Case Report

CONSEQUENCES OF THE MISDIAGNOSIS OF BIPOLAR DISORDER AS BORDERLINE PERSONALITY DISORDER

by

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KEY WORDS

Bipolar disorder, borderline personality disorder, misdiagnosis, deliberate self-harm, economic burden

Abstract

Context: *This case illustrates the emerging concept of bipolar spectrum disorder.*

Report: *We report the case of a 26-year-old patient with bipolar spectrum disorder who was misdiagnosed with borderline personality disorder. In spite of trials of various psychotropic drugs and frequent, prolonged hospitalizations, the patient had remained chronically symptomatic. Following a detailed examination of the longitudinal illness course and confirmation of the diagnosis of bipolar spectrum disorder, antidepressants were discontinued and the patient was treated with lamotrigine and quetiapine. This treatment resulted in sustained euthymia and cessation of deliberate self-harm in addition to a significant reduction in utilization of health resources.* **Conclusion:** *Antidepressants are known to cause treatment refractoriness in patients with a bipolar diathesis. Hence the need for caution and a longitudinal history in diagnosing individuals with an apparent personality disorder*

Borderline personality disorder occurs in 1 to 2% of the general population and is arguably the most common personality disorder encountered in clinical settings[1] affecting about 10% of psychiatric outpatients and up to 20% of inpatients[2].

The relationship between borderline personality disorder and bipolar disorders remains controversial[3-5]. The overlapping symptoms between the 2 disorders such as affective instability, unstable interpersonal relationships, and impulsivity contribute to the diagnostic confusion. Among young people the presence of mixed episodes makes it difficult to distinguish between borderline personality disorder and an emerging bipolar disorder [6]. Subsyndromal symptoms that occur interepisodically in patients with bipolar disorder may resemble borderline psychopathology[6].

The consequences of misdiagnosis of bipolar disorder as borderline disorder can be serious, as patients may not receive optimal treatment. We present the case of a patient with bipolar spectrum disorder who was misdiagnosed as having borderline personality disorder and discuss the clinical and economic consequences of misdiagnosis and mismanagement.

Case History

Background

Mrs. D is a 26-year-old unemployed, happily married lady who developed symptoms of anorexia nervosa at the age of 15. The onset of symptoms coincided with her sexual abuse by a former boyfriend. Her first contact with psychiatry was at the age of 17 when she was hospitalized for anorexia nervosa. After discharge from hospital, the patient continued to struggle with symptoms of the eating disorder. However; she coped quite well over the next 3 years. The start of a new relationship with her current husband at the age of 21 appeared to trigger thoughts of her previous abuse and she developed symptoms of depression including sad mood, anhedonia, social withdrawal, disrupted sleep, decreased appetite, lack of energy, poor concentration, and thoughts of suicide. She denied having any symptoms of (hypo)mania or psychosis and there was no history of substance use disorders. Family history revealed presence of depression on the paternal side and anxiety disorders on the maternal side.

Treatment history

Over a 4-year period, she was tried on multiple psychotropic medications including antidepressants, neuroleptics, and benzodiazepines but never received mood stabilizers. There was an initial response to some of the antidepressants but the improvement was not sustained. In addition to medication management she also participated in intensive individual and group psychotherapy.

Soon after introduction of antidepressants she began to engage in self-harm initially on a weekly basis and gradually the self-mutilation in the form of cutting became a daily

occurrence. There had been episodes of self-harm on a couple of occasions as a teenager but never on a consistent basis. She had made 63 visits to the emergency department over a 4-year period including 5 visits for drug overdoses, 16 for suicidal ideation, and 42 for self inflicted lacerations. She had required 11 admissions to the inpatient psychiatry unit, 1 admission to the mood disorders unit and there were at least 65 outpatient hospital visits, which did not include weekly psychotherapy sessions. She was given multiple diagnoses including post-traumatic stress disorder, anorexia nervosa–restricting type, major depressive disorder, and dependant personality disorder but borderline personality disorder remained the main diagnosis. Interestingly, a formal personality assessment by a community psychologist showed no evidence of Axis II psychopathology.

Admission to the Mood Disorders Program

Mrs. D was referred to the Mood Disorders Program with a history of refractory depression and chronic suicidal ideation. She presented with symptoms of low mood, irritability, anger, racing thoughts, low energy, poor concentration, reduced interest and sleep disturbance. Her appetite was low but her weight had been stable. The Structured Clinical Interview for DSM IV [7] confirmed the current diagnosis of major depressive disorder and lifetime diagnoses of anorexia nervosa-restricting type, and post-traumatic stress disorder. According to the SCID -I there was no evidence of a bipolar disorder.

Her medications at the time of admission included nortriptyline 50 mgs, quetiapine 100 mgs, and trazodone 200 mgs a day. She was weaned off the antidepressants due to lack of effectiveness. Moreover, there was the evidence that antidepressants had lead to induction of mixed episodes. The quetiapine dose was optimized to 150 mgs and she was started on lamotrigine that was gradually increased to 200 mgs a day. During the 6 months following her discharge, she had 3 emergency department visits but there were no admissions to hospital. During this period she had reduced the lamotrigine dose to 150 mgs due to financial concerns about her ability to pay for the drug costs. Once drug coverage was obtained the lamotrigine dose was increased to 200 mgs and quetiapine to 300 mgs a day. Over the past 1 year she has not had any visits to the emergency department and she has not engaged in self-harm behavior.

Economic Burden

We calculated the economic burden associated with emergency room visits and hospital admissions based on the case costing database at London Health Sciences Center. This included the costs incurred for inpatient services, meals, lab analysis, electrocardiogram, pharmacy medications, occupational therapy and clinical nutrition. Over a 51-month period prior to her admission to the Mood Disorders Program, the total cost was calculated at $102,968 with an average yearly cost of $24,228. Since being diagnosed with bipolar spectrum disorder and managed with lamotrigine and quetiapine, she has had 3 visits to the emergency department and no admissions to hospital. The total cost incurred over this 12-month period was $627. The cost of outpatient pharmacy medications was not included.

Discussion

The patient's primary diagnosis prior to admission to the Mood Disorders Program was borderline personality disorder. However, a closer examination of the longitudinal course suggested a diagnosis of bipolar spectrum disorder as proposed by Ghaemi and colleagues [8].

Table 1. A proposed definition of bipolar spectrum disorder

A. At least one major depressive episode
B. No spontaneous hypomanic or manic episodes
C. Either of the following, plus at least 2 items from criterion D, or both of the following plus 1 item from criterion D:
   1. A family history of bipolar disorder in a first-degree relative
   2. Antidepressant-induced mania or hypomania
D. If no items from criterion C are present, 6 of the following 9 criteria are needed:
   1. Hyperthymic personality (at baseline, non depressive state)
   2. Recurrent major depressive episodes (>3)
   3. Brief major depressive episodes (on average, < 3 months)
   4. Atypical depressive symptoms (DSM-IV criteria)
   5. Psychotic major depressive episodes
   6. Early age of onset of major depressive episode (< age 25)
   7. Postpartum depression
   8. Antidepressant "wear-off" (acute but not prophylactic response)
   9. Lack of response to > 3 antidepressant treatment trials

From: SN Ghaemi, JY Ko, FK Goodwin (8), reproduced with permission.

The patient met criteria A and B as well as six D criteria including hyperthymic personality, recurrent major depressive episodes, brief major depressive episodes, early age of onset of major depressive episodes, antidepressant wear-off and lack of response to >3 antidepressant treatment trials (Table 1).

Despite trials of several antidepressants used alone or in combination with neuroleptics, she remained highly symptomatic and engaged in self-abusive behavior on a daily basis. It was only upon discontinuation of antidepressants and addition of lamotrigine to quetiapine that she was able to achieve and maintain euthymia. Antidepressants are known to cause treatment refractoriness in patients with a bipolar diathesis [9,10] and may contribute to suicidality by inducing mixed episodes [11]. Increased risk of suicidality in mixed depression may be mediated by irritability and psychomotor agitation [11].

The financial burden associated with the misdiagnosis of bipolar disorder can be staggering but the emotional pain and suffering that the patients and their families endure is of prime concern. Having the diagnosis of personality disorder eventually leads to interactive expectancies of continued poor behavioural control, poor treatment

compliance and poor response to treatment [12]. Patients may feel that they are not being listened to or taken seriously. This can further exacerbate their symptoms as they become desperate and do impulsive things as ‘a cry for help’. Often times they give up on themselves and believe that there is no chance of improvement. This was the case with Mrs. D, who felt that once diagnosed with borderline personality disorder her symptoms were not taken seriously.

Unfortunately, once the patient has been diagnosed as having a personality disorder, psychiatrists often see these patients as problematic and undeserving of medical care [12,13,14]. Without the proper diagnosis and management they continue to place a large burden on the mental health system. This case emphasizes the need to be cautious about diagnosing individuals with a personality disorder based solely on a cross sectional assessment. Importance must be placed on obtaining a detailed longitudinal history to avoid the negative consequences that can be deleterious for both the patient and the mental health care system.

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