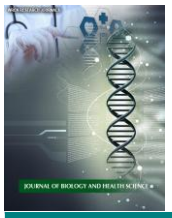

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Case Report

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Diagnostic Difficulties in SSPE with Igg Measles Antibody and Unpredictable Psychiatric Presentations-A Case Report

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Abstract

SSPE is a rarely encountered neuropsychiatric disorder. Diagnosis rests on laboratory findings and clinical presentations. Sometimes, SSPE may mimic common psychiatric illnesses and pose diagnostic difficulties. I am reporting a case where initial presentations of the patient prompted us to work up on the line of SSPE but later turned out to be bipolar depression.

Key words: SSPE; Bipolar depression; Catatonia

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Introduction

SSPE (Subacute Sclerosing Panencephalitis) is a rarely encountered neuropsychiatric disorder seen in psychiatry practice. The great majority of cases occur in children or adults. Classic cases present with insidious deterioration of intellectual functions with forgetfulness and inattention. Patients may present with nocturnal delirium and hallucinations, lethargy and uncontrollable behavior. Patients may develop myoclonic jerks involving face, fingers and limbs (Lishman's organic psychiatry: A textbook of organic psychiatry, 4th Edition). Not much cases have been reported of SSPE mimicking psychiatric illnesses. This case report highlights how laboratory parameters can misguide and let the psychiatrists miss the commonly encountered psychiatric illnesses like Depression and get confused with SSPE.

Case Report

A 33-year-old married man was brought to psychiatry OPD with complaints of using alcohol for past 13 years in dependence pattern; complaints of poor interaction, poor self-care, poor eye contact, poor oral intact, staring behavior, restlessness, repetitive behavior such as moving the body back and forth, crying spells without any trigger, urinary incontinence for past 1 month. The current episode was abrupt in onset, continuous in course and divorce with wife being possible precipitating factor. Patient had history of 3 episodes in the past, lasting for 1-2 months wherein patient had unprovoked anger outbursts, sleeplessness, big talks, increased spending and increased energy. There was history of psychiatric illness in patient's mother and maternal grandfather and history of suicidal death in his elder brother. On examination: BP was 206/185; Pupils b/l moderately dilated but equally reactive to light; b/l hyperreflexia in biceps, brachioradialis, triceps, knee and unstained Clonus in Achillies tendon reflex; flexor plantar reflex. Gait was slow with poor arm swing, mild rigidity and patient was mute, staring vacantly and looked withdrawn from the environment; relevant investigations were sent **(Table 1)**. Initially, patient was started on Injection Lorazepam given in divided doses up to 10 mg a day, as patient was suspected of having catatonia, which was subsequently tapered down. Patient scored 15, on BFCRS. Patient was also administered Tab Promethazine 50 mg, Tab Amantadine 100 mg, suspecting possible EPS due to unknown medications given at rehab center as patient was having slow gait, diminution in swing and mild rigidity. His raised blood pressure was controlled with Tab Amlodipine 10 mg OD and Tab Propranolol 40 mg OD and Tab Thiamine 300 mg OD was added. With course of time, his restlessness increased and patient kept moving his limbs

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back and forth in the bed. A CSF sample was sent for analysis, as patient had history of measles infection in childhood, which tested positive for IgG Measles antibody (14.1 NTU) **(Table 2)**. Patient tested negative for CSF Autoimmune encephalitis mosaic and ANA profile. MRI Brain revealed left Otomastoiditis and MRI cervical spine revealed early degenerative changes in cervical spine. chest x-ray didn't reveal any major anomaly **(Figure 1)**.

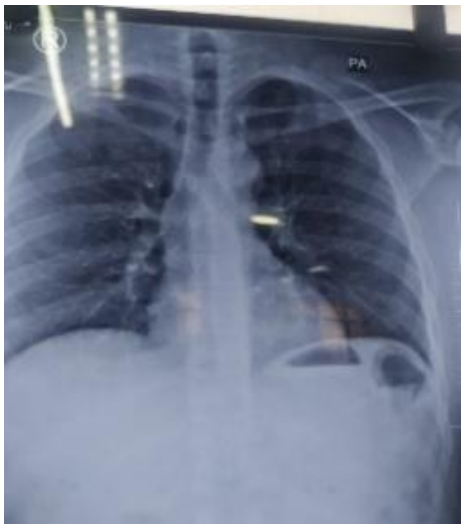

Figure 1: Chest X-Ray of 33-year-old psychiatric illness patient.

Table 1: Parameters and results of patient.

Parameter name	Result	Ref range and unit
Calcium	8.65	8.6-10 mg/dl
Creatinine	0.72	0.7-1.3 mg/dl
Potassium	3.63	3.5-5 meq/l
Sodium	140.66	135-145 meq/l
Urea	18.88	13-43 mg/dl
A/G ratio	1.32	1.5-2.5 g/dl
AST	32	<37
ALT	43	13-40
Total protein	6.69	6.4-8.3 g/dl
Vitamin B_{12}	380	211-911 pg/ml
Vitamin D	43	30-100 ng/ml
HIV	non-reactive	
HBS antigen	non-reactive	
Anti-HCV	non-reactive	

Table 2: Sample type- CSF.

Parameter name	Result	Ref range & unit
Glucose	68.6	40-70 mg/dl
Protein	32.08	15-40 mg/dl
ADA	4.59	0-5 U/L

We further added Tab Prednisolone 10 mg OD in view of likelihood of SSPE and Tab Ropinirole 1 mg BD to relieve the restlessness in legs. Patient was discharged from the hospital on improvement in biological functions and on caregiver's request. Within 5 days, however, patient was brought back to the hospital with complaints of increased restlessness, attempts at self- harm, crying spells and poor self-care. This time we revised the diagnosis to BPAD current episode, depression, in view of poor response to previous treatments, past history of manic episodes and current symptoms suggestive of depression. Patient was started on Injection Lorazepam 2 mg i.v. BD; Tab Quetiapine 100 mg HS; Tab Sertraline 100 mg OD; Tab Trihexyphenidyl 2 mg BD and Tab Propranolol 20 mg OD. With the change in diagnosis and treatment, there was significant improvement in patient's interaction and restlessness within few days. There was no more, any crying spells and his biological functions had improved.

Discussion

In a systematic review, schizophrenia, catatonia and ill-defined psychiatric disorders were common presentations in 60% of diagnosed SSPE cases. Affective disorders, mania and depression were reported among 23% (7/32) cases. Measles antibodies detected in the CSF using CF, HI or NT methods are highly suggestive of SSPE because of the low sensitivity of these detection methods. However, antibody detection using Immunoglobulin G (IgG)-specific EIA may not directly indicate SSPE because of its high sensitivity. However, the level of CSF measles antibody detected by IgG-specific EIA that is required to indicate SSPE remains unclear. Dyken's criteria are valuable tools to assist in the diagnosis of SSPE [1].

Subacute sclerosing panencephalitis is an important cause of Rapidly Progressive Dementia (RPD) in some countries with low current or past rates of vaccination for the measles virus. Owing to their typically acute onset with seizures and altered conscious state, these infections are not usually considered in the differential diagnosis of RPD, but are reported to be potential mimics and are important to exclude in patients with severe RPD with an accelerated disease course [2].

Conclusion

Commonly encountered psychiatric illnesses can sometimes mimic like other neurological disorders. A laboratory parameter must be clinically correlated before arriving at a firm diagnosis.

Informed Consent

Written informed consent was taken from the patient for the publication of this case report.

Conflict of Interest

None.

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No funding has been done for this study.

Author Contribution

Entire work of this study has been done by the corresponding author.

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