predict poor long-term outcomes (7). Some data suggest that inevitable clinical deterioration as a result of long duration of untreated psychosis is consistent with worsening of the neuropathological process of schizophrenia (8). This is evidenced by reduction of the cortical (mainly frontal) volume and enlargement of the cortical sulci at baseline as measured by brain neuroimaging studies (8).

In conclusion, evidence suggests an association between prolonged duration of untreated psychosis in the first episode of schizophrenia and poor prognosis. This is manifested as poor response to the antipsychotic treatment, severe global psychopathology, and a great level of functional impairment (1, 2). Strategies that potentially enhance treatment responsiveness and clinical outcome in patients with a long period of untreated psychosis necessitate further attention (see Table 2).

Table 2 Strategies that Possibly Lessen the Duration of Untreated Psychosis

Before identifying the patient (early detection)*	
Recognition of illness, cultural issues and stigma: raise public awareness of mental health through public education groups.	
Unavailability of mental healthcare access: create collaborative care treatment setting that includes integration of primary care physicians and mental health providers working together for patients.	
Overlap of the prodromal symptoms with other psychiatric disorders: increase efforts to determine specific criteria for the prodromal phase.	
After identifying the patient (early treatment)†	
Denial of illness: provide psychoeducation to the patient and family including diagnosis, risks and benefits of the proposed medications, and prognosis with and without treatment.	
Complexity of the medication schedule: simplify the regimen and provide written instructions concerning the prescribed medications.	
Financial issues: refer patients to government assistance programs if they can't afford the medications.	

*see references #8, 13, †see references #14, 15

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