

Case Report

Where Lines Blur-The Psychiatric Manifestation of a Neurological Disorder: Remitting Psychosis as an Initial Presentation of Multiple Sclerosis - A Case Report and Literature Review

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Keywords

- Multiple sclerosis
- Psychosis
- Neuropsychiatric symptoms

Abstract

Background: Multiple Sclerosis is a demyelinating disorder which presents with an array of clinical manifestations. Nearly 25 % of the patients have neuropsychiatric symptoms with a small percentage presenting with psychotic symptoms as an initial presentation.

Aim/Methodology: We hereby present a case of a young female who presented to us in psychiatry services with psychosis and no neurological deficits. She was later diagnosed with MS. Description and management of this case is followed by a brief literature review.

Conclusion: This case illustrates the significance of considering neurological differentials in patients presenting with first episode of psychosis. It also provides a learning tool for being more vigilant in cases with atypical presentation, overt or soft neurological symptoms or ambiguous psychiatric presentation.

ABBREVIATIONS

MS: Multiple Sclerosis

INTRODUCTION

Multiple Sclerosis [MS] is a multi-faceted demyelinating disease of the Central Nervous System [CNS] which follows a chronic and debilitating course [1]. It frequently presents as pyramidal weakness, cerebellar signs or visual defects. It affects around 2.5 million people worldwide and begins between the ages of 20-40 years [2]. Research has shown that neuropsychiatric symptoms are common in MS with depression being present in as high as 25- 50 % of the diagnosed population [3]. Other disorders are Bipolar illness, anxiety states, pathological laughing or crying. Euphoric states and psychosis have also been consistently shown in literature to be over-represented in this cohort [4]. Around 5% of patients exhibit psychotic symptoms during the disease

progression which could be attributed either to the primary disease pathology or to the side-effects of pharmacotherapy, most noticeably steroids [5]. However, data speculates that psychosis as an initial presentation of Multiple Sclerosis accounts for less than 1 % of the total affected population making it a rarer and more difficult-to-diagnose presentation [6]. We are here by reporting a case of a young female who presented to us in psychiatry out-patient services with first-episode psychosis and no prior neurological or psychiatric history who was later diagnosed with MS. The authors hope that sharing our experience will aid in developing a more cautious and contextualized neuropsychiatric approach for evaluating the young population presenting with first-episode psychosis.

CASE PRESENTATION

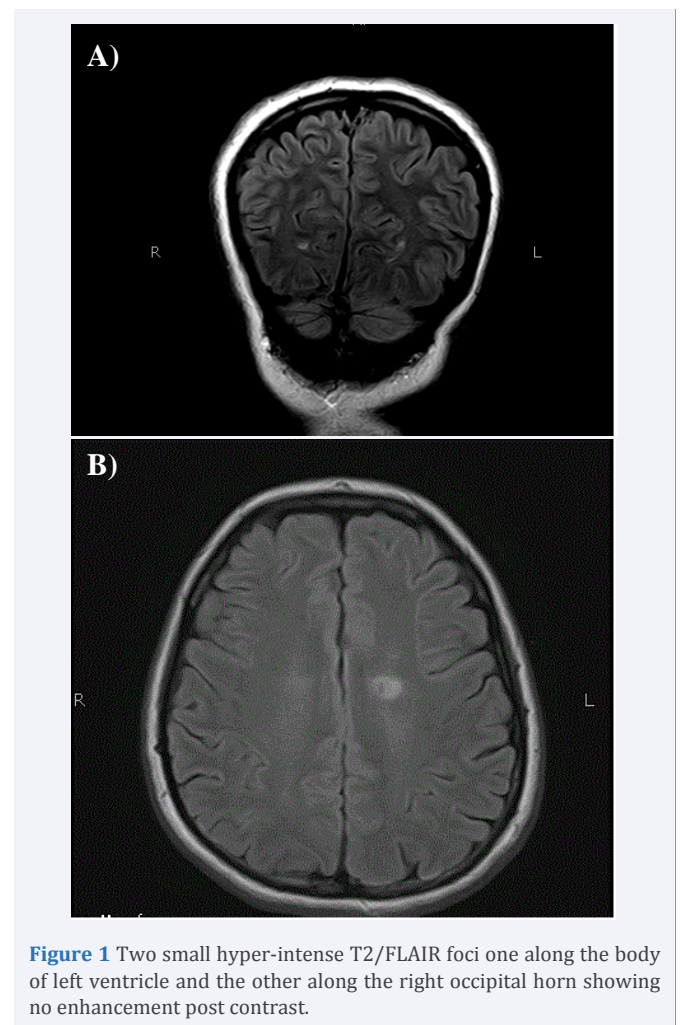
Miss A, a 22 years old female, single, presented to our psychiatry clinician Aga Khan University Hospital, Karachi with

recent complaints of decreased appetite, increased muteness and decreased mobility as well as social isolation and compromised self-care. Family also noticed that patient was at times mumbling to herself. In the past one year, she had been seen by psychiatrists for increased anxiety, palpitations, difficulty in breathing and restlessness. She had been treated with SSRI with minimal benefit. Ultimately, patient verbalized feeling fearful that people are plotting against her and hearing voices of strangers talking to her. She minimally participated in the interview at the time of presentation to our clinic and seems disoriented and confused. There was no associated history of any head trauma/loss of consciousness or transient neurological deficit. Family denied any past psychiatric history or any family history of neurological or psychiatric illness. There was no history of any substance use or any recent stressor. The patient was admitted in the hospital with a working diagnosis of catatonia and psychosis as well as questionable depressive symptoms. Benzodiazepines were given for a few days with improvement noted. Her neurological examination showed that patient needed help in walking but otherwise no gross abnormality was detected in motor, sensory or cerebellar examination. Investigations including autoimmune workup and serum ceruloplasmin levels were unremarkable. Decision to order brain imaging in view of first episode psychosis was deliberated upon but deferred based on her financial constraints. A provisional diagnosis of Brief psychotic Disorder was made. She was initiated on haloperidol 5 mg which was later replaced by Aripiprazole 5 mg as she had developed mild extra pyramidal symptoms. There was some improvement in movement and communication and she was subsequently discharged. Two days after discharge, she complained of headache and vomiting and was called to the ER. Although the symptoms resolved on symptomatic management but decision to do MRI [head] was taken to rule out any other pathology that could have been a contributory factor. MRI [head] revealed two small hyper-intense T2/FLAIR foci one along the body of left ventricle and the other along the right occipital horn showing no enhancement post contrast. These findings raised a strong suspicion of Multiple Sclerosis (Figure 1).

Patient was referred to neurology services where her diagnostic Lumbar puncture was done revealing Oligoclonal bands in CSF thereby confirming the diagnosis of Multiple sclerosis. By that time her psychiatric symptoms had completely resolved indicating the remitting relapsing nature of the disease process and she had no new onset deficit. Therefore, the neurologist decided not to keep her on any active treatment unless mandated in future. Her psychotropic medication was continued with a plan for gradually tapering off and discontinuing. Patient and her family were counseled about the nature of the disease and advised to follow-up in psychiatry clinic in future if needed.

DISCUSSION AND LITERATURE REVIEW

It was Charcot in 1877 that recognized the presence of affective and psychotic component as well as cognitive deficits in MS [7]. Psychiatric symptoms in Multiple Sclerosis, both at the time of presentation or during the course of illness, are not a novel phenomenon. The presence of these symptoms not only complicates the picture from a diagnostic perspective but also pose significant difficulties in the long term functionality



and quality of life for such patients [8]. Data suggests presence of affective symptoms and anxiety disorders but literature on psychosis as an initial presentation for MS is rarer [9].

Psychosis and MS is a relative uncommon phenomenon with majority of the data published as case reports [10]. Reiss et al reported rates of psychosis in 2-3% of those suffering from MS as compared to 0.5-1% in the general population [11]. Brief episodes comprising of either delusions or hallucinations which have a better prognosis than primary psychotic illnesses have been reported [12]. Our patient Miss A also presented with auditory hallucinations and paranoid delusions which followed a favorable course.

Patients of MS may develop psychotic symptoms either as an initial presentation (which is rarer) or as a complication of interferon or steroids administered. During the initial presentation, patients may not have any neurological deficits on physical examination [13]. However a thorough neurological examination and carefully delineated history is mandated for any young patient presenting with first-episode of psychosis.

A single study conducted by Ron et al on 116 MS patients indicated that flat affect and thought disorder was associated with greater pathology in the temporo parietal region [12]. Although the data is scarce but it suggests a preponderance of the

white matter lesions being multiple, peri-ventricular and usually located in the temporal region if psychotic symptoms are present in MS [6,14]. In our patient, the lesions were peri-ventricular and were a minimum of two in number.

Management of psychosis in MS is primarily by antipsychotics however there are some contradictory reports of steroids playing a beneficial role also. So far there has been no case report from Pakistan regarding this presentation but a similar case was reported from India by A Aggarwalet al in 2011 [15].

This case illustrates the significance of considering neurological differentials in any patient presenting with first episode of psychosis especially if he/she falls in the younger or elderly age group. It also provides a learning tool for being more vigilant in cases with atypical presentation, overt or soft neurological symptoms or ambiguous psychiatric presentation. In the context of a third world country like ours where resource allocation for health and approachability to speciality care is compromised, it becomes an even bigger challenge to provide cost-effective health care. This would mean being proficient in history and examination and have a certain degree of command over other sister-specialities. The authors conclude that further research is needed to ascertain the chronological timeline and actual prevalence of psychosis in patients of MS and perhaps development of more robust objective screening tools to rule out neurological disorders in milieu of psychiatric presentations.

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