

## Evaluating the Dilemma of Organic Psychosis: A Case Report

Dr. Vivek Srivastava<sup>1</sup>, Dr. Savinder Singh<sup>2</sup>, Dr. Shobhit Kumar Prasad<sup>1</sup>, Dr. Priti Singh<sup>3</sup>,  
Dr. Ashish Kumar Malik<sup>4</sup>, Dr. Asha Kumari<sup>5</sup>

<sup>1</sup>Junior Resident, Department of Psychiatry, Pt. B.D. Sharma PGIMS, Rohtak

<sup>2</sup>Director, Institute of Mental Health, Amritsar

<sup>3</sup>Professor, Department of Psychiatry, Pt. B.D. Sharma PGIMS, Rohtak

<sup>4</sup>Senior resident, Department of Psychiatry, Pt. B.D. Sharma PGIMS, Rohtak

<sup>5</sup>Assistant Professor, Department of Biochemistry, SHKM Government Medical College, Nuh, Haryana

Corresponding Author: Dr. Ashish Kumar Malik

### ABSTRACT

Mental and behavioral problems are known to result from brain dysfunction attributable to specific organic factor, and form the basis for organic psychosis. This entity includes disturbances of sensorium, cognitive impairments, psychotic symptoms, along with behavioral or personality changes which may be acquired after a period of typical development. Psychiatric symptoms may first bring such a person to medical attention, and may effectively over-shadow the indicators of organicity. This is case report of a 45 years old male presented with socially withdrawn behavior, muttering to self and poor self-care with other significant findings suggestive of a diagnosis of organic Psychosis.

### Highlights:

- Brain dysfunction secondary to an organic insult forms the basis of organic psychosis.
- Features of organic psychosis may include disturbances of sensorium, impairments of higher mental functions, psychotic symptoms as well as behavioral or personality changes.
- Literature has attributed encephalomalacia with increased risk of psychotic symptoms.
- Diagnosis may be compounded by a lack of significant past history and is frequently associated with poor prognostic outcome.

**Keywords:** Brain Dysfunction; Organic Mental Disorder; Hallucination; Psychoses.

### INTRODUCTION

Mental and behavioral problems are known to result from brain dysfunction

attributable to specific organic factor, and form the basis for the diagnosis of organic psychosis. <sup>[1]</sup> This entity may include disturbances of sensorium, cognitive impairments as well as psychotic symptoms like delusions, hallucinations, mood and emotional disturbances along with behavioral or personality changes which may be acquired after a period of typical development. <sup>[2]</sup> Encephalomalacia in particular, that reported in the periventricular as well as parietal regions of the brain, has been associated with an increased risk of psychoses. <sup>[3]</sup> Previous studies including that of Holt et al <sup>[4]</sup> found that lesions in the white matter of the parietal lobe disrupt fronto-parietal connectivity and might be responsible for the motor deficits as well as the social dysfunction and negative symptoms analogous to schizophrenia patients. <sup>[3]</sup> This is in synchrony with the suggestions of Yildiz et al <sup>[5]</sup> that structural and functional alterations might start in the parietal lobe and progress to the frontal regions in a small proportion of individuals with emerging schizophrenia.

### CASE HISTORY

A 45 year old unmarried male, with no formal education, a tailor by occupation, currently not working for past 10 years, from rural background was brought to PGIMS Rohtak, Haryana, India by his brother with an illness insidious in onset and continuous in nature, characterized by not

going to work, inappropriate laughter, excessive smoking for 10 years along with decreased sleep, muttering to self and unprovoked aggression for past 1 year.

A change in the behavior of the patient was noticed when at his elder brother's marriage, he started crying badly in the middle of the function for no apparent cause. He cried loudly for about 2 hours and all the attempts by the family members to console him went into vain. After the function was over, he did not sleep at night, appeared restless, roaming here and there in the house.

For next few days, he appeared irritable over trivial matters. He stopped going to his work and on being forced would get agitated.

His sleep was also noticed to be decreased to 3-4 hours in the night, while he continued to smoke bidis and roam about in the house restlessly. At times, he was also noticed to have started laughing without any apparent reason.

At that time his appetite as well as self-care were normal.

He was taken to multiple faith healers but to no avail, following which he was taken to a private practitioner also but he refused to take medications prescribed. Gradually it was observed that his sleep improved without medications. He started doing some household/ field work assigned to him under supervision like watering fields, getting animals. While his house was being constructed, he helped in construction work by taking material from one floor to the other.

Throughout the day, he would continue smoking bidis, one after the other and on being refused became irritable, his laughing continued along with gradual decline in self-care. As such he stopped brushing teeth, washing hands after going to toilet and upon being forced became abusive. As per family members, he had not taken bath for years now.

Since last 1 year, he is noticed to be talking to self in forms of questions and answers, following which would start

singing songs, laughing loudly or hurling abuses for no apparent reason.

There was no history of seizure, head trauma, forgetfulness, suspiciousness, substance abuse. No history of low mood, suicidal ideas, hopelessness, worthlessness, helplessness was elicited.

Nothing suggestive of any contributory family history with birth and developmental history being normal. Patient remained unmarried initially owing to poor financial condition of the family and later on due to illness. There is history of bidi smoking for 30 years in dependence pattern. Pre-morbid personality was well adjusted. On GPE, power was reduced to 4/5 in left upper and lower limb.

On mental status examination patient was hard of hearing. Eye to eye contact was made but not maintained, rapport was not established. Speech only in response to question and his affect was inappropriate. Formal thought disorder could be elicited as derailment. Patient categorically denied hallucinations.

His attention was not found to be sustained on higher mental function assessment.

Upon MMSE his score was obtained as 13, suggestive of severe cognitive dysfunction. MRI suggested periventricular as well as right fronto-parieto-temporal encephalomalacia with gliosis along with other chronic ischaemic changes also. His serum vitamin B<sub>12</sub> level was low and was started on injectable vitamin B<sub>12</sub> in accordance with the recommendation of the neurologist.

Based on history, clinical assessment, GPE, cognitive assessment as well as radiological findings along with the opinion of the neurologist, a diagnosis of "organic psychosis" was kept. Patient was admitted and started on Tab Risperidone 2 mg, Tab Clonazepam 1 mg in divided doses, with dose of anti-psychotic medication being adjusted as and when required. He showed gradual improvement in response to medications and his muttering to self and self-care improved significantly.

## DISCUSSION

The literature points towards Inflammatory and infectious conditions being involved in the development of encephalomalacia, which although were not appreciable in the history of the index patient but the insult to brain tissues was evident in the findings of the MRI.

The fronto-parietal cortex is involved in various neuropsychological functions that are impaired in schizophrenia patients, such as the social functioning, senses, cognitive and executive function, and self-awareness. [6,7]

Literature suggests that individuals with such an extensive lesion in the brain have a poorer outcome or are difficult to treat. Moreover, they have been difficult to diagnose in terms of given history and observed symptoms. Hence, this case report is unique as the index case has a rather satisfactory outcome with treatment.

## ACKNOWLEDGEMENT

We acknowledge the support of the patient. The case study and writing of the manuscript was with the authors.

### Funding Source:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## REFERENCES

1. Cummings JL. Psychosis in neurologic disease. Neurobiology and pathogenesis. Neuropsychiatry, Neuropsychology and Behavioral Neurology 1992;5:144–150.
2. Davison K, Bagley CR. Schizophrenia-like psychoses associated with organic disorders of the central nervous system: a review of the literature. In: Herrington, R.N. (ed.) Current Problems in Neuropsychiatry. British Journal of Psychiatry 1969;4.
3. Pan F, Wang JY, Xu Y, Huang M. “Abnormal Parietal Encephalomalacia Associated with Schizophrenia: A Case Report”. Medicine 2017;96(10):e6310.
4. Holt DJ, Boeke EA, Coombs G. Abnormalities in personal space and parietal-frontal function in schizophrenia. Neuroimage Clin 2015;9:233–43.
5. Yildiz M, Borgwardt SJ, Berger GE. Parietal lobes in schizophrenia: do they matter? Schizophr Res Treatment 2011:581-686.
6. Gottlieb J. From thought to action: the parietal cortex as a bridge between perception, action, and cognition. Neuron 2007;53:9–16.
7. Antonova E, Sharma T, Morris R, et al. The relationship between brain structure and neurocognition in schizophrenia: a selective review. Schizophr Res 2004;70:117–45.

How to cite this article: Srivastava V, Singh S, Prasad SK et.al. Evaluating the dilemma of organic psychosis: a case report. International Journal of Science & Healthcare Research. 2019; 4(1): 72-74.

\*\*\*\*\*