

Continuously Paranoid Schizophrenia in Young Man: A Case Report

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Abstract

Introduction: Schizophrenia is a chronic disorder accompanied by prominent hallucinations or delusions. The individual must be ill for at least 6 months and need not be psychotically active during that time. Schizophrenia is classified into several types. Enforcement of the type of diagnosis of schizophrenia can be established through history taking in the patient and family, then a diagnosis is made according to ICD-10. Treatment can be in the form of pharmacological or psychosocial therapy.

Case Reports: A 32-year-old male patient came with his family, the patient looked anxious. The patient comes with the main complaint that he is often angry because he often hears voice whispers. The patient also complains of rapid mood changes. According to the family, this has been happening since 2015. He had been on treatment for a while but only got better shortly after that it came back again.

Conclusion: Schizophrenia is a psychotic disorder in which the patient does not have contact with reality which is characterized by major disturbances in thoughts and emotions and experiences delusions and hallucinations. Schizophrenia can be treated using antipsychotics and psychosocial. The prognosis of patients with schizophrenia depends on family support.

Keyword: Schizophrenia, Hallucination, Delusion

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Introduction

Schizophrenia is a mental health disorder characterized by disturbances in thinking that affect language skills, perspective, behavior, disturbed thoughts, where various thoughts are not logically related, wrong perceptions and attention, abnormal affect that is integrated with real situations. or in fact, and various motor activity disorders are bizarre (weird behavior), schizophrenic patients withdraw from other people and reality, often entering a fantasy life full of delusions and hallucinations. Schizophrenia can be caused by genetic, environmental, etc. Schizophrenia is more common in men than women and is more common in patients aged 28-35 years.[1] The prevalence of schizophrenia in Indonesia is 1.7 per 1000 population while the most are in DI Yogyakarta and Aceh where the incidence is 2.7 per 1000 population.[2]

Case Report

The patient aged 32 years came with his family, the patient came in a state of anger, especially when he heard bad talk about himself. Complaints felt by the patient since 7 years ago. The patient felt someone was whispering in the form of ridicule, since then he felt like killing people and got angry. When angry all items are thrown away and broken. Shortly after that the patient suddenly felt tired, and felt irritated, confused, daydreaming, and felt anxious, restless, difficult to sleep and difficult to concentrate. Patients also experience mood changes suddenly sometimes happy sometimes sad. The patient has never consumed alcohol or other addictive substances. The patient had previously been treated with Trihexyphenidyl 2x2mg, Clorilex x 25mg, risperidone 2x2mg, had improved after taking the drug but after that it did not change. According to the family, this has happened since 2015, when the patient became a teacher and had wanted to kill his students. Since then the family has not felt well. When the patient arrives in a state of anxiety, affect is flat, the harmony between mood and affect is harmonious. The patient's thought process starts from the flow of thought and the content of good thoughts. The patient was diagnosed with paranoid Schizophrenia, this was related to the IV axis obtained when he failed to perform scientific tests.

Discussion

Schizophrenia is a chronic disorder that is usually accompanied by prominent hallucinations or delusions. The individual must be ill for at least 6 months and need not be psychotically active during that time. According to PPDGJ III "A description of a syndrome with a variety of causes (many unknown) and a wide course of disease (not always chronic or "deteriorating"), as well as several the consequences that depend on the balance of genetic, physical, and socio-cultural influences. It is generally characterized by fundamental and characteristic deviations from thought and perception, as well as by blunted affect. Clear

consciousness and intellectual abilities are usually maintained, although certain cognitive declines may develop later.[2]

Symptoms of schizophrenia usually appear in late adolescence or young adulthood. Onset in males is usually between 15-25 years and in females between 25-35 years. The prognosis is usually worse in males when compared to females. Onset after the age of 40 years is rare. The incidence of schizophrenia in men is greater than in women. The annual incidence is 15.2% per 100,000 population, the incidence in immigrants compared to natives is about 4.7%, the incidence in men is 1.4% greater than women. In Indonesia, almost 70% of those treated in the psychiatry department are due to schizophrenia. Figures in the community range from 1-2% of the entire population have experienced schizophrenia in their lives.[6]

Etiology Schizophrenia can be caused by biological factors, some studies report that all these changes are static and have been brought from birth and in some cases the course is progressive. Its location indicates the behavioral disturbances encountered in schizophrenia, for example, hippocampal disturbances are associated with memory inference and frontal lobe atrophy is associated with negative symptoms of schizophrenia⁴. In addition, it could also be due to biochemical effects such as the hypothesis of dopamine, norepinephrine, glutamate, acetylcholine and nicotine.[4]

This hypothesis states that schizophrenia arises from excessive dopaminergic activity. This theory was developed based on two observations. First, the efficacy and potency of most antipsychotic drugs (example: dopamine receptor antagonists), correlates with their ability to act as type 2 (D2) dopamine receptor antagonists. Second, drugs that increase dopaminergic activity, most notably amphetamines, are psychotomimetic. This underlying theory does not describe whether dopaminergic hyperactivity is due to excessive dopamine release, too many dopamine receptors, dopaminergic receptor hypersensitivity to dopamine, or a combination of these mechanisms. The dopamine pathways in the brain involved are also not detailed in this theory, although the mesocortical and mesolimbic pathways are most cited. The significant role of dopamine in the pathophysiology of schizophrenia is in line with studies measuring plasma concentrations of the main metabolite of dopamine, homovalinic acid. Studies report a positive correlation between homovanillic acid concentrations and the severity of symptoms in patients. Decreases in homovalinic acid correlate with improvement in symptoms in at least some patients. For norepinephrine

Several investigators have reported that long-term administration of non-psychotic drugs decreases the activity of noradrenergic neurons at the locus ceruleus and that the therapeutic effect of some antipsychotic drugs may involve their activity at alpha-1 adrenergic and alpha-2 adrenergic receptors. Although the relationship between dopaminergic and noradrenergic activity remains unclear, there is an increasing amount of data suggesting that the noradrenergic system modulates the dopaminergic system in such a way that abnormalities of the noradrenergic system predispose patients to frequent relapses.[4]

Glutamate has been implicated because ingestion of phencyclidine, a glutamate antagonist, produces an acute syndrome like schizophrenia. Hypotheses regarding glutamate include activating, hypoactivity, and glutamate-induced neurotoxicity⁴. In the study of acetylcholine and nicotine postmortem data (data taken from people who have died) schizophrenia patients showed decreased levels of muscarinic and nicotine receptors in the caudal putamen area, hippocampus, and some parts of the prefrontal cortex. These receptors play an important role in the regulation of neurotransmitters that play a role in individual awareness in a person who has a disorder in schizophrenic patients.[4]

Genetics also contributes to the incidence of Schizophrenia. Schizophrenia is a disorder that is familial, the closer the kinship, the higher the risk of developing schizophrenia. The frequency of occurrence of non-psychotic disorders is increased in families of schizophrenia and is genetically associated with borderline and schizotypal personality disorder, obsessive-compulsive disorder, and may be associated with paranoid and paranoid personality disorders antisocial.[4] Disruption and family dynamics play an important role in causing relapse and maintaining remission. Patients at risk are patients who live with disorganized families, display excessive anxiety, are very protective, overly intrusive, highly critical, and are often not released by their families. Some researchers have identified a pathological and peculiar mode of communication in schizophrenic families. Communication is often vague or unclear and a bit illogical. Recent research suggests that this pattern of family communication may be due to the impact of having a schizophrenic child.[4] The last factor is the stress diathesis model. This Stress Diathesis Model is to integrate biological, psychosocial, and environmental factors. A person has a specific vulnerability (diathesis), which if experiencing stress can trigger the emergence of symptoms of schizophrenia. This

stressor or diathesis is biological, environmental or both. Components of the biological environment (such as infection) or psychological (such as the death of a loved one).[4]

Schizophrenia itself is classified into several types, first, namely paranoid schizophrenia with general symptoms of schizophrenia plus hallucinations and / or delusions that must be prominent such as hallucinatory voices threatening the patient or giving orders, or auditory hallucinations without verbal form in the form of a whistle (whistling), buzzing. (humming) or laughter (laughing), hallucinations of smell or taste, or sexual or other bodily feelings, but visual hallucinations may also be present but rarely prominent. It can also be that delusions can be of almost every type, but delusions of control (delusion of influence) or passivity (delusion of passivity) and beliefs being chased are of various kinds, are the most typical. Finally, there are affective disorders, impulses of will and speech, as well as catatonic symptoms, which are relatively not real / not prominent.[5]

The second is hebephrenic schizophrenia with the same characteristics as the provisions of schizophrenia plus the diagnosis of hebephrenia for the first time is only enforced at the age of teenagers or young adults (onset usually starts from 15-25 years), the presence of a pre-morbid personality shows characteristics: shy and likes to be alone (solitary), but it does not have to be for the diagnosis. For a conclusive diagnosis of hebephrenia, 2 or 3 months of continuous observation is generally required, to ensure that the following characteristic features persist, namely irresponsible and unpredictable behavior, and mannerism, a tendency to be solitary, and The behavior shows a lack of purpose and feeling empty, the patient's affect is shallow (shallow) and inappropriate (inappropriate), often accompanied by giggling or feelings of self-satisfaction, self-absorbed smiling or by an arrogant attitude (self-absorbed smiling). lofty manner), grinning laugh (grimaces), mannerism, pranks, hypochondriacal complaints and repeated phrases. Then the thought process experiences disorganization and rambling and incoherent speech and affective and volitional disturbances and thought process disorders are generally prominent.[5]

Third, catatonic schizophrenia meets the criteria for a diagnosis of schizophrenia plus one or more of the following behaviors must dominate the clinical picture, such as stupor (significantly reduced in reactivity to the environment and in movement and activity) or mutism (not speaking), restlessness (obvious activity) aimless motor activity unaffected by external stimuli), displaying certain body positions (voluntarily assumes

and maintains certain body positions that are unnatural or odd), negativism (obviously unmotivated resistance to all commands or attempts to move, or movement) in the opposite direction), rigidity (maintaining a rigid body position to resist efforts to move the body), cerea flexibility / "waxy flexibility" (maintaining limbs and body in a position that can be formed from the outside, and other symptoms such as command automatism). (Adherence to automatic response to commands), and repetition of words and sentences.[8]

The four unspecified schizophrenia met the general criteria for a diagnosis of schizophrenia but did not meet the criteria for a diagnosis of paranoid, hebephrenic, or catatonic schizophrenia and did not meet the criteria for a diagnosis of residual schizophrenia or post-schizophrenic depression. Fifth Post-schizophrenic depression, the diagnosis must be made if the patient has suffered from schizophrenia (which meets the general criteria for schizophrenia) for the past 12 months, it is found that some of the symptoms of schizophrenia are still asymptomatic.[6]

Furthermore, Residual Schizophrenia to establish a diagnosis of this requirement must be met first negative symptoms of schizophrenia that are prominent, for example psychomotor slowing, decreased activity, blunted affect, passivity and lack of initiative, poverty in quantity or content of speech, poor non-verbal communication as in facial expression, eye contact, voice modulation, and body position, poor self-care, and social performance. Furthermore, there has been at least one clear history of psychotic episodes in the past that meet the criteria for a diagnosis of schizophrenia, and at least one year has passed, in which the intensity and frequency of marked symptoms such as delusions and hallucinations have been greatly reduced (minimal) and the syndrome has developed. negative” of schizophrenia. There is no dementia or other organic brain disease/disorder, chronic depression or institutionalization that can explain the negative disability.[6]

Finally, Simple Schizophrenia The diagnosis of schizophrenia simplex is difficult to make conclusively because it depends on steadying the slow and progressive development of the negative symptom characteristic of residual schizophrenia without a history of hallucinations, delusions, or other manifestations of a psychotic episode, and accompanied by changes in personal behavior. meaning, manifests as a marked loss of interest, inaction, no purpose in life, and social withdrawal. This disorder is less clearly psychotic than other subtypes of schizophrenia.[6]

According to the Indonesian government through the Ministry of Health, the clinical manifestations of Schizophrenia have provided guidelines. The manifestations contained are 5 thought process disorders including loose associations, excessive intrusion, inhibition, associations, echolalia, alogia, neologisms. Thought Content Disorder in the form of Delusions, is a false belief that persists in accordance with the facts and cannot be corrected. Perceptual disorders such as hallucinations, illusions, depersonalization, and derealization. Emotional disturbances, there are three basic affect that is often shown by people with schizophrenia (but not pathognomonic) such as blunt or flat affect, mismatched affect, and labile affect. Behavioral Disorders: Inappropriate or odd behavior can include odd body movements and grinning ritual behavior, extreme silliness, and aggressive and inappropriate sexual behavior. Motivational Disorders; decreased or absent activity, for example, loss of will and inactivity. Finally, Neurocognitive Disorders such as impaired attention, ability to solve problems, memory disorders (e.g., working memory, spatial and verbal).[7]

The pathophysiology of schizophrenia is caused by both genetic factors, environmental factors and other factors which will then cause stressors that will cause mental balance disorders in patients where there is a failure in the ego defense mechanism and orientation in patients which makes it easier for patients to experience psychological disorders which then causes what we usually do. call schizophrenia.[3]

This is due to the occurrence of abnormalities in the transmission of neurotransmitters. Namely in the mesolimbic, nigrostriatal, tuberoinfundibular, and mesocortical regions, where in the mesolimbic there is an increase in dopamine, dopamine transmission abnormalities in the mesolimbic pathway cause symptoms of +, aggressiveness, and impulsivity which are commonly known as delusions, hallucinations, and irregular thinking. Then in nigrostriatal, if there is an increase in dopamine, it will cause hyperkinetic such as TIC, or correa, if there is a decrease in dopamine, there will be hypokinetic such as extrapyramidal syndrome. In tuberoinfundibular, if there is a decrease in dopamine, hyperprolactinemia will occur. In mesocortical, there will be a decrease in dopamine which in the abnormal transmission of dopamine in the mesocortical pathway will cause symptoms of -, cognitive, and affective symptoms. Where there will be symptoms such as alogia, affective flattening, avolition, anhedonia, a sociality and cognitive disorders such as memory problems, attention, planning, and decision making which will lead to unsocial behavior, not connecting when spoken to, often angry, and difficulty eating.[8]

Enforcement of the diagnosis of schizophrenia is adjusted to ICD-10 and PPDGJ-III, namely thought echo, thought withdrawal, or thought insertion, and thought broadcasting. Delusions of being controlled, delusions of being influenced, or “passivity”, which clearly refers to body movements or movement of the limbs, or special thoughts, actions, or feelings (sensations); perceptual delusions. Hallucinations in the form of voices commenting on the behavior of the patient or a group of people discussing the patient, or other forms of voice hallucinations that come from several parts of the body. Other types of persistent delusions that are culturally considered unnatural and utterly impossible, such as regarding religious or political identity, or “superhuman” powers and abilities (incompatible with culture and highly improbable or implausible, for example being able to communicate with aliens that come from other planets). Persistent hallucinations of various modalities, when accompanied by either floating or semi-formed delusions with no apparent affective content, or by persistent overvalued ideas, or when occurring daily for weeks or months -month continuously. Thoughts that are interrupted or interpolated resulting in incoherent or irrelevant speech or neologisms. Catatonic behavior, such as excitement, posture or flexibility, negativism, mutism, and stupor. Negative symptoms, such as apathy, stagnation of speech, and blunted or inappropriate emotional responses, usually result in social withdrawal and decreased social performance, but it should be clear that they are not caused by depression or neuroleptic medication. Consistent and significant changes in the overall quality of several aspects of individual behavior, manifesting as loss of interest, aimlessness, laziness, self-absorbed attitudes, and social withdrawal.[8]

In addition, supporting examinations can also be carried out such as Psychological Test Examination to detect pathological frontotemporal cortex affecting vigilance, memory and concept formation-the test results are abnormal, bilateral dysfunction is related to impaired attention, time retention, and problem-solving abilities and brain asymmetry is related to ability motor⁷. Second, it can also be intelligence tests where schizophrenia tends to have lower scores than the general population, low scores are often obtained at the beginning of the onset and continue to deteriorate as the disease progresses⁷. Finally, the Projection and Personality Test using Rorschach and TAT (Thematic Apperception Test) shows a bizarre idea, the MMPI personality test shows abnormal it can contribute to diagnosis and minimal therapy plan.[7]

Indications for the administration of antipsychotic drugs in schizophrenia are to control active symptoms and prevent relapse. The treatment strategy depends on whether the disease phase is acute or chronic. The acute phase is usually characterized by psychotic symptoms (newly experienced or relapsed), which need to be addressed immediately. The goal of treatment here is to reduce severe psychotic symptoms. With phenothiazines, delusions and hallucinations usually disappear within 2-3 weeks. Even though there are still delusions and hallucinations, the sufferer is less affected and becomes more cooperative, willing to participate in environmental activities and willing to participate in occupational therapy.[7]

After 4-8 weeks, the patient enters the stabilization stage. From time to time the symptoms have somewhat resolved, but the risk of relapse is still high, especially if treatment is interrupted or the patient is under stress. After the symptoms subside, the dose is maintained for several more months, if the attack is the first time. If the schizophrenic attack has been more than one time, then after the symptoms subside, the drug is given continuously for one or two years.[7]

After 6 months, the patient entered the maintenance phase which aims to prevent recurrence. To patients with chronic schizophrenia, neuroleptics are given for an indefinite period with doses that fluctuate according to the patient's condition (as well as giving drugs to patients with chronic physical ailments, such as diabetes mellitus, hypertension, heart failure, and so on). We must always be aware of side effects.[7]

The maintenance strategy is to find the lowest effective dose that can provide protection against relapse and does not interfere with the patient's psychosocial functioning. Treatment outcomes are better when antipsychotics are started within the first 2 years of illness. There is no standard dose of this drug, but an individualized dose is prescribed⁷. Antipsychotics commonly selected can be generation one or generation two, for generation one Chlorpromazine, Perphenazine, Trifluoperazine, Haloperidol. While the second generation can be aripiprazole, clozapine, olanzapine, quetiapine, risperidone, paliperidone, zotepine.[9]

Complications, namely the patient may have mild delusions and hallucinations that are not so clear (vague). Some of the acute and more dramatic symptoms disappear with time, but the patient needs protection or spends years in a mental hospital. Engagement with the law for misdemeanors is occasional (e.g., trespassing, tampering

with security) and is often associated with substance abuse. A small proportion of patients develop dementia. Overall life expectancy is short, mainly due to accidents, suicide, and inability to care for herself¹. The disorganized type generally has a poor prognosis, but the paranoid and some catatonic types have a good prognosis. The prognosis is worse if the patient abuses substances or lives in a dysfunctional family.[1][10]

Conclusion

Schizophrenia is one of the psychotic disorders, psychotic patients cannot recognize or do not have contact with reality which is characterized by major disturbances in emotional thoughts and experiences delusions and hallucinations. Schizophrenia is classified into; Paranoid Schizophrenia, Disorganized Schizophrenia (Hebephrenic), Catatonic Schizophrenia, Unspecified Schizophrenia, Post-schizophrenic Depression, Residual Schizophrenia, and Simple Schizophrenia. Classification based on the etiology of schizophrenia into two approaches, namely somatogenesis and psychogenesis. Treatment for people with schizophrenia is diverse, both using drugs, as well as psychosocial, there is no single treatment approach that meets all the needs of people suffering from schizophrenia, conceptual therapy. Contemporary treatments tend to be comprehensive, combining psychopharmacological and psychosocial approaches.

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