University Journal of Medicine and Medical Specialities

ISSN 2455- 2852 2021, Vol. 7(6)

Mutism in Non – Catatonic Schizophrenia: A Case Series

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ABSTRACT

Mutism is defined as a functional inhibition of speech and vocalization. While it is often observed to be a symptom of catatonia, mutism in schizophrenia in the absence of other features to suggest catatonia is uncommon. We report three cases of patients with schizophrenia with varying periods of mutism which did not respond to conventional treatment strategies.

Keywords: Mutism, non- catatonic schizophrenia

BACKGROUND

Mutism is the functional inhibition of speech and vocalization (1). It can present as a symptom of neurological disorders such as Alzheimer's disease, cerebrovascular events, fronto-temporal dementia and Creutzfeldt-Jakob disease (2) and is sometimes seen as a side effect of drugs like Tacrolimus and cyclosporine (3). In psychiatric practice it is commonly seen as part of a catatonic presentation of schizophrenia. Less commonly, it may be seen secondary to poverty of content of thought (1) or cognitive dysfunction and long duration of untreated psychosis in patients with schizophrenia (4). Reports of mutism in patients with schizophrenia in the absence of any other catatonic signs are rare (1, 2, 5), and the largest such report is from the Kosraean population (4). In this series, the period of mutism ranged from a few days to 20 years, was seen in the initial phase of the illness, and was a predictor of relapse. Though mute, no other catatonic features were present and nonverbal methods were used for communication (1). There are no clear treatment guidelines for the treatment of this condition, which according to available literature, is often resistant to treatment.

We describe three patients with schizophrenia who presented with mutism in the absence of other catatonic symptoms.

CASE REPORTS

Case Report 1

Ms. J a 22-year-old single woman from a lower socio-economic, Tamil speaking background who presented with a four year history of a continuous illness characterized by anhedonia, asocialization and avolition along with occasional hallucinatory behaviour. Over the last three years, she had become mute and dependent on her family members for her activities of daily living. There was no history to suggest seizures, other catatonic symptoms or pervasive mood symptoms. On mental state examination, though reluctant to be interviewed, her comprehension was intact as evident from her non-verbal communication. Her affect was blunted with reduced range and reactivity and was unwilling to express herself by writing. A diagnosis of undifferentiated schizophrenia was made and the patient was commenced on olanzapine. Despite an adequate trial of olanzapine, there was minimal improvement. She was evaluated in the department of otorhinolaryngology where structural causes for mutism were ruled out. She was admitted to the ward for psychosocial intervention and drug adjustments. Risperidone was commenced while olanzapine was discontinued. The patient's caregivers were educated about the illness and the prognosis. She was encouraged to attend occupational therapy where the focus was on improving communication and activities of daily living. Differential reinforcement techniques were used to improve desired behaviors. She was encouraged initially to communicate her needs in writing. Gradually her non-verbal gestures improved and she began communicating with her family members in monosyllables. She also became more independent in her activities of daily living and negative symptoms improved. No delusions or hallucinations were reported. She is on regular follow up and continues to maintain her improvement.

Case Report 2

Mr. A is an 18-year-old, single male from lower socio-economic status, Tamil speaking background. He presented with an insidious onset, continuous illness of three years duration characterized initially by auditory and visual hallucinations, persecutory and referential delusions along with disorganized behavior, poor self care, academic decline and poor social functioning. A diagnosis of paranoid schizophrenia was made. The patient received adequate trials of olanzapine and risperidone; however response was poor and he developed abnormal involuntary movements of the upper limbs. He was admitted following an exacerbation of symptoms of one month, despite being on regular medication, with increase in preoccupation, decreased socialization and mutism. Mental status examination revealed a well-built but poorly kempt male who made and maintained eye contact. There were no features of catatonia apart from mutism. Comprehension was good as evidenced by appropriate non-verbal communication. His affect was blunted with restricted range of reactivity. In view of recent onset of mutism he was evaluated by the neurologist to rule out organic causes. Neuroimaging and EEG were normal and autoimmune work up was negative. His vitamin B-12 levels were lower than the normal range and serum homocysteine levels were elevated. He was commenced on Vitamin B-12 replacement. After the various treatment options were discussed with the family, they chose to commence electro-convulsive therapy; with a course of ECT, there a reduction in hostility and improvement in verbal output. He is currently on regular antipsychotic medication and is maintaining his improvement.

Case Report 3

Ms. S is a 33-year-old homemaker from a Tamil speaking middle socioeconomic status background. She initially presented at the age of sixteen years with an acute onset of illness characterized by altered biological functions, disorganized behavior, persecutory beliefs and decline in academics and social functioning. While a diagnosis of acute polymorphic psychosis was initially made, the diagnosis was revised to schizophrenia as the symptoms persisted. There was poor response to adequate trials of risperidone, olanzapine and quetiapine; hence she was commenced on Clozapine. Though her level of functioning improved, she continued to report distressing auditory hallucinations. Following interpersonal stressors, a worsening of symptoms was observed despite being on regular medications (325 mg of clozapine in divided doses) with disturbed biological functions, smiling and muttering to self, and mutism along with decline in social functioning and personal care. The patient was on Thyroxine replacement for hypothyroidism and was diagnosed to have polycystic ovarian disease related primary infertility. On mental state examination, she made and maintained eye contact. Rapport could be established. She was mute, but comprehension appeared to be adequate. She communicated by writing and admitted to auditory hallucinations.

In view of the persistent psychotic symptoms, augmentation was planned and 30 mg of aripiprazole was given in addition to clozapine. Psycho-social interventions were also attempted. She showed gradual improvement in her symptoms and started communicating verbally in three weeks. Her speech was hesitant, soft, monotonous and laconic in productivity. She answered all questions with monosyllables and a poverty of content was noted. Attempts were made to explore with her the reasons for the mutism; however she was unable to explain it. She is on regular follow up and is communicating adequately. She continues to report residual auditory hallucinations.

DISCUSSION

Mutism associated with non-catatonic schizophrenia has been considered as a cultural variant of psychopathology (4). Most reports suggest that mutism appears in the initial phases of the illness and is difficult to treat, often requiring clozapine for treatment resistance. It is associated with significant socio-occupational impairment and can be considered as a poor prognostic indicator. In this case report, mutism appeared later in the course of the patient's illness, and treatment response was partial.

This report highlights that non-catatonic mutism is not uncommon, can be difficult to treat and possibly indicates a poor prognosis. However systematic studies are required to improve our understanding of this phenomenon.

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