

Case Report

Late Onset Psychosis, Determining Chronology: A Case Report

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ABSTRACT

Psychosis is generally an illness that appears in early adolescence to young adulthood and presents bimodally in females. A very small number of patients develop psychotic symptoms for the first time in later life in the absence of a dementia or secondary organic causes. Psychotic disorders develop because of an interplay between environmental, biological and social factors. An accurate diagnosis can be difficult and a detailed history is the best tool for diagnosis.

The aim of this report is to describe the case of an elderly male patient who initially displayed depressive symptoms which later progressed to late onset psychosis (LOP).

KEYWORDS: Late onset psychosis, Psychosis, Dementia, Organic, Depression

INTRODUCTION

Psychosis in later life is phenomenologically different from psychosis in younger age groups. A much greater incidence (60%) occurs due to secondary causes such as metabolic abnormalities such as vitamin deficiencies, dyselectrolytemias, hypoxia; infections like meningitis, encephalitis, HIV; endocrine dysfunctions like thyroid abnormalities, adrenal diseases, hypo/hyper glycemia; neurological causes include epilepsy, cerebrovascular events, tumours etc.¹ Primary causes of late life psychosis (LOP) include various dementias; affective disorders such as depression, bipolar disorder etc.; psychotic conditions like schizophrenia, delusions etc.; and other psychiatric disorders.

Meesters and colleagues in their one-year cross-sectional study found the prevalence rate of primary psychotic disorder in patients aged more than or equal to 60 years to be 0.71%^{2,3}. In this study Schizophrenia accounted for 0.55%, schizoaffective disorder 0.14% and delusional disorder 0.03% of these cases. In another study for early comprehensive review of patients with schizophrenia or related disorders, 13 %, 7%, and 3%, respectively, had their condition begin at the ages of 40, 50, and 60 years³.

Here we present a patient whose first-episode of psychotic symptoms occurred at the age of 64 years. We believe it is rare for a patient to develop psychosis at this age in the absence of an organic illness. He was initially given treatment for depressive symptoms and was started on antidepressants which eventually diagnosed as case of LOP.

CASE PRESENTATION

Mr. GK a 64 years old right-handed, Hindu married male, educated up to Ph.D., retired school principal, presently unemployed, belonging to middle socioeconomic status, living in a joint family from urban background was brought to the out-patient department by his son with complaints of increased irritability, suspiciousness, reduced sleep & appetite since 1 year and muttering to self and decreased self-care for the last 20 days. As per the informant patient was apparently alright 1 year back when there was an ongoing argument with family members regarding property. During this time, he started having suspicious thoughts towards family members, sleep disturbances in the form of frequent awakenings and

thinking excessively about property matters. He consulted his family doctor, who prescribed him Tab. Escitalopram 5mg and Tab. Clonazepam 0.25mg for 1 month and advised to consult a psychiatrist. Subsequently, he reported improvement only in sleep with the medication. Although, he did not consult a psychiatrist yet he continued taking the same medicines for two months after which he stopped Tab. Escitalopram and continued Tab. Clonazepam on SOS basis for his sleeplessness. This continued for approximately 8 months without any formal follow-ups with a doctor. According to the informant since last 3 months, he allegedly started accusing his son's in-laws of trying to plot against him. As reported by his son, patient felt that the entire family is accusing him of being abusive and unreasonable especially towards his daughter-in-law. During this time his sleep declined, to less than 3 to 4 hours at night along with gradually reducing appetite over the course of 1 month so much that he even started skipping meals. Subsequently, he started behaving irritable without any provocation. His suspiciousness worsened and he now started thinking that somebody was going to harm his son. He even started displaying disorganised behaviour such as not asking for food, inadequate grooming and reduced self-care in the form of wearing unwashed clothes and not bathing & shaving regularly. This made the family members bring him to the hospital. Patient's personal history is remarkable for chronic tobacco chewing in the past for approximately 7 years. Currently he has been abstinent since last 8 years. He denied using any other substance or drug use. He is a known case of hypertension for the past 8 years and is on regular treatment for the same. There was no history suggestive of any head trauma, neurological conditions or any psychiatric illnesses. There was no significant family history.

His family described his premorbid personality as a friendly, jolly and an extrovert person who enjoyed company of family and friend. He was a leader and actively involved in organizing extracurricular events for his students in his school. He was actively involved in donations for any needy students. He refrained from displaying anger publicly and was able to balance work and personal life. During his free time, patient enjoyed reading spiritual books, news-paper and current affairs, which he had stopped doing for the past few months.

Medical examination at the time of admission did not reveal any significant findings. On mental status examination, he was conscious, un-cooperative, moderately built, appearing older than his stated age, with inadequate grooming in form of uncombed hair, unshaven beard, wearing culturally appropriate clothing in an unkempt manner, sitting on a chair with increase psychomotor activity in the form of raised right arm with index finger pointed in upward direction. He remained guarded during the interview and rapport was not established. Eye to eye contact not initiated throughout the interview. His speech and language was non-spontaneous, comprehensible, coherent and occasionally

irrelevant. Tone, volume and pressure of speech were decreased with increased reaction time. He only responded when questions were asked in English. He did not report his mood. Quality of affect was irritable, with restricted range and congruent with behaviour & thought content. He had poverty of thought with predominantly persecutory ideas. He denied hearing of any voices but was occasionally seen as if responding to internal stimuli. He was oriented to time, place and person. Simple concept was intact however he was not cooperative for abstract or memory assessment. Judgement could not be assessed and his insight was absent. He was not cooperative for MMSE, however, his SAPS score was found to be 42 on admission.

All the routine investigations were within normal limits and MRI-Brain showed age-appropriate cerebral atrophy only. At the time of admission, patient was given Inj. Haloperidol 5 mg I/M along with Tab. Lorazepam 2 mg stat. He was started on Tab. Risperidone 2 mg, Tab. Trihexyphenidyl 2 mg and Tab. Lorazepam 2 mg per day in divided doses. His anti-hypertensive medications were continued (Tab. Telmisartan 40 mg and Tab. Metoprolol 40 mg OD). Psychological support and psycho-education about the illness was provided to family members.

On day 7 of inpatient treatment patient's mental status examination showed improvement. He was sitting comfortably on hospital bed reading newspaper. He displayed good personal hygiene and grooming. It was possible to engage with him and his psychomotor activity was normal. Eye to eye contact was established but not sustained. Speech continued to be non-spontaneous, comprehensible, coherent, partly irrelevant, with reduced tone and increased reaction time. Volume and pressure of speech was normal. He reported his mood as "I am fine". Affect was restricted, stable, reactive, appropriate to situation and congruent with thought. Stream of thought was goal directed and he expressed concern about his health. He further revealed that prior to admission he could hear the voice of his religious 'guru' talking with him and commenting on his actions. However, he denied any persecutory thoughts or hearing any voices during the assessment. He was also able to tell the similarities and differences between objects, and meaning of proverbs. His recall memory was 4/5 and had good test judgement with partial insight. His MMSE score was 28/30 that itself ruled out the possibility of organic condition. Tab. Lorazepam was reduced to 1mg HS and plan was to gradually taper & omit.

At the time of discharge importance of treatment adherence and regular follow-up was emphasized. On the follow-up visit after 30 days, no adverse effects were reported. There was a significant improvement in self-care and social functioning as reported by the patient's son. Patient and his family members reported were satisfied with the progress. His affect was euthymic and no perceptual or thought abnormalities were reported. During this follow-up, his SAPS score was found to be 19.

DISCUSSION

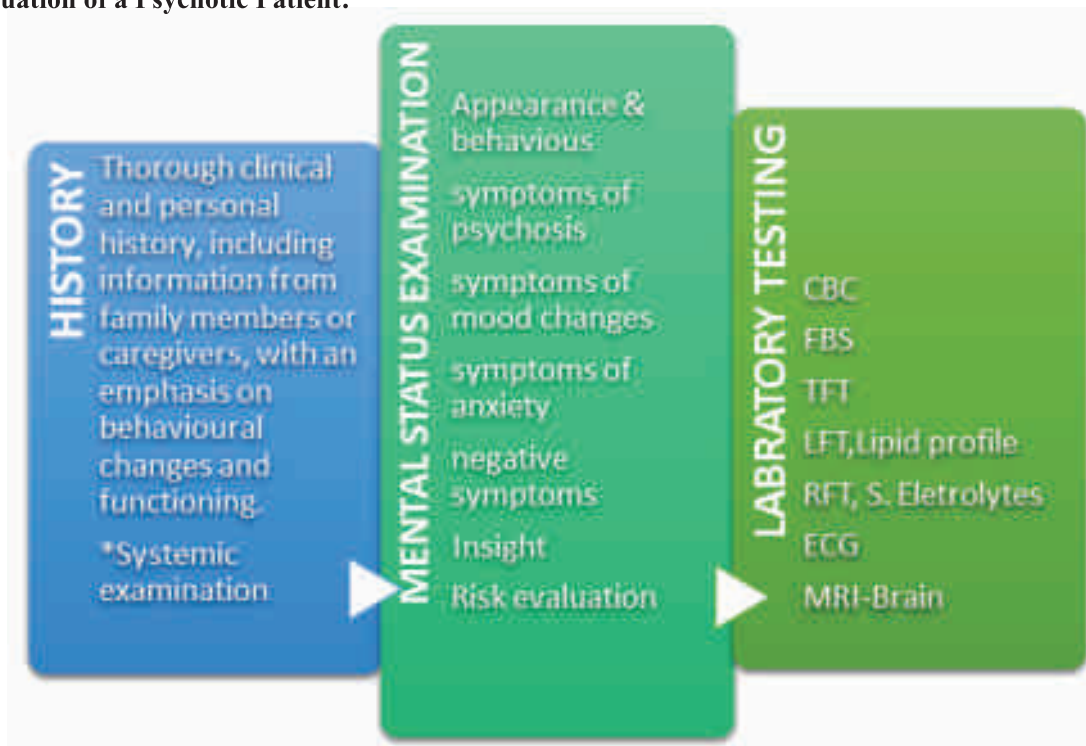
“Psychosis” as a term is not explicitly defined in DSM-5 and ICD-10 classifications, however, they have described psychotic features with symptoms such as delusions (suspiciousness, fearfulness), hallucinations (hearing voices, seeing things), disorganized speech, disorganized behaviour (poor self-care, catatonia), or prominent negative symptoms (apathy, avolition, alogia).⁴ Other commonly seen symptoms are unprovoked verbal or physical aggression, gesticulations, wandering behaviour, a decline in the level of mental functioning etc.⁵

Some of the biological risk factors for LOP are poor physical health, frequent falls or head trauma, sensory deprivation like auditory or visual impairment, age related changes in dopaminergic / glutaminergic / serotonergic systems and increased sensitivity to psychotropic drugs. While LOP is generally associated with lower rates of substance use & formal thought disorder^{6,7}, higher education and good premorbid functioning in comparison to younger onset psychosis, it has a greater proximity to psychological factors

As there are no pathognomonic signs to differentiate between primary and secondary causes of psychosis a detailed history from patient and a reliable informant is of paramount importance. The history must also explore for changes in personality or intellectual functioning. Laboratory investigations may include complete blood count, fasting blood sugar, liver, renal & thyroid function tests, vit-b12, erythrocyte sedimentation rate, HIV testing, urine toxicology and electrocardiogram. Imaging studies like CT/MRI or EEG may be considered depending on the history. Neuropsychological testing may also be done for assessing the degree of impairment and to monitor progress.

Treatment must be targeted towards any specific cause. Possibility of comorbidities must also be taken in to consideration. In the absence of any identifiable underlying disease condition, antipsychotic medications may be used for control of symptoms. Lower doses with gradual titration may reduce the risk of developing irreversible side effects such tardive dyskinesia with typical and metabolic syndrome with atypical antipsychotics.

Clinical Evaluation of a Psychotic Patient:



and major life events like unemployment, adjustment problems, loneliness etc. Affective blunting or flattening⁸, which is a hallmark negative symptom of schizophrenia, and other negative symptoms like alogia, avolition etc. are less common in LOP patients. Furthermore, psychological disorders in late life are associated with greater rates of morbidity and mortality when compared to psychological disorders in younger adults.⁹

There is also a black box warning issued by FDA regarding risk of mortality associated with use of antipsychotics in geriatric patients. Electroconvulsive therapy remains a safe and effective treatment option in geriatric age group.¹⁰ It can be considered in case of severe decline in functioning, aggressiveness or catatonic symptoms. Combining biological with psychosocial intervention has the best treatment outcomes. Cognitive skills training, behaviour therapy,

functional adaptive skills training, caregiver support, family counselling & psycho-education are the non-pharmacological modalities. Appropriate application of these therapies based on individualized needs is beneficial.

In our patient, we ruled out secondary causes of psychosis because history, laboratory findings and neuroimaging were not suggestive of any organic cause. Also, there was significant improvement in behaviour on treatment with Tab. Risperidone along with a normal MMSE score. The following differential diagnoses were considered in our case:

1. *Brief reactive psychosis.* There were no significant recent stressors in his life. And duration of dysfunction was more than 1 month.
2. *Depression with psychotic feature.* Among the points in favour were the onset with depression-related symptoms such as low mood, sleep disturbances and response to escitalopram in the past. However, the presentation this time was predominantly psychotic with impairment in self-care and also the patient responded well to monotherapy with risperidone.
3. *Schizoaffective disorder.* There weren't any coexisting psychotic and affective symptoms and the course was not continuous.
4. *Schizophrenia.* This appears to be the likely diagnosis. However, the duration of symptoms was not adequate. The depressive symptoms previously present could be the prodrome of schizophrenia.
5. *Psychosis not otherwise specified.* We have given a provisional diagnosis of psychosis not otherwise specified or schizophreniform disorder at the initial presentation. We will wait and watch for the course of illness and response to treatment to ensure an accurate diagnosis.

CONCLUSION

This case is reported to raise awareness that the clinical presentation and outcome of psychosis in late life often differs from that of younger adults. Most cases of LOP develop secondarily because of underlying illnesses, drugs or depression. Identification and treatment of secondary causes of psychosis is essential as elderly people are more vulnerable. An in-depth history, comprehensive physical examination, neuro-psychological testing, and appropriate lab data is essential to distinguish primary from secondary causes of psychosis.

CONFLICTS OF INTEREST: Conflicts of interest do not exist.

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