CASE REPORT

Ganser Syndrome in Schizophrenia: A Case from India

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Abstract

Objective: The aim of this paper is to report the symptom of approximate answers in a case of schizophrenia with abnormal MRI findings, who improved with the antipsychotic drugs and to discuss whether it is part of schizophrenic thought disorder or structural brain involvement. Method: A case report and review of the literature of Ganser syndrome in a case of schizophrenia is presented. Results: The subject recovered from her symptoms of approximate answers and schizophrenia. Relatively few cases have been reported about Ganser syndrome in schizophrenia. The majority of articles published were either related to organic cause or dissociative disorder. Conclusions: There is a need to reconsider Ganser syndrome in schizophrenia where it has responded to antipsychotic medications. The current diagnostic classification of Ganser syndrome as Dissociative disorder does not mention about the occurrence in schizophrenia or consider the symptom of approximate answers as a formal thought disorder of schizophrenia.

Keywords: Ganser Syndrome, Symptoms of Approximate Answer, Schizophrenia

Introduction

The symptom of approximate answers is the hallmark of Ganser syndrome which was originally considered as a part of transitory hysterical twilight state by Ganser.¹ The etiology is controversial, with researchers reporting hysteria, malingering, factitious disorder, brain damage or psychosis as the underlying cause. It has been noted in cases of head injury and stroke,² alcoholism with Korsakoff's psychosis,³ dementia,⁴ AIDS,⁵ schizophrenia⁶ and affective disorders.⁷ We present here a case of Ganser syndrome in schizophrenia with coincident neuroimaging findings of structural brain involvement.

Case Report

A 22 year-old emaciated lady had a cesarean section in the ninth month of pregnancy for anhydramnios with fetal distress. After delivery she became irritable, refused to accept her male child and did not look after her baby. She was observed to be addressing all the males in the ward as well as her male relatives with her husband’s name.
A detailed psychiatric evaluation revealed a change in behavior about a year ago immediately after patient’s love marriage when she had become irritable, abusive and expressed fearfulness about her life being in danger with somebody coming to harm her. She was taken to native place for faith-healing which is a frequent Indian custom. Following this her behavior quietened and she did her routine household chores.

When she was five months pregnant, she visited her parents for a week where they noticed her to be withdrawn, staring and being abusive with sleep disturbances. Later her behavior worsened with patient laughing and muttering to self, not recognizing her in-laws, wandering aimlessly outside the home and severely neglecting herself in the form of refusal to eat, not taking bath and passing urine in clothes. This behavior continued for the next 4 months and it was then she was seen in the emergency services of our hospital.

In view of her symptoms, she was diagnosed as schizophrenia and transferred to the psychiatric inpatient ward. Initially, she was hostile and did not talk to the doctors. She was seen muttering and smiling to self, showed delusion of persecution and her sleep and self care were inadequate. Patient was started on oral antipsychotic medications Tab. Risperidone (4mg), Tab. Trihexyphenidyl (4mg) in divided doses and Tab. Lorazepam (2mg) at bed time and within a week patient’s symptoms improved. It was then, when her delusion of persecution improved that a new symptom was observed.

In response to questions about her name and age she would give approximate answers. She identified the female doctors as her mother and the male doctors as her father. On asking her simple calculations (e.g., 2+2 = 6, 2+3= 2, 5+4 =7), identification of colors (red as white, green as blue), duration of her stay in hospital, sex of her baby etc. she gave all erroneous but approximate answers which persisted during 3 weeks of inpatient stay, though psychotic symptoms had improved. Patient was taking self care, was co-operative and understood all the questions asked. A magnetic resonance imaging (MRI) study of brain and neuropsychological testing were done. MRI brain revealed generalized cortico-cerebral atrophy with periventricular white matter hyperintensities predominantly in frontal region with “capping” of frontal horns of the lateral ventricles. Patient was tested on Bender Gestalt test which revealed severe organicity or severe psychosis. There was some improvement seen in her response to certain questions like identifying the doctors and relatives, naming colors. However patient still gave approximate answers in response to calculations, day, date etc. She was discharged and regular follow up was advised. Her medications continued in the same dose and currently after 5 months of being on medications she has reached premorbid level of functioning. Since 2 months there is no evidence of Ganser syndrome and now patient gives correct answer to all personal details, recent events, colors, calculations etc.

**Discussion**

The syndrome originally described by Ganser had four major features: giving approximate answers, clouding of consciousness, somatic or conversion symptoms, and hallucinations. The current classification of Ganser syndrome according to the ICD-10 and DSM-IV-TR as ‘Dissociative disorder not otherwise specified’ necessitates "the giving of approximate answers to questions (e.g., "2 plus 2 equals 5") when not associated with
Dissociative Amnesia or Dissociative Fugue" and does not actually require any other symptoms for diagnosis.

Our patient had florid psychotic symptoms which were untreated for a year. As her psychosis got controlled the symptoms of approximate answers became evident. What was interesting was that she had the symptoms of giving approximate answers with symptoms of schizophrenia and abnormal MRI brain findings. The periventricular white matter hyperintensities with frontal capping have been reported following ischemic changes\textsuperscript{10} as well as in normal asymptomatic individuals.\textsuperscript{11} There was no history of any brain insult or trauma in our patient and hence the MRI finding was difficult to explain. The existence of this finding with the symptom of approximate answers made us consider this symptom as some form of ‘dysphasia’ following organic brain involvement or a part of the ‘schizophrenic thought disorder’. However, the complete resolution of her symptoms during the course of her antipsychotic treatment does suggest the fact that it may be a part of schizophrenic thought disorder which improved over a period of 3 months with medication and the structural brain involvement could just be co-incidental. Whitlock 1967, after consideration of Ganser’s original cases in his studies had opined that the condition occurs most frequently either after acute cerebral trauma or in the course of acute psychotic illness, commonly of a schizophreniform or psychogenic kind.\textsuperscript{3}

The current diagnostic classification of Ganser syndrome as Dissociative disorder does not mention about the occurrence of symptom of approximate answers in schizophrenia or consider approximate answers as the disorganized thought of schizophrenia. Thus, there is a need to reconsider Ganser syndrome (approximate answers) in schizophrenic illness where it responds to antipsychotic medications.

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**References**


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