Late-Onset Psychosis

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Objective Although psychotic disorders usually manifest in young adulthood or middle age, some psychotic patients present psychotic symptoms for the first time in late life. The concept and diagnosis of late-onset psychosis have changed over the years. The authors review the clinical features, epidemiology and treatment of late-onset psychosis, with particular emphasis on late-onset schizophrenia.

Methods The authors conducted a MEDLINE literature review. Reviews, textbooks and some clinical studies about late-onset psychosis which were published in the literature were reviewed.

Results Although, in general, patients with late-onset schizophrenia have similar symptoms to those with early-onset schizophrenia, they are more likely to complain of hallucinations, persecutory delusions and partition delusions, and they are less likely to display formal thought disorder, affective flattening or blunting than their earlier-onset counterparts. Like early-onset schizophrenia patients, late-onset schizophrenia patients exhibit nonspecific structural changes in the brain. Although the exact prevalence of late-onset schizophrenia is not yet known, the 1-year prevalence rate of late-onset schizophrenia was found to be less than 1%. There is no trial-based evidence to help guide the choice of drug, however a number of special considerations are necessary when managing elderly patients.

Conclusions In the past few years, late-onset psychosis has begun to arouse the interest of psychiatrists, with research into late-onset schizophrenia being a relatively recent endeavor. The diagnosis and treatment of psychotic symptoms in elderly patients requires more than just extrapolation from that of young patients. There is a necessity for further researches involving Korean late-onset psychosis patients.

KEY WORDS: Geriatric psychiatry, Psychotic disorders, Schizophrenia, Aged.

Introduction

Psychotic disorders such as schizophrenia and mood disorders with psychotic features usually manifest in young adulthood or middle age, and late-onset psychosis is comparatively rare. However, some psychotic patients definitely present psychotic symptoms for the first time in late life. Furthermore late-onset psychosis has different characteristics from those of the more common early-onset psychosis.

As the population ages, the number of older persons with a major psychiatric disorder is expected to increase. As a result late-onset psychosis will likely cause more serious problems than before, and consequently research into this disorder is on the increase.

The initial studies of late-onset schizophrenia were conducted by Manfred Bleuler, who described it as being similar to early-onset schizophrenia, except that the age of onset was over 40 years. He personally examined 126 patients whose illness began after the age of 40 years. These late-onset cases constituted 15% of the schizophrenia patients he examined; 4% of the patients experienced onset after 60 years old. About 50% of the patients with late-onset schizophrenia had symptoms that were indisting-

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unishable from those of the patients with early-onset schizophrenia. Martin Roth and colleagues introduced the idea that late-onset schizophrenia could be a distinct entity, and adopted the term “late paraphrenia” for the group of patients whose onset of the disorder occurred after the age of 60. These patients were generally women with sensory deficits, who had no family history of schizophrenia and presented with delusions and hallucinations. The concept of late paraphrenia was adopted in the ninth edition of the International Statistical Classification of Diseases and Related Health Problems (ICD-9), and was said to include female preponderance, abnormal premorbid personality and social functioning, and deafness.

The age of onset criteria for schizophrenia in the Diagnostic and Statistical Manual of Mental Disorders (DSM) have changed over the years. The first and second editions of the DSM (DSM-I and DSM-II) did not specify the age of onset criteria for schizophrenia. Unlike in the previous DSM editions, the DSM-III criteria restricted the diagnosis of schizophrenia to those with symptom onset before age 45, and DSM-III-R had a separate category for patients whose illness emerged after age 45. Since the ICD-10 and DSM-IV, the criteria for schizophrenia do not contain separate codeable diagnoses for late-onset schizophrenia. However DSM-IV and DSM-IV-TR mention differences between cases of schizophrenia with onset after 45 years compared to those with earlier onset.

As mentioned above, late-onset psychosis has become the center of concern of geriatric psychiatrists, and it is important for those who treat the elderly patients with psychosis to be concerned about late-onset psychosis and to have a thorough knowledge of this disorder.

In a broad sense, late-onset psychosis includes not only late-onset schizophrenia but also other psychotic disorders-affective psychoses (manic or depressive), paranoid psychoses without hallucinations (delusional disorders) and those psychotic affective and paranoid syndromes that may arise in association with demonstrable or suspected cerebral disease in the absence of a diagnosable dementia syndrome in elderly patients. However, in this article, the authors give priority to late-onset schizophrenia. This article briefly reviews the clinical features, epidemiology and treatment of late-onset psychosis.

Methods

The authors conducted a MEDLINE literature review. Reviews, textbooks and some clinical studies about late-onset psychosis which were published in the literature were reviewed.

Results

Clinical features

The clinical presentation of older persons with schizophrenia differs somewhat from that of younger persons. At first, Bleuler found some differences in the symptom profile between late-onset and earlier-onset schizophrenia. Just over 50% of the late-onset patients had “paraphrenia-like, depressive-anxious catatonic or confused agitated” symptoms. The remainder had symptoms similar to those of the earlier-onset patients, but with less affective flattening and a more favorable prognosis.

Nowadays, although a diagnosis of schizophrenia without an onset specifier is acceptable, differences between early- and late-onset schizophrenia have been identified. Although, in general, late-onset patients have similar symptoms to those of early-onset schizophrenia, they are more likely than their earlier-onset counterparts to complain of visual, tactile, and olfactory hallucinations, persecutory delusions and partition delusions (delusions that people, substances, or forces are entering through the walls from next door), and they are less likely to display formal thought disorder, affective flattening or blunting.

Jeste et al. reported that thought disorder and affective flattening were less prevalent in patients whose illness began after age 45 years, and in their more recent study, they found better premorbid functioning and a higher prevalence of paranoid ideation in patients with late-onset schizophrenia.

Schizophrenia is commonly associated with mild-to-moderate neuropsychological deficits. Some studies found that patients with late-onset schizophrenia also had cognitive deficits, particularly in their executive functions.

Folsom et al. reported that the patients' neuropsychological functioning remained stable over follow-up periods of up to 5 years or more, in elderly patients with both early-onset and late-onset schizophrenia.

Harris described a typical patient with late-onset schizophrenia as having been married, held a job or been a homemaker, and functioned in the community and within the family. It was said that such a patient might have a history of mild schizoid or paranoid personality traits, and that prodromal symptoms and a gradual decline in functioning might develop, followed by delusions (usually complex and often bizarre) and hallucinations.

The delusions and hallucinations in late-onset psychosis are often florid and fantastic, and are accompanied by quarrelsome or abusive behavior, repeated complaints to the police, or self-seclusion, and lack of insight. Delusions of persecution and reference are most common, but delusions of control, hypochondriasis and jealousy also occur.

In Korean investigation, patients with late paraphrenia...
were found to have a more paranoid personality trait, nihilistic delusion and hypochondriasis, and affective symptoms than patients with early onset schizophrenia. As in the case of early-onset schizophrenia, there have been some computed tomography (CT) and magnetic resonance imaging (MRI) studies which reported findings of nonspecific structural changes (e.g., higher ventricle-to-brain ratio and third ventricle volumes) in the brains of patients with late-onset schizophrenia. However, the thalamic volume of late-onset schizophrenia patients has been reported to be larger than that of early-onset schizophrenia patients and not significantly different from that of unaffected subjects. In functional imaging studies, regions of hyperperfusion in the frontal and temporal areas, the posterior frontal and bilateral inferior temporal areas, and bilateral frontal and temporal lobes have been reported.

**Epidemiology**

Late-onset psychosis is comparatively rare and data for this disorder are scarce. Also, the exact prevalence of late-onset schizophrenia is not yet known. The point prevalence of paranoid ideation in the general elderly population has been estimated to be 4–6%, but most of these patients will also have dementia. In the United Kingdom, some studies found that late paraphrenia constituted 5–10% of admissions to mental hospitals. In the United States, some studies found that the proportion of schizophrenia patients whose illness first emerged after the age of 40 was approximately 23.5%, and 13% of patients with schizophrenia were reported to have experienced onset in the fifth decade, 7% in the sixth decade and 3% in later decades. The 1-year prevalence rate of schizophrenia in persons 45 to 64 years of age was found to be 0.6% in one investigation, and another study reported a rate of 12.6 per 100,000 per year for new-onset schizophrenia. In elderly patients with schizophrenia, approximately 90% were found to have the early-onset form, and the remaining 10% to have late-onset schizophrenia.

In Korea, there have been few studies about late-onset psychosis. In one epidemiological survey in a rural area, the prevalence of late-onset psychosis was estimated to be 0.05%. Late-onset schizophrenia is two to ten times more common in women than in men.6,14,30,31 These findings, coupled with the higher incidence of early-onset schizophrenia in men, have led to the hypothesis that estrogen-mediated dopaminergic inhibition may protect younger women from schizophrenia. However, these robust findings of a gender difference are not readily explicable in terms of variations in the care-seeking and societal role expectations or in the delay between the emergence of symptoms and contact with medical service between male and female.

**Treatment**

There have been few controlled trials of the use of antipsychotic medications in late-onset schizophrenia, and there is no trial-based evidence to help guide the choice of drug. Therefore it is likely that clinicians have made the choice of antipsychotics based on clinical judgment and their prescribing patterns.

Although there are no medicines specific to late-onset schizophrenia, a number of special considerations are necessary when managing elderly patients. Approximately 80% of the elderly have at least one chronic serious physical illness and may be receiving multiple drug therapy. Because of age-associated cognitive impairment, elderly patients may not only forget to take their medication, but also take the wrong doses or use inappropriate dosing intervals. Elderly patients have a greater risk for adverse effects on account of age-related pharmacokinetic and pharmacodynamic changes. It is important that drug treatment should be started at very low doses and that increases in dose should be made slowly in elderly patients.

Typical late-onset patients will respond to dose amounts that are about one-quarter to one-half those given to early-onset schizophrenia patients (i.e., approximately 200 mg chlorpromazine equivalents per day). The risk of extrapyramidal side-effects (EPS) and tardive dyskinesias (TD) is known to be particularly high in elderly patients.Jeste et al. reported that the risk of TD in older outpatients in high, even with a relatively short treatment course of low dose typical antipsychotics. In elderly schizophrenia patients, no significant differences were demonstrated in the 1-year incidence of TD among early-onset schizophrenia and late-onset schizophrenia patients were demonstrated.

Psychosocial and behavioral approaches are also important for patients with schizophrenia, although their role in the management of patients with late-onset schizophrenia remains to be investigated.

**Discussion**

Over the past century, studies about schizophrenia primarily involved young adult patients. During some periods, schizophrenia was considered to be a disease that only young adults suffered from. In the past few years, late-onset psychosis has begun to arouse the interest of psychiatrists with research into late-onset schizophrenia being a relatively recent endeavor.

Late-onset psychosis has a somewhat different symptom...
profile and epidemiology from those of early-onset psychosis. The diagnosis and treatment of psychotic symptoms in elderly patients requires more than just extrapolation from that of young patients. It is important to have a thorough knowledge of the characteristics of late-onset psychosis for the appropriate management of elderly patients with psychotic symptoms.

In Korea, there have been few studies of late-onset psychosis, and consequently, there is a necessity for further research involving Korean late-onset psychosis patients.

REFERENCES


