TRANCE AND POSSESSION LIKE SYMPTOMS IN A CASE OF CNS LESION: A CASE REPORT

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ABSTRACT

Trance and possession symptoms along with religious and mystic experiences are commonly seen in Indian patients. Though, commonly conceptualized under the rubric of dissociative disorders, possession like symptoms can be present in variety of clinical conditions. Trance and possession syndrome results from a variety of central nervous system involvement. We report here such a case with lesion in the basal ganglia and fronto-patietal lobes. Pathophysiology and cultural connotation of the symptoms is discussed.

Key Words: Trance, Possession, Culture-bound, Neurological.

Possession trance is characterized by a transient alteration in identity whereby one's normal identity is temporarily replaced (possessed) by a spirit, ghost, deity, or other person. Descriptions of possession trance are found in a variety of cultures and have been most studied in India (Ahuja & Hebbar, 1999). The current classificatory system, include this disorder under the rubric of dissociative disorders (WHO, 1992). However, possession like states is common in other psychiatric disorders like schizophrenia, mania, OCD and depression (Teja et al., 1970). Possession states along with religious and mystic experience are also known to occur during hyperactivity of the limbic system and with temporal and frontal lobe lesions (Joseph, 1997). We report a case, which presented as trance and possession disorder, but on further investigation showed unequivocal evidence of CNS lesion.

CASE HISTORY

Index patient P.D, a 47-year old married Hindu female presented at our Institute with complains of episodes of being possessed by ghost for the last one year. During these episodes, she would start shaking her body and head in gyrating movements; she would be unaware of what was going around her, she would say that she is sent by her husband's dead sister-in-law to kill her husband; at other times, she would claim that she was a demon. She would not eat anything during these episodes and would claim that she can't see the food served before her. At times, she would utter completely irrelevant and incomprehensible speech. Such episodes would
occur two to three times per day and would last for two to five hours each. She would have such episodes almost every day. She would say that she could control the utterances to some extent but not the movements. Gradually, she started remaining sad most of the time, her appetite was reduced and she lost a lot of weight. She did not have any significant loss of socio-occupational functioning. There were no depressive cognitions or death wishes. There was nothing to suggest any other neurotic, somatoform and stress-related disorders, or any psychotic features.

There was no contributory family or personal history and no past mental or physical illness. No abnormality was detected on a detailed physical examination. Mental status examination was unremarkable except for an anxious affect; preoccupation with the thoughts related to possession, hypnogogic tactile hallucination and impaired immediate memory.

She was taken up for psychological assessment, which showed poor attention and concentration. Bender Visuo-Motor Gestalt test (Bender, 1946) showed a score of 24, which was 15 points more than the cut-off point, indicating organicity. On Beck’s depression inventory (Beck & Beck, 1972) her score was eight indicating no depression. An EEG was performed which showed bilateral theta waves and the beta asymmetry on the temporal region, indicating a possibility of structural lesion (Green & Wilson, 1961). The MRI showed multiple hyperintense lesions involving the left putamen, bilateral globus pallidus, and bilateral fronto-parietal deep white matter. To see if they were of ischemic origin, a 99mTc TCD brain SPECT was performed which revealed no areas of hyperperfusion globally or regionally throughout the brain gray matter. Her thyroglobulin and Vitamin B₁₂ were within normal range.

She was started on Nortryptiline 75 mg and Thioridazine 50 mg, which was later raised to 100 mg each. On these doses, she responded well with the reduction in the number and intensity of “possession” episodes and improvement in mood and socio-occupational functions within one year of treatment. The doses were gradually tapered over another year and a half and currently she is only on Nortryptiline 25 mg and free of symptoms.

DISCUSSION

The clinical presentation of this case suggests a diagnosis of trance and possession disorder (Ahuja & Hebbar, 1999). Though the depressive cognitions were not in the forefront, the presence of depression in this case is evidenced by loss of sleep, appetite and low mood. The occurrence of the depression is expected, as depression is the commonest comorbid diagnosis in cases of possession disorder (Bhatia, 1999). Nevertheless, what distinguishes this case is the occurrence of the CNS lesions.

A detailed neurological examination, revealed no neurological abnormality. However, neuropsychological examination showed the evidence of organicity. The EEG showed bilateral theta waves and the beta asymmetry on the temporal region, indicating a possibility of structural lesion (Green & Wilson, 1961). The MRI showed multiple hyperintense lesions involving the left putamen, bilateral globus pallidus, and bilateral fronto-parietal deep white matter.

The involvement of the basal-ganglia structures and the frontal lobe, which are known to cause depression (Tiffney & Jeffrey, 2000) can explain the depressive symptoms in this case. The episodes of abnormal behaviour in which the patient would claim to be a different individual are difficult to explain. Description of such states is common in Temporal lobe epilepsy especially in cases of limbic seizures (Mesulam, 1981). In this case, however, there is little evidence of any temporal lobe abnormality except for the EEG abnormality. Nevertheless, the occurrence of depression can independently explain the occurrence of possession like episodes, as these are a common occurrence in depression especially in Indian set up (Bhatia, 1999). The apparent response to antidepressants and antipsychotics only without any need for antiepileptics is also a proof of the underlying depression being
responsible for the symptoms only. This case hence, gives a new dimension of conceptualization of possession like states in presence of a structural CNS lesion. The structural lesions here, were primarily responsible for the underlying depression, which in turn was responsible for the possession like states.

Current nosological system places ‘trance and possession’ disorders under the general rubric of dissociative disorder (ICD-10) implying a psychological causation of symptoms. However, this case amply exemplifies the presentation in conditions with unequivocal evidence of CNS lesion as well. This case thus proves that cases of gross neurological lesions can have a presentation akin to the so-called “culture-bound syndrome”. Presentations of multiple personality disorder involving limbic epilepsy have been noted before in Western set up (Mesulam, 1981). Cases of temporal lobe epilepsy presenting as Voodoo possession have been reported by Carrazana et al. (1999). Our case along with the cases described by Mesulam (1981) and Carrazana et al. (1999) exemplifies the cultural connotations in the manifestations of CNS lesions. In the western set up these kind of presentations are diagnosed as multiple personality disorder where as in India and in the African countries these get a primary diagnosis of Trance and Possession disorder and Voodoo Possession respectively. Hence, a detailed neurological evaluation and the possibility of an underlying neurological abnormality have to be kept in mind for every case presenting with trance and possession like presentation. The possibility of lesions other than only temporal-lobe epilepsy should also be kept in mind in such cases as well.

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