

Case Report

# Bipolar Mood Disorder and Concurrent Medical Multicomorbidity

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## ABSTRACT

Management of comorbidity especially if they are multiple is one of the new challenges in clinical practice. In clinical psychiatry although psychiatric comorbidity is often diagnosed and managed appropriately the medical comorbidity is not often recognized, diagnosed, evaluated and treated. We are reporting a case of bipolar mood disorder with multiple concurrent medical comorbidity. This 60 year old patient is diagnosed to have Hypothyroidism, Diabetes Mellitus, Hypertension, Tardive Dyskinesia and Parkinson's Disease in addition to Bipolar Mood Disorder. Management of the medical comorbidity and the difficulties and importance are briefly discussed.

**Key Words:** Medical Comorbidity. Concurrent Comorbidity. Multicomorbidity.

## INTRODUCTION

The presence of multiple disorders and diseases in most patient populations has been increasingly well recognized. Comorbidity and multicomorbidity represent one of the modern challenges in clinical practice and academic medicine. In clinical practice including psychiatry the comorbidity and multicomorbidity are underrecognized, underdiagnosed, undervalued and undertreated. [1,2]

There are inherent difficulties in defining the concept of comorbidity. Feinstein introduced the concept of comorbidity in medicine in 1970. [3] He defined it as 'any distinct additional entity that has existed or may occur during the clinical course of a patient who has the index disease under study'. The question of which entity should be considered as the index is a debatable issue. This definition implies that both life time and concurrent additional conditions are included in

comorbidity. Goldberg observes that the term comorbidity could be better reserved for coexistence of physical and mental disorders only. [4] Multicomorbidity indicates that there are multiple diseases in a patient in addition to the index disorder. [3] Most of the definitions given are more or less similar except for minor differences [1,2,5,6] There are different kinds of relationships among the comorbid disorders based on which there are different classifications of comorbidity and multicomorbidity such as etiological and non etiological, primary and secondary, concurrent (simultaneous) and successive (sequential), causal and random, unidirectional and bidirectional, complicating and non-complicating, homotypic and heterotypic, concordant and discordant organic and non organic and medical and psychiatric comorbidity. [1,2]

Clinical and epidemiological investigations indicate that both lifetime and

concurrent psychiatric and medical comorbidity are common in patients with Bipolar Mood Disorder.

Majority of patients with BPAD of all ages and gender have at least one comorbid medical or psychiatric disorder and may have multiple comorbidity. High rates of prevalence of medical comorbidity and consequent decrease in life expectancy and increase in premature death rates in patients with bipolar disorder are reported in recent studies. [7-14]

### CASE REPORT

A 60 year old obese gentle man was brought to psychiatry outpatient department of Father Muller Medical College on XXX X 2010. He had been on treatment for Bipolar Affective Disorder since 1970 and had used multiple medications including first generation antipsychotics and lithium for many years. He was referred to our OPD due to poor response to treatment in terms of incomplete remission of the episodes and increasing frequency of episodes. During first contact patient had a severe depressive episode with psychotic symptoms (delusion of infidelity). Involuntary choreo-athetoid movements in the BLM regions and tremors of extremities were conspicuous during first clinical examination. A possibility of tardive dyskinesia (TD) and drug induced extrapyramidal symptoms (EPS) were considered by the treating psychiatry unit. Elevated blood pressure was recorded. Patient was hospitalized in a private ward in the general hospital under psychiatry unit. Investigations revealed laboratory evidences in favor of hypothyroidism and type 2 diabetes mellitus. On consultation physician and endocrinologist confirmed clinical diagnosis of essential hypertension, hypothyroidism and diabetes mellitus. As advised by the consultants further investigations were done and he was given thyroxine, oral hypoglycaemic agents and antihypertensive medicines. Neurology opinion was sought for the movement disorders. A diagnosis of early drug induced parkinsonism was made by the neurologist.

MRI showed mild cerebral atrophy. The abnormal movements did not improve with amantadine, trihexyphenidyle and a trial of tetrabenazine. Subsequently during his follow ups in 2012 he developed unilateral rigidity and later asymmetrical rigidity and PISA syndrome on two occasions. As there was more unilateral rigidity and axial instability during later visits the neurologist revised his diagnosis to Parkinson's Disease in addition to TD. Currently in addition to Bipolar Mood Disorder in remission he has the following medical comorbidity, Hypothyroidism., Type 2 Diabetes Mellitus, Hypertension, Tardive Dyskinesia and Parkinson's Disease.

Regarding the treatment of his bipolar disorder we did not consider giving lithium, olanzapine, clozapine, risperidone and first generation antipsychotics in view of hypothyroidism, diabetes, TD and PD. Divalproate was initiated along with aripiprazole. The psychotic symptoms did not respond to aripiprazole and subsequently ziprasidone trial also failed. He was given amisulpiride along with divalproate. Patient had remission of mood and psychotic symptoms but both TD and PD worsened. We were constrained to replace amisulpiride with quetiapine. Mood and psychotic symptoms remitted gradually without much impact on hyperglycemia and little worsening of TD and PD. Upon reduction of dosage of quetiapine there were recurrences of mood symptoms. Hence patient was maintained on divalproate and quetiapine. Since 2014 his PD worsened and the motor deficits are his major limitations at present.

### DISCUSSION

This patient has five concurrent medical (physical) comorbidity in addition to the index psychiatric morbidity (BPMD). They are two endocrine, one cardiovascular and two neurological comorbidity. It could be conceived that probably hypertension, diabetes and hypothyroidism are random concurrent morbidity independent of the BPMD. But at the same time one can argue

that there is a possibility of all being induced or triggered by second generation antipsychotics (olanzapine) and mood stabilizer (lithium). It could be conceived that diabetes and BPMD are probably causal bidirectional concurrent comorbidity and not just a random comorbidity. TD is a comorbidity due to the treatment options resorted to earlier in treatment. PD could be considered as a sequential discordant medical comorbidity.

This case report illustrates the importance of the psychiatric management in addition to the pharmacological management of mood disorders as recommended by the practice guidelines. Medical as well as psychiatric comorbidity are the rule and not exception in BPMD. Diagnostic evaluation is a must in all patients. The diagnostic evaluation shall not be considered as a one-time process and subsequently ignored. Proper monitoring for both the index as well as the comorbidity should be a continuous management option. The most suitable drugs and monotherapy whenever possible should be the choice as per evidence based guidelines. The multicomorbidity like in this patient will drastically reduce our pharmacological treatment options. Disease- disease interactions, drug- disease interactions and drug- drug interactions produce substantial limitations, impediments and compromise in the treatment of the index disorder and the multicomorbidity. The short term and the long term prognosis are adversely affected by the medical comorbidity. Patients with mood disorders are reported to be more vulnerable to develop neurological adverse effects like TD, diabetes mellitus and hypothyroidism. The case reported illustrates clearly the limitations and complexities in management of such patients and the need for a subspecialty to manage such patients with competence and expertise. [10,12-14] The case reported also indicates that such modern clinical challenges may provide opportunities to bring together the separated specialists and super- specialists in medicine. [1,10,12,14]

## CONCLUSION

Medical comorbidity and medical multicomorbidity are common in BPMD. Early diagnosis and proper management of the BPMD as well as the comorbidity are of great importance. Medical comorbidity has adverse impact on treatment and outcome of BPMD. Evidence based proper psychiatric and pharmacological management as suggested by guidelines may help us in most clinical situations. Monitoring for a medical comorbidity should be a continuous management strategy and shall not be a one-time clinical exercise.

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