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Case report

Quetiapine XR and Restless Legs Syndrome

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Abstract

Restless Legs Syndrome (RLS) is a common condition associated with many medical illnesses and medications. Psychotropic medications (both antidepressants and antipsychotics) may be causal. There have been over twenty cases of RLS due to Quetiapine but no published case reports linking RLS to Quetiapine XR. We present the case of a woman with previously established Bipolar Disorder who presented with RLS following the administration of three doses of Quetiapine XR. RLS occurred after administration of the medication and stopped upon discontinuation. She was taking no other medications, had no other acute medical comorbidities, and had not been abusing substances. Clinicians are encouraged to be aware of the potential for Quetiapine XR to cause RLS. Further studies are needed.

Keywords: Restless Legs Syndrome; Neurological disorder; Psychiatry; Quetiapine

1. Introduction

Restless legs syndrome (RLS) is a common neurological disorder consisting of dysesthesias which are worse in the evening and relieved by movement. It must be differentiated from akathisia which is a distressing feeling of generalized restlessness.

2. Report of the Case

A 56 –year-old woman with a history of Bipolar I Disorder (diagnosed 20 years ago) was admitted to a psychiatry unit for a three week manic episode. She stopped taking her medications (Valproic Acid and Clonazepam) two months prior to admission. She was on no other medications, did not abuse substances and medical history consisted of obesity, hypertension and hyperlipidemia. She had previously been well in the community.

She announced that she planned to fly to another country to meet a man she barely knew. She endorsed poor sleep, rapid speech and was acting impulsively. Because family could not supply her usual psychiatric medications, the resident decided to start her on Quetiapine XR (200 mg hs) for sleep. Clonazepam 0.5 mg po prn was started for possible benzodiazepine withdrawal.

She was admitted on a Friday night and had three doses of Quetiapine XR. She developed restless leg phenomena on the third evening. She slept poorly and requested medication for an uncomfortable sensation limited to her legs. When seen by the attending psychiatrist the following day, medication doses were available and she was re-started on regular Valproic Acid and Clonazepam. She continued to complain of restless legs that evening. Quetiapine XR was discontinued the following day and her restless legs completely resolved. On discharge one month later, she was completely free of RLS symptoms.

3. Discussion

Dopaminergic dysfunction and a change in the regulation of iron homeostasis can lead to iron depletion in the central nervous system and are thought to be involved in the pathophysiology of RLS [1]. Drug-induced RLS

remains an underdiagnosed condition, although it is associated with sleep deprivation, substance abuse and medication non-adherence [2]. Restless legs syndrome is a common side effect of both antidepressant and antipsychotic medications [3].

There are 22 case reports of RLS due to Quetiapine. One paper reported a case of RLS after low dose quetiapine administration [3]. One elderly patient developed RLS symptoms after addition of 50 mg/d quetiapine to preexisting 20 mg/d citalopram treatment. Another patient developed RLS after a single dose of quetiapine was added to preexisting low-dosed paroxetine [1]. One patient developed RLS after combination therapy with lithium and quetiapine but symptoms were reduced by changing the times of administration without reducing the dose of quetiapine [4]. In one case, the combination of quetiapine and venlafaxine was associated with RLS, although each agent singly was not [3]. Rittmannsberger and Werl [5] reported that small doses of quetiapine provoked RLS in a dose-dependent way. Most of their seven case report patients suffered from an affective disorder and all were treated concomitantly with antidepressants. They concluded that Quetiapine seems to carry a special risk for RLS in patients treated with antidepressants for affective disorders.

This is the first case report of RLS due to Quetiapine XR (not Quetiapine) in the medical literature. Since the patient was taking Quetiapine XR (with no other medications), was not abusing substances and had no acute medical issues, the emergence of RLS on initiation of Quetiapine XR points to a likely causal etiology. The resolution of RLS on discontinuation of Quetiapine XR similarly supports a causal etiology. The fact that the patient had a pre-existing affective disorder supports the risk of Quetiapine and associated RLS in the mood disorder population [5].

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