WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Clinical Presentation and Management of Hebephrenic Schizophrenia

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A B S T R A C T

Background. Schizophrenia is a syndrome with a wide variety of causes, as well as a number of consequences that depend on the balance of genetic, physical and cultural influences. Schizophrenia whose typical symptoms occur only in adolescents is hebephrenic schizophrenia with multifactorial influences as the cause. This type of schizophrenia is quite difficult to treat. This article aimed to describe the clinical presentation and management of hebephrenic schizophrenia.

Case Presentation. A 36 year old male patient was admitted to emergency room and was treated in the Hospittal Psychiatric ward with a diagnosis of Hebephrenic Schizophrenia. The patient's diagnosis was made based on anamnesis and psychiatric status examination. The patient was first diagnosed with Hebephrenic Schizophrenia when the patient was 24 years old, where usually the first diagnosis of hebephrenic disease is only made in teenagers or young adults (15-25 years). From the examination it was also found that the patient was shy and liked to be alone (solitary), which is a premorbid personality for hebephrenic schizophrenia.

Conclusion. Based on this case, it can be concluded that Hebephrenic schizophrenia is schizophrenia that only occurs in teenagers, often comes and disappears until adulthood and is a type that is difficult to manage.

Keywords: Hebephrenic Schizophrenia, Adolescents, Difficult Treatment

Introduction

Schizophrenia is a chronic psychotic disorder that comes and goes. This disease can be.defined as a syndrome with a wide variety of causes of the disease, as well as a number of consequences that depend on the balance of genetic, physical and cultural influences. [1,2] Epidemiologically, schizophrenia affects men and women with the same percentage, where this disease usually appears in late adolescence or early adulthood (18-25 years).[3] In Indonesia, mental disorders are a common disease and are almost always present in every region with a prevalence of 1.7 per mile. The most mental disorders are found in DI Yogyakarta (2.7 per mile). [3] Schizophrenia itself is a disease with many risk factors, both in terms of genetics, neurobiological disorders, environmental, psychosocial and cultural factors.[1,2]

Clinical signs and symptoms of schizophrenia have three main features; First, there are no signs or symptoms that are pathognomonic for schizophrenia; Each sign or symptom seen in schizophrenia can occur in other psychiatric and neurological disorders. Therefore, the patient's history is important for the diagnosis of schizophrenia; Clinicians cannot diagnose based on mental status alone. Second, patient symptoms may change over time. Third, the clinician must consider the patient's educational level, intellectual abilities, and culture.[1] In a typical premorbid history of schizophrenia, the patient has schizoid or schizotypal personality traits which are characterized by being quiet, passive and introverted. Some adolescent patients may also show the onset of obsessive compulsive behavior as a prodromal feature. The presence of prodromal signs and symptoms is almost always recognized after the diagnosis of schizophrenia has been made, even though several months or years before that the signs and symptoms may have been present. Signs and symptoms can begin with somatic symptoms which are then diagnosed initially as malingering or somatization disorder. Until finally the family and people around them realize that the patient has changed and there are disturbances in social, occupational function and personal activities. At this stage the patient begins to develop an interest in abstract ideas, philosophy, the occult, or religious questions. Additional prodromal signs and symptoms may include very strange behavior, abnormal affect, unusual speech, bizarre ideas, and strange perceptual experiences.[1]

In 1980, T.J. Crow proposed a classification of schizophrenic patients into types I and II, based on the presence or absence of positive (or productive) symptoms and negative (deficit) symptoms. Although this system was not accepted as part of the DSM IV classification, this clinical distinction significantly influenced psychiatric research. Positive symptoms include delusions and hallucinations. Negative symptoms include flat or blunted facial expressions, poor speech (alogia) or speech content, blocking, lack of self-care, lack of motivation, anhedonia, and social withdrawal. Type I patients tend to have mostly positive symptoms, normal brain structure on CT scan, and relatively good response to treatment. Type II patients tend to have mostly negative symptoms, brain structural abnormalities on CT scan, and poor response to therapy. The third category, disorganized, includes chaotic speech (disruption of thought content), chaotic behavior, cognitive defects, and attention deficit.[1]

Schizophrenia is a chronic disease. Over time, the patient gradually becomes more withdrawn and loses other psychosocial functions and also causes deterioration in the patient. The patient's prognosis also varies depending on the risk factors that the individual patient has. Comprehensive management right down to the patient's living environment greatly influences the process of improving the patient's function, so support is needed from the family or community for patients with schizophrenia so that they do not become a burden on the family or society. Therefore, it is important for clinicians to understand schizophrenia from its types, symptoms, to comprehensive management.[4]

Hebephrenic Schizophrenia can be diagnosed firstly if it meets the general criteria for a diagnosis of schizophrenia. The first diagnosis of hebephrenia is only made in adolescence or young adulthood (onset usually starts at 15-25 years). The premorbid personality in hebephrenia shows typical characteristics of shyness and likes to be alone (solitary), but this does not have to be the case to determine the diagnosis. For a conclusive diagnosis of hebephrenia generally requires continuous observation for 2 or 3 months, to ensure that the following typical picture really persists, namely irresponsible and unpredictable behavior, as well as mannerism; there is a tendency to always be alone (solitary), and behavior shows a lack of purpose and a lack of feelings; The patient's affect is shallow and inappropriate, often accompanied by giggling or feelings of self-satisfaction, self-absorbed smiling or lofty manner, grinning laughter. (grimaces), mannerism, teasing in jest (pranks), hypochondriac complaints, and repeated phrases (reiterated phrases); and thought processes experience disorganization and speech is erratic (rambling) and incoherent.[5]

In hebephrenic schizophrenia, disorders of affective and volitional drives, as well as disorders of thought processes are generally prominent. Hallucinations and delusions may be present but are usually not prominent (fleeting and fragmentary delusions and hallucinations). The drive and determination are lost and the target is abandoned, so that the sufferer's behavior shows typical characteristics, namely behavior without aim and without purpose. The superficial and artificial preoccupation with religion, philosophy and other abstract themes makes it increasingly difficult for people to understand the patient's way of thinking.[5]

Pharmacological management of patients with schizophrenia includes antipsychotics such as dopamine receptor antagonists (APG I) and serotonin dopamine antagonists (APG II). The APG 1 drug is mainly used to control positive symptoms, while it is almost useless for negative symptoms. APG II drugs are useful for both positive and negative symptoms. The new gold standard is APG II, which is effective and has milder side effects and can be used safely without requiring weekly monitoring of white blood cell counts. [1,6]

Table 1. Antipsychotics group to treat schizophrenia

Groups	Drug
APG 1	Haloperidol
	Chlorpromazin
APG 2	Risperidone
	Olanzapine
	Quetiapine
	Clozapin
	Paliperidone
	Aripipirazole

Other treatments include electroconvulsive therapy and psychosocial therapy. Supportive-oriented psychosocial therapy is very useful, especially in long-term schizophrenia therapy. Schizophrenic patients must be approached well with empathy.[6] Hebephrenoc schizophrenia is quite difficult to treat This article aims to describe the clinical presentation and management of hebephrenic schizophrenia.

Case Presentation

A 36 years old men was taken by his family to the emergency room. Currently, the patient came with severe cognitive impairment, chaotic behavior, and confused speech. The patient had been treated in the mental ward four times and went to the psychiatric polyclinic at the hospital. Before the patient was taken by the family to the emergency room, the patient did not return home for 2 days and was found on the overpass near the city airport. The patient had not taken his medication regularly for the last 2 months.

On mental status examination, the patient was found to have a fairly neat appearance; uncooperative attitude during interview; restless psychomotor; normal flow of conversation, little productivity, little repertory, ordinary tone, ordinary volume, inappropriate content, no emphasis on speech, no spontaneity; psychic contact is less feasible, unnatural, and fleeting; impaired orientation; inappropriate, blunted affect; hyperthymic mood; the patient's thought process is incoherent. Patients have auditory and visual hallucinations. Grade I patient's discriminative insight and impaired discriminative judgment. On neurological examination there was achathisia. The patient's diagnosis was made based on anamnesis, history of past disease, and examination of the patient, revealing changes in behavioral patterns and feelings that were clinically significant and impairment (disability) in social functioning. Thus, based on PPDGJ III it can be concluded that this patient was experiencing a mental disorder.

To confirm a diagnosis of a mental disorder, a good interview was needed to collect data and information regarding significant symptoms, time period, onset, episode and course of the disease. Oganic mental disorders, were mental disorders caused by primary diseases in the brain or secondary diseases outside the brain that cause brain dysfunction. From the patient's allo-anamnesis and medical records, no medical history was found that matched these characteristics. There was no history of head trauma, seizures, or other serious illnesses that might cause brain dysfunction. Thus, the diagnosis of organic mental disorder can be excluded. From the allo-anamnesis it was also found that the patient had never consumed psychoactive substances and alcohol. Therefore, the diagnosis of mental and behavioral disorders due to psychoactive substances (F1) could be excluded.

From the main cause and history of the disease, it was concluded that this patient was found to have very chaotic perception and behavioral disorders, including disorganized speech, disorganized behavior, regression, auditory and visual hallucinations, delusions of religion and grandeur, and the family had never seen the patient talking and laughing alone, but patients often went aimlessly. This has created a consistent and meaningful change in the overall quality of several aspects of personal behavior, manifested as loss of interest, aimless living, not doing anything, a self-absorbed attitude, and social withdrawal. The patient had exhibited these signs and symptoms for 13 years. Therefore, the possible diagnoses were schizophrenia, schizotypal disorder, and delusional disorder. From the prominent symptoms and signs in the patient, it was matched with the diagnosis of hebephrenic schizophrenia as Axis I diagnosis.

From the patient's personality history, it was found that the personal characteristics were warm or gentle towards other people. Apart from that, patients also often daydream. On axis II, the patient was diagnosed with schizoid personality traits. In this patient, no significant general medical conditions were found so there was no diagnosis on Axis III. In this patient, it was found that the main problem that caused changes in the patient's behavior, feelings and thoughts was a problem with his friends at school, namely the patient had a fight due to romantic problems. In this way, the diagnosis of axis IV in this patient was a problem with school friends. On axis V, the patient has severe disabilities in communication and judgment, unable to function in almost all areas, so that based on the GAF (Global Assessment of Functional Scale) assessment, the patient is currently at a score of 30-21.

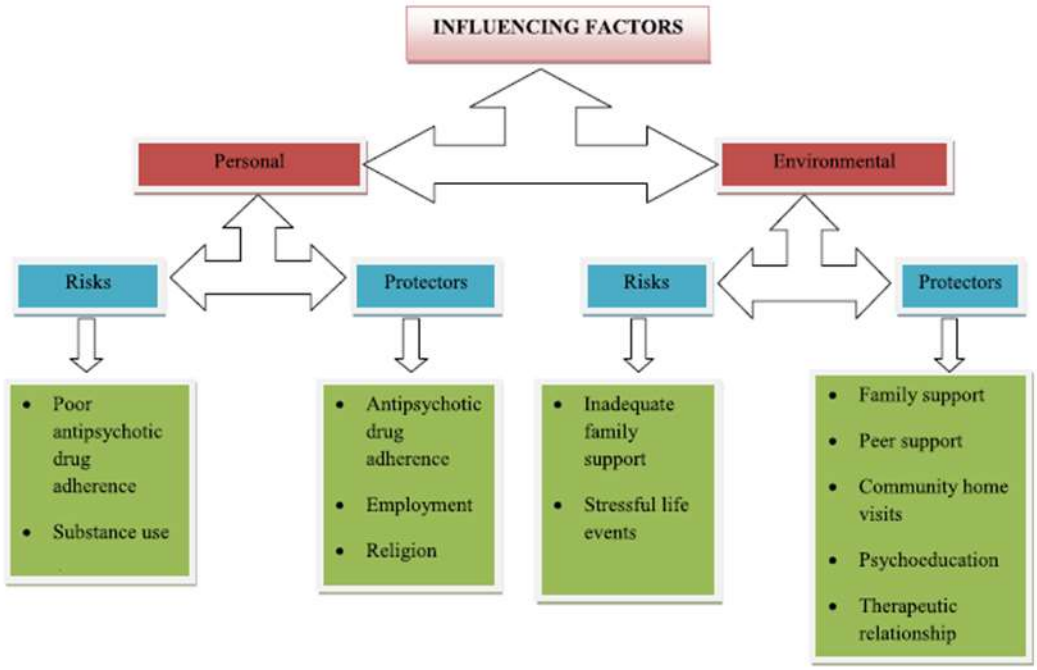
Discussion

A 36 year old male patient was admitted to emergency room and was treated in the Hospittal Psychiatric ward with a diagnosis of Hebephrenic Schizophrenia. The patient's diagnosis was made based on anamnesis and psychiatric status examination based on PPDGJ III. In this patient there was a psychotic disorder with impaired ability to assess reality (RTA) and self-understanding (Insight). The patient also showed symptoms of disorganized speech and behavior. For schizophrenia, there has been a fundamental and characteristic deviation from thoughts and perceptions, as well as by inappropriate or blunted affect and accompanied by symptoms in accordance with PPDGJ III which last for a period of one month or more.[1] In Patients were found to have auditory and visual hallucinations, negative symptoms such as poverty of thought content which manifests as little speech and tends to be repetitive. These changes are consistent and meaningful overall. The patient was first diagnosed with Hebephrenic Schizophrenia when the patient was 24 years old, where usually the first diagnosis of hebephrenic disease is only made in teenagers or young adults (15-25 years). From the examination it was also found that the patient was shy and liked to be alone (solitary), which is a premorbid personality for hebephrenic schizophrenia.[5]

The patient also had typical symptoms to be diagnosed with Hebephrenic Schizophrenia, namely irresponsible and unpredictable behavior, a tendency to be alone, and behavior that is devoid of purpose and devoid of feelings which was the main complaint of patients brought to the hospital, namely that the patient disappeared and went away. from home for 2 days and didn't come home. Apart from that, the patient's examination also showed inappropriate (inappropriate) affect, where the patient's expressions and feelings were inappropriate, and were often accompanied by giggling. When examined, patients often answered by joking (pranks), grinning and often saying words that were repeated (rambling) and incoherent. The patient also showed signs and symptoms of real regression, seen from the patient's behavior and words, which tended to resemble children, such as preferring to hang out with children rather than friends his age.[4,5]

This patient had experienced several relapses so that the patient had to be treated again in the mental ward. Relapse is a worsening of psychopathological symptoms or rehospitalization within 1 year after discharge from the hospital. Risk factors for relapse are: (1) Non-compliance with antipsychotic treatment, which is the most important factor in preventing relapse. The majority of patient reasons mentioned in a study reported that the presence of at least one side effect of the drug, especially extrapyramidal syndrome (EPS), could directly make the patient non-compliant with taking the drug; (2) Lack of family support, where the family is one of the psychosocial factors that influences the outcome of schizophrenia, including the occurrence of relapse; (3) There are difficult life experiences. It was stated in a previous study that patients with schizophrenia were more sensitive and vulnerable to the negative effects of mild life stressors (relapse occurred within 3 weeks); (4) The use of substances, such as marijuana and alcohol, is believed to be a precipitating factor in relapse.[7] In this patient, the risk factor that causes relapse is non-compliance with treatment. The patient had been off medication for 2 months before the patient became anxious and was admitted to the hospital.

Relapses that occur can cause patients to be resistant to treatment and cognitive impairment due to progressive structural damage to the brain. Because patients' psychopathology and social functioning may worsen with recurrent psychotic episodes, prevention of relapse is therefore an important treatment goal for successful long-term management of schizophrenia. There is strong evidence for the efficacy of using antipsychotics to prevent relapse in patients with first and chronic episodes of schizophrenia, where the risk of relapse is 2-6 times higher than in patients without medication. However, because the rate of medication non-adherence can reach 50%, this can limit the efficacy of pharmacotherapy. Therefore, the use of long-acting injectable antipsychotics (LAIs) is an important option. LAI was first introduced in 1960, and to date there are at least 5 first generation LAIs and 3 second generation LAIs available. In a meta-analysis, it was stated that LAI was associated with a lower relapse rate compared with oral antipsychotics. 6 Therefore, patients with a history of frequent relapses were advised to be given LAI.[7]



Picture 1. Factors that cause relaps in Schizophrenia[7]

The patient had akhatisia, which is the acute EPS that causes the most suffering. Approximately 41% of patients treated with APG-I experienced mild akathisia and 21% experienced moderate and severe akathisia. The most frequent clinical manifestations are the patient's inability to sit still, frequently changing positions while sitting, walking in place, unable to keep his feet still, and the patient feeling subjectively restless. Akhatisia patients always want to move or walk. In mild cases, patients feel restless but do not show increased motor activity. Distinguishing akhatisia from restlessness associated with psychotic symptoms is very difficult. Anxiety in psychotics is usually caused by irritability and anxiety. Anticholinergics are effective in treating achathisia. β-adrenergic receptor antagonists such as propranolol are also effective for treating akhatisia because akhatisia is a disturbance in the balance between dopamine and norepinephrine.[6] Management of akhatisia in patients is given the anticholinergic trihexyphenidyl 2 mg 2 times a day.[8]

Apart from psychopharmaceutical therapy, patients also receive Electroconvulsive therapy (ECT) three times a week. Electroconvulsive therapy (ECT) is a type of physical therapy which is an option for therapeutic indications in several cases of psychiatric disorders. In Western countries, ECT is used for the treatment of major depression and bipolar disorder, and is rarely used for schizophrenia. However, in Eastern countries such as India, China, parts of Africa, and some other developing countries, ECT is seen as the main line therapy for severe psychosis when symptoms require hospitalization. In secondary psychotic cases associated with other neuropsychiatric conditions and those induced by drugs, ECT is used as second-line therapy for resistant cases. However, ECT has been demonstrated to have antipsychotic effects, as seen in some cases of mood disorders accompanied by psychotic symptoms, and is being reconsidered as an option for schizophrenia. The use of ECT is an effective therapy for acute schizophrenia symptoms but not for chronic schizophrenia. Patients with schizophrenia who have marked positive symptoms, catatonia, or affective symptoms are considered likely to respond to ECT. In such patients, the effectiveness of ECT is approximately the same as that of antipsychotics, but improvement may occur more quickly. Consistent with its broad efficacy, it is assumed that ECT induces multidimensional neurophysiological changes in the brain.[1,8]

Conclusion

Based on this case, it can be concluded that Hebephrenic schizophrenia is schizophrenia that only occurs in teenagers, often comes and disappears until adulthood and is a type that is difficult to manage.

Acknowledgements

This study was funded by the Andalas University research grant.

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