

CASE REPORT OF A PATIENT WITH BIPOLAR DISORDER - MIGRAINES AND EPILEPSY

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SUMMARY

Bipolar disorder; migraines and epilepsy are three prevalent conditions, of which little is understood about their pathophysiological processes. Co-morbidities often present between two of these conditions, but it is uncommon for all three to co-exist in a patient. Here, we present a middle-aged gentleman, seen in the outpatient department of a district general hospital in England, who suffers from severe effects of all three disorders, with no other medical history. Clinical difficulties have arisen in the diagnosis and treatment of his bipolar disorder. Management of his depressive episodes with simple selective serotonin reuptake inhibitors and mood stabilisers were either ineffective, or precipitated complicating adverse effects. Persistent use of citalopram is likely to have triggered bipolar disorder, whilst quetiapine induced seizures. The clinical problems presented question the possibility that bipolar disorder; migraines and epilepsy may fall on the same spectrum of disorders. This could contribute towards the complexities in treating his conditions. Further insight into their link and interactions would facilitate diagnoses of these conditions, as well as improve treatment strategies when they are presented co-morbidly.

Key words: bipolar disorder – migraines – epilepsy - case report

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INTRODUCTION

Bipolar disorder; epilepsy and migraines are three common and broad-spectrum disorders, for which their pathophysiological mechanisms still remain uncertain. Epidemiological studies have shown that these conditions often exist as co-morbidities (Ortiz 2010, Ettinger 2005). Similarities in many respects have been described in the literature, suggesting that a common pathophysiological process could explain their comorbid phenomenon. These include disease chronology and symptomatology; response to antiepileptic medication; and genes that are involved (Holland 2012). Co-morbidities between two of these conditions are common, mainly involving migraines, but it is unusual for a patient to have all three conditions. Here, we present the case of a middle-aged gentleman, seen in the outpatient department of a district general hospital in England, who is severely affected by all of these disorders, with no other medical history. This case illustrates that bipolar disorder; migraines and epilepsy may fall on the same pathophysiological spectrum, which would have important implications in the individual management of these conditions.

CASE REPORT

The patient is a 41-year-old self-employed gentleman, presenting with eight year history of depression and mood instability, and one year history of migraines and seizures. The depression was exacerbated two years ago, after having been made redundant and had his house repossessed. Symptoms described included persistent low mood, and feeling like he wants to “curl

up and die”. He had lost motivation in completing his college course, and partaking in other activities of interest. He was also noticed to become increasingly socially withdrawn.

Somatic symptoms include sleep-onset insomnia; nocturnal awakenings, loss of appetite and weight. Further consultations over the course of one year elicited periods of elevated mood. These included overspending money; inappropriate social behaviours, such as phoning friends at early hours of the morning and getting himself into embarrassing situations. This included dancing around in public. He also described staying awake for up to 72 hours due to constant thoughts running through his mind, and works very effectively on his website during this time. These elevated moods can last up to 10 days in duration. In between the high and low moods, he describes feelings of intense anger, when he can attempt to be physically violent towards his mother. These symptoms fitted with a diagnosis of Bipolar II Disorder. His first seizure occurred five days after starting quetiapine, prescribed for his bipolar disorder. He described waking up with a sore mouth, having been doubly incontinent, and felt very drowsy the following day. Despite withdrawal of quetiapine after this episode, he still suffers from approximately four similar nocturnal generalised seizures per month. The diagnosis of epilepsy was made following consultation with a neurologist. Migraines were first documented one year ago. They have been described to be severe, unilateral headaches that are associated with monocular visual loss. They limit activities of daily living, and the patient has reported missing various appointments due to these. The migraines tend to occur during the transition between his high and low moods (Figure 1).

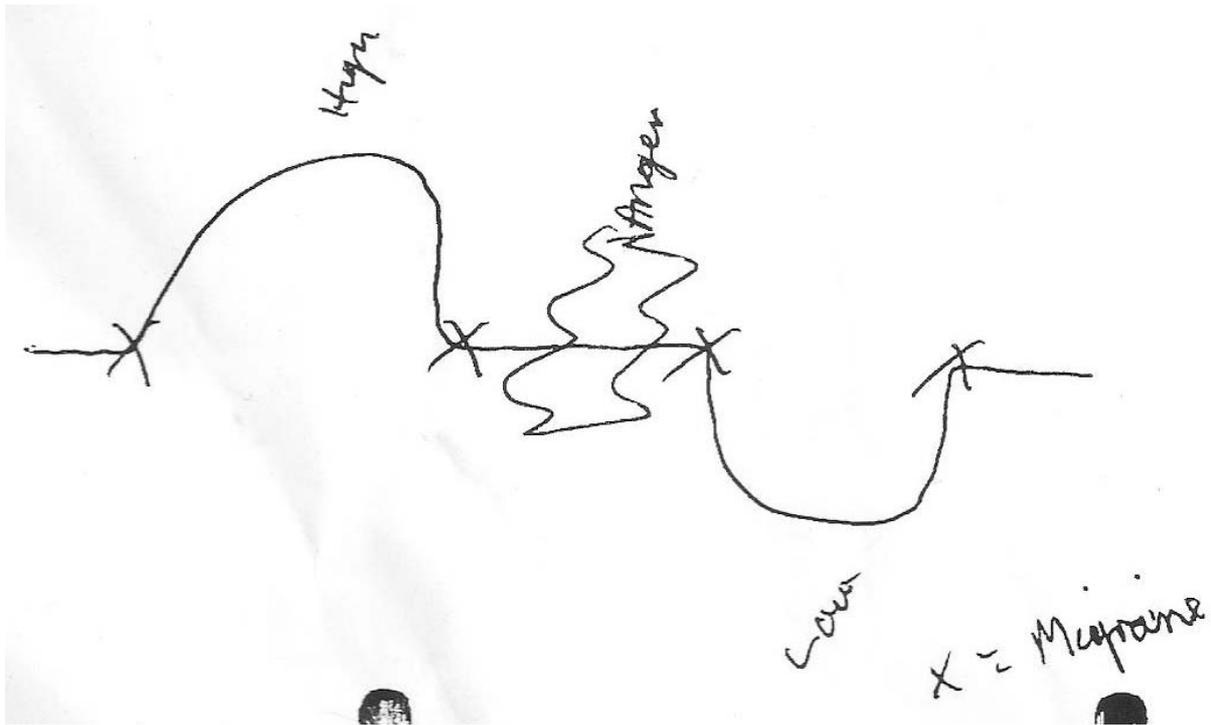


Figure 1. Diagram drawn by patient illustrating temporal relationship between migraines; high/low/angry moods. High and low moods are shown by peak and trough respectively; migraines marked with “X”; and angry state occurs between peak and trough

He also suffers from chronic anxiety, which manifests as agoraphobia and social phobia. This started since a traumatic event at 14 years of age. Psychotherapy throughout the years has had moderate efficacy. Currently, he still experiences palpitations and excessive sweating when in public toilets and crowded spaces. He can also be anxious when using his own bathroom when guests are present in the house, including relatives.

There has been two suicide attempts two years ago, related to the exacerbation of his depression. These were fluoxetine overdoses with alcohol. A cry for help as opposed to suicide intent was described to be the main motivation for these attempts. The patient has no other medical co-morbidities. He experiences eczema on his fingers that worsen during the peaks and troughs of his bipolar mood disorder. There is a positive family history of affective mood disorders. Two aunts have affective mood disorders and alcohol dependence. His paternal grandmother was also described to suffer from “mood swings”. His mood disorder had been unresponsive to fluoxetine; citalopram; lithium and valproate. Lithium and valproate were effective in mood stabilisation, but was of limited use due to intolerable adverse effects. Quetiapine was tried and withdrawn, due to seizure induction. Patient is currently on 250mg of lamotrigine, but is still symptomatic of all three conditions. The current plan is to titrate to higher lamotrigine doses, and reintroduce valproate if necessary. The patient was born by natural vaginal delivery, with no perinatal complications. He reached developmental milestones at appropriate times, and

described a happy childhood and primary school. He was, however, bullied by a group of boys in secondary school. This led to the traumatic incident at 14 years old when he was raped in the school showers by the gang leader. The event went unreported, as the patient was experiencing family stresses at home. He was the primary carer of his paternal grandmother then, and his mother was out of town caring for his maternal grandmother. As such, he has always felt resentment towards his mother, which accounts for his attempted violent actions towards her later in life. He has had a relationship for 18 months at 19 years of age, which unfortunately ended as his partner had been unfaithful. He has had no subsequent relationships. Occupation-wise, he worked for British Telecom for nine years, before being made redundant and immigrating to Australia to seek similar job opportunities. Unfortunately, he was made redundant again after only two months of work there, during which his depressive symptoms commenced. On mental state examination, patient is an average-built Caucasian gentleman, who was always well-kempt and cooperative. His speech was also spontaneous and fluent. He had a reactive affect and negative cognition during periods of low mood, but never held abnormal beliefs or percepts. Insight was always good. Physical examination is always normal, but with noticeable weight loss during his certain low mood exacerbations. Magnetic resonance imaging and electroencephalograms were performed, with normal results. Discussion Figure 2 outlines the timecourse of patient’s symptoms and medical treatment.

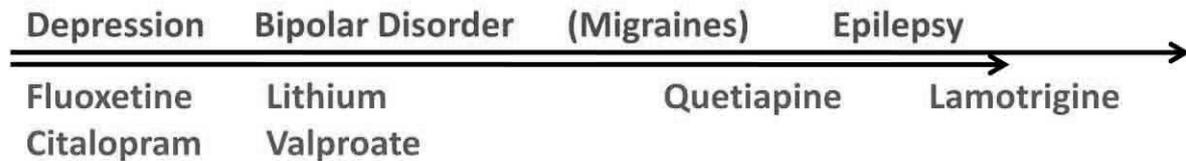


Figure 2. Approximate timeline of patient's symptoms and medical treatment, over a period of two years. Lower arrow indicates timecourse for which citalopram was still taken by patient

Although migraine was first documented one year ago in psychiatry notes, it is likely to have been present for longer. Citalopram, which was initially used to treat depression, had not been withdrawn until very recently. The manic symptoms of his bipolar disorder is thus likely to have been exacerbated by the continuation of citalopram. The onset of his bipolar disorder; on a background of migraines, could have further lowered his seizure threshold, explaining why he became severely disabled by epilepsy despite prompt withdrawal of quetiapine. The late withdrawal of citalopram and commencement of quetiapine were the main therapeutic problems presented with this case. The difficulty with withdrawing citalopram was due to the patient experiencing depressive symptoms for a long period of time. Nevertheless, the efficacy of citalopram as an antidepressant in this case is questionable, and therefore withdrawal at an earlier stage could have been beneficial in avoiding the manic mood exacerbations.

Quetiapine is indicated for the treatment of bipolar disorder, and has been documented to trigger seizures in the literature (Dogu 2003, Yalug 2007). More research into co-morbid conditions that are commonly associated with epilepsy, would provide information on whether patients are more prone to developing seizures when prescribed epileptogenic drugs.

CONCLUSION

Bipolar disorder; migraines and epilepsy are common conditions. However, the co-existence of all

three in a patient with no other medical problems is relatively unusual. This patient is one out of ~1000 patients in the district general hospital psychiatry outpatient department, who has all three diagnoses. Further understanding of the correlations between these diseases would allow better treatment strategies, and avoid exacerbation of co-morbid conditions.

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