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Case Report

Psychiatry/Mental Health Section

Successful Resolution of Messianic Delusion following Bi-temporal Modified Electroconvulsive Therapy in a Patient with Treatment-resistant Schizophrenia

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ABSTRACT

Messianic delusion comprises a delusional system centered on the patient's conviction that he has been selected by God for a special task or mission and has unique abilities to carry it out. The present case report describes a case of Treatment-Resistant Schizophrenia (TRS) with Messianic delusion in a 23-year-old unmarried male who presented to the Emergency Department with complaints of muttering to himself, decreased sleep, suspiciousness, socio-occupational dysfunction, aggressive behaviour, and a recent suicide attempt. Key interventions offered during the ward stay included rapid tranquilisation, antipsychotics, and benzodiazepines. The patient completely recovered with the concurrent use of clozapine and Modified Electroconvulsive Therapy (MECT). The patient received 16 sessions of MECT. He achieved both short-term and long-term remission with the therapy, as observed during regular follow-ups in the next six months. The present case emphasises the need for a multidisciplinary approach to the management, early detection, and adequate treatment of this challenging illness.

Keywords: Antipsychotics, Clozapine, Religious delusion

CASE REPORT

A 23-year-old unmarried male, a skilled labourer from a rural nuclear family of lower socio-economic status, without a significant past, personal, or family history of medical and surgical illness, presented with his mother and paternal uncle to the Emergency Department of a tertiary hospital located in Northern India with symptoms of unusual talk, aggressive and abusive behaviour towards family members, along with difficulty in initiation and maintaining sleep for the last one to two days. Upon further exploration, the patient was found to be agitated and non co-operative towards the examiner and had to be chemically restrained with an injection of Haloperidol 5 mg and an injection of Lorazepam 4 mg Intramuscularly (IM). Subsequently, the patient was admitted to the psychiatry ward and was kept in a segregated room under observation for the next 24 hours. Further evaluation from his family members revealed that the patient had a chronic history of psychiatric illness for the past seven years (since his school days), which was insidious in onset and continuous in nature. This was characterised by symptoms of muttering to himself in a low tone, attributing himself as a messenger of God, poor self-care and hygiene, and socio-occupational dysfunction.

The history dates back to 2016, when the family members and teachers started noticing a change in his behaviour. The patient stopped talking and started remaining aloof at home and at school. They also noticed a change in his sleep patterns and observed that he used to sit calmly on his bed at night. Additionally, they noticed a decrease in his appetite, and a deterioration in his self-care, as he would take a bath, brush his teeth, and change his clothes only once every 3-5 days. After 2-3 months, family members started noticing that the patient had begun talking to himself in a low tone, which was not audible or comprehensible to others, along with gesturing in the air. Initially, this behaviour occurred for 1 to 2 hours a day, gradually increasing to the entire day over the subsequent six months. It was also observed that the patient had started laughing out loudly on occasion without any apparent reason. After 8-10 months from the onset of the illness, the patient absconded from his school. About 10-12 days later, the patient, in an unkempt condition with torn clothes, was identified by one of his relatives at a railway station situated around 130-150 kilometres from his home. The patient was then brought back home, and consultation was sought from a general physician, but the patient's symptoms did not show any improvement in the next month. The patient's academic performance also declined and he failed, in contrast to his average scholastic performance in the 10th class, eventually leading to his dropping out of school. Family members took him to a faith healer, who later advised them to take the patient to a psychiatrist. After a period of 12 to 14 months of untreated illness, the patient was taken to a nearby tertiary hospital, where the patient revealed 2nd person auditory hallucinations during the Mental Status Examination (MSE) (documented). He was then advised to take risperidone 3 mg in divided doses along with benzodiazepines.

On subsequent follow-ups, risperidone was increased to 8 mg in divided doses. He was on regular outpatient follow-up with a private psychiatrist, and his medications were supervised at home by his mother for the next 4-5 years. Gradually, within a period of 8-10 months, his psychotic symptoms decreased, and the patient started interacting with family members, but only with persuasion. The patient did not attain remission, as he remained engaged in non productive activities at home, and a few times he would roam in the village without any purpose. Subsequently, the patient discontinued the medication and stopped attending follow-up appointments. However, his previous symptoms (muttering to himself and suspiciousness) worsened over the next six months. During this period, the patient began to refer to himself as a gatekeeper of God on a special mission and started suspecting his family members of being involved in a conspiracy to prevent him from completing his mission. Within a few days, the patient left his home. After being missing for five months, or just five days before the day of admission, his family members received a call from the urban police station of a district distant from his hometown (approximately 100 km), informing them that the patient was found wandering in a disheaveled condition near their premises. He was then referred to a tertiary Government hospital where he provided his name, address,

and his mother's phone number. His family members reached the hospital and left against medical advice the next day. On the same day, at the railway station, he attempted to jump in front of a moving train. Upon being stopped, the patient became aggressive and attempted to strangle his mother. He also began to verbally abuse other people present. When questioned about his self-injurious act, he stated that his mission on earth as "Gatekeeper" was over, and in order to unite with God, he had to end his human life, as he had already been assigned his next mission in the universe. Despite repeated explanations by his family members, the patient remained unconvinced that these thoughts were implausible and that he was not a messenger of God. Subsequently, the patient was manually restrained by family members and brought to the Emergency Department of a Tertiary Hospital in eastern Haryana, where he was admitted.

On the 3rd day of admission, the patient was shifted to the general psychiatry ward from the segregated room as he was found to be co-operative. General physical and systemic examinations, along with a neurological examination, were found to be normal. There was no history of seizures, head trauma, forgetfulness, weakness of limbs, or substance abuse in the patient. The patient did not report any other psychiatric history. Further exploration revealed that the birth and developmental history were normal. During the MSE, the patient was observed to be ill-kempt, had poor eye-to-eye contact, and exhibited hallucinatory behaviour. His speech was spontaneous, with an increased rate, tone, and volume. His mood was found to be elated. The poverty of content of speech, use of neologisms (such as "gatekeeper"), and 2nd person auditory hallucinations were other notable findings. A score of 66 was found on the Brief Psychiatric Rating Scale (BPRS) [1]. Based on the history and clinical assessments, a diagnosis of "Paranoid Schizophrenia" was considered, and the patient underwent routine investigations (complete blood count, blood sugar, liver function tests, kidney function tests, thyroid profile, lipid profile, viral markers, and chest X-ray), which were all found to be normal. On the 5th day of admission, the patient was started on Tab Olanzapine 5 mg and clonazepam 1.5 mg in divided doses.

On the 15th day of admission, the patient began to elaborate on the voices he was hearing. At times, when asked, he would say that he was talking to God and addressed himself as God's gatekeeper. When questioned about the term "gatekeeper," he would elaborate, stating that he was a messenger of God and had been sent to Earth for a special mission for mankind, similar to other messengers sent previously, namely Lord Rama and Lord Krishna. He also elaborated that he was able to hear the voices of Lord Vishnu in clear consciousness, and these voices had informed him about his mission. As there was not much improvement in the symptomatology, the doses were further increased to 20 mg (Olanzapine) over the next 20 days. In subsequent MSEs over the next four weeks, the patient also revealed delusions of grandiosity, religious delusions, delusions of a special mission, and delusions of persecution. Higher mental functions revealed that the patient had concrete thinking, poor judgement, and insight. As his BPRS score only reduced to 54 in the next four weeks on the tablet olanzapine, the option of treatment with the tablet Clozapine was discussed with the family members. Written informed consent was obtained from the family members.

On the 35th day of admission, after baseline recording of weight, body mass index, and a complete blood count, the patient was started on tablet clozapine up to 25 mg in divided doses. On the 45th day of admission, the patient attempted to jump from the second floor of the ward. When questioned about his behaviour, the patient replied that doctors, hospital staff, and family members were impeding his mission accomplishment and that the voices of God had instructed him to jump from the window. Consequently, the patient was prepared for Modified Electric Convulsive Therapy (MECT) along with an increase in the dose of clozapine. During the course in the ward, the patient received 16 sessions of MECT over the next five weeks, along with an increment of tablet clozapine up to 250 mg per day. The patient started showing improvement, and his BPRS score decreased to 18. After 82 days of hospitalisation, the patient was discharged in good condition with residual deficits in social interaction. On subsequent follow-ups for the next six months, there was no re-emergence of delusions and hallucinations, and no notable side-effects of clozapine were noticed with regular monitoring of complete blood count. At his latest follow-up, around six months after his discharge, the patient had started sharing household responsibilities and had begun working as a skilled labourer.

DISCUSSION

Spirituality is an aspect of an individual's subjective experience. It is still difficult for mental health professionals to discern between healthy religious experiences and pathological ones in modern times. Additionally, religious themes are frequently present in mental disorders. Patients suffering from schizophrenia often present with religious content, which includes both religious delusions and hallucinations [2]. In a study conducted on 262 patients with schizophrenia and schizoaffective disorders, it was found that around 101 (39%) patients had religious delusions. The study also reported that there were 3.6 times higher odds of the risk of religious delusions in patients with strong religious activities [3].

Religious delusions have been further categorised into messiah syndrome (grandiose identity delusions), persecutory delusions (by demons, devils), delusions of sin, somatic passivity, and antichrist delusions (hetero-destructive behaviour) [2]. The core of a messianic delusional condition is the patient's belief that they have been crafted by God for a unique and immutable mission. For completing this task, the patient believes that they possess multiple unique abilities and proclaims the resurrection and is also a saviour [4]. Religious delusions are commonly seen in patients with schizophrenia, but there are only a few reports on messianic delusions.

Although religious practices are cited as an important coping strategy for many people living with schizophrenia, and frequent use of religious coping or higher levels of religiosity among these patients have been linked to a better quality of life [5], it has been reported in the literature that religious delusions have been associated with higher severity of illness, longer duration of untreated illness, higher medication dosages, treatment resistance, and poor outcomes, which is in consonance with the present case report as well [2,6,7]. In addition to this, it was reported that patients with delusions of religious content hold their delusions with greater conviction as compared to other patients without religious delusions [2,8]. Hence, people with religious delusions are a difficult group to treat, as evidenced in the present case.

Apart from this, it was also observed that patients with religious delusions preferred magicoreligious healing. A study conducted in Taiwan on 55 schizophrenia patients found that these patients had a greater preference for magico-religious healing as compared to psychiatric treatment [6]. Another study conducted in India on 40 patients with schizophrenia found that most of the patients (n=23) had undergone magico-religious treatment [9]. These types of non psychiatric treatment can affect thoughts and beliefs about health and psychiatric illness, and as a result, there might be poor adherence to psychiatric treatment, which might result in the colouring of the psychopathology of the patient and have increased the duration of untreated illness. It can be speculated that these above mentioned plausible reasons might have influenced the psychopathology (higher conviction of religious delusions) and treatment-related behaviour (delay in seeking treatment, and poor adherence) of the index patient.

A recent systematic review and meta-analysis of 12 studies found the rate of TRS to be around 24.2% in first-episode schizophrenia

patients, with men having 1.57 times higher chances than women of developing TRS [10]. In line with the present case, it has been found in the literature that religious delusions in schizophrenia are associated with treatment resistance, as in the present case, which failed to show improvement with recommended adequate trials of antipsychotics [11]. Evidence also suggests that a subgroup of patients with religious delusions have a higher likelihood of violence and self-injurious behaviour, which was also observed in the present case in the form of higher suicidality [12,13]. Additionally, it has been reported in the past that the lifetime risk of suicide in schizophrenia patients is 5% [14]. The literature also confirms that suicidality in schizophrenia has been associated with socio-demographic risk factors such as young age, male gender, and illness-associated risk factors like active hallucinations and delusions, which were also found in the present case [15].

The index case of TRS with high suicidality indicated that the patient needed aggressive management; hence, the patient was started on the tablet clozapine and MECT concurrently. Clozapine has been approved for use in TRS, and it has been observed that around 60-70% of patients with TRS responded to clozapine [16]. Previous reports have indicated that the combination therapy of clozapine and MECT is highly effective for positive symptoms among these patients [17]. In accordance with the present case, a study conducted by Tor PC et al., to assess the effect of Electroconvulsive Therapy (ECT) on suicidality in schizophrenia patients revealed that around 86.45% of the patients showed improvement in expressed suicidality after an average of 10.2 sessions of ECT [18]. Additionally, a recent review of 40 reports by Grover S et al., found that clozapine with concurrent use of MECT or MECT augmentation in clozapine-resistant patients was effective for both short-term (37.5% to 100% of patients) and sustained long-term improvement, and overall this combination was found to be safe [19]. The supremacy of clozapine against other antipsychotics when combined with MECT was also reported [20]. Similarly, in the present treatment-resistant case with high BPRS scores and high suicidality, the patient was administered ECT and Clozapine concurrently and attained partial remission without side-effects, as described previously in the literature. In line with a previous study, the present case also maintains partial remission for the long-term on this combination and was found to be a good and safe [20].

CONCLUSION(S)

The present case report was intended to increase clinician awareness about Messianic delusion and highlight the hurdles in treating a patient with TRS and suicidality. The treating team should adequately address religious and cultural factors associated with religious delusions and hallucinations. It also highlights the timely intervention of MECT to prevent suicide among these patients and the role of combination therapy of clozapine along with MECT to attain remission in a patient with TRS.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for clinical information to be reported in the journal. The patient understands that his name and initial will not be published, and due efforts will be made to conceal the identity, but anonymity cannot be guaranteed.

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