Drug-induced Akathisia and Suicidal Tendencies in Psychotic Patients

DUANGJAI KASANTIKUL, M.D.*

Abstract

Five patients, while being treated with high potency antipsychotic drugs developed akathisia and tended towards committing suicide as a consequence of the inner agitation and restlessness they were suffering. Upon discontinuation of the respective medication or switching to low potency drugs, as well as addition of anti-parkinson drugs or benzodiazepines, the akathisia and suicidal tendencies abated. Clinicians ought to be aware of suicidal impulses emerging in patients suffering from akathisia. By prompt recognition and treatment of akathisia such suicidal tendencies and attempts can be prevented.

The term akathisia was first introduced by Haskovec to describe the inner restlessness and inability to remain still experienced by patients with Parkinson's disease(1). However, reports to date seem to suggest this symptom to be a common and frequently troubling side effect of psychotropic drugs(2,3). Clinically, the patients have a subjective feeling of restless agitation which may be manifested as several diverse behavior patterns, such as irritability, insomnia, hyperactivity and extreme agitation. It has also been associated with strong effects of terror, anger and extreme anxiety. The most serious complication comprises feeling helpless or out of control which might lead to suicidal ideation or attempts(3-5). In the present report, 5 patients are described who experienced such serious side effects upon administration of neuroleptics.

CASE REPORTS

Case 1

A 38-year old, single, unemployed woman suffering from chronic schizophrenia and with a history of repeated hospitalization, typically experienced hallucinations and delusions. For 8 months, she failed to follow-up and her symptoms recurred. Haloperidol decanoate 100 mg was administered. Shortly after having received the injection she reported feeling worse and became more agitated. The patient suffered from an unbearable inner rest-

* Department of Psychiatry, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand.

lessness and an inability to sit still to such an extent that she developed suicidal ideation. Upon diagnosis of akathisia she received trihexyphenidyl 6 mg/day. Subsequently, her distress and suicidal tendencies gradually dissipated in the course of a few days without the need of any antidepressant.

Case 2

A 20-year old, single, unemployed woman with a 1-year history of schizophrenia was admitted to the hospital and initially received perphenazine 24 mg/day. After two days of treatment the patient developed acute dystonia and was given trihexyphenidyl 6 mg/day. Despite improvement of her psychotic symptoms the patient reported severe anxiety and restlessness which made her feel that "death would be a relief". She had the urge to jump through the glass wall. Upon addition of lorazepam 0.5 mg p.o. twice a day, the symptoms of akathisia, as well as suicidal ideation disappeared.

Case 3

A 24-year old, single, man had a 5-year history of bipolar disorder with psychosis. He was hospitalized with symptoms typical of one of his relapses. His subsequent medication consisted of flupentixol decanoate 40 mg i.m., lithium carbonate 900 mg/day, trihexyphenidyl 8 mg/day and lorazepam 4 mg/day. Five days later, the patient reported an increase in his sense of restlessness. He suffered from constant pain and shaking of a leg. Moreover, he could not sit still or lie down to sleep. Since he felt he was suffering from an unbearable and incurable disease the suicidal ideation developed which eventually made him seek admission. His medication was changed to benztropine 2 mg i.m. and lorazepam 2 mg p.o. which markedly improved the akathisia along with the suicide tendency.

Case 4

A 27-year old single man, suffering from acute mania, was brought to the psychiatric emergency room. He received haloperidol 30 mg/day and lithium carbonate 1200 mg/day p.o. whereupon he became acutely agitated and complained of restlessness. He also reported that he felt like jumping off the building. Based on these symptoms akathisia was diagnosed and the medication was discontinued. Instead, the regimen was changed to a low potency neuroleptic, chlorpromazine 400 mg/day p.o., trihexyphenidyl 15 mg/day, as well as flunitrazepam 2 mg at bed time. This resulted in complete remission of akathisia and suicidal thought patterns.

Case 5

A 21-year old single woman with a 1-year history of schizophrenia, received flupentixol 6 mg/day, lorazepam 2 mg at bed time and benztropine 4 mg/day in addition to flupentixol decanoate 40 mg i.m. on a monthly basis. During the following few months, she could not stop pacing the floor and suffered from insomnia. Due to unbearable inner restlessness she threatened to jump off the roof of the building twice, but was stopped by her family. One week before her admission, her medication was changed to benztropine 10 mg/day, propanalol 80 mg/day and diazepam 30 mg/day in order to relieve her akathisia. Yet, six days later she attempted to commit suicide by jumping off the second floor of the building whereby she sustained fractures of the coccyx and both legs. Thereupon, the dosages of propanolol, benztropine and diazepam were increased to 120 mg/day, 15 mg/day and 40 mg/day, respectively. This led to a remission of her symptoms and within a few weeks there were no more signs of suicidal ideation. The patient gradually improved and remained well on a regimen of pimozide 4 mg/day and benztropine 4 mg/day.

DISCUSSION

Although patients suffering from Parkinson's disease can develop akathisia, this is also a frequent disturbing adverse effect of high potency neuroleptics and SSRI antidepressant drugs[3-6]. Moreover, other drugs such as lithium and carbamazepine can also induce such a symptom[7,8]. In addition, akathisia has been implicated in the development of violent behavior, as well as suicidal and homicidal ideations, particularly in patients with underlying mental disorders[3,9,10]. For example, Shaw et al described a case of suicidal and homicidal ideation and akathisia in a double-blind neuroleptic study[10]. Drake and Ehrlich reported impulsive suicide attempts associated with akathisia following the administration of antipsychotic drugs in two patients with no previous history of suicidal ideation despite clinical histories of psychosis[3]. Furthermore, patients developing akathisia and suicidal tendencies during treatment with fluoxetin have been recorded[4,5,11].

The emergence of suicidal tendencies in connection with akathisia is of interest. This of course, raises the question whether they represent a merely coincidental manifestation, or whether the tendency to commit suicide arises as a consequence of akathisia. Several authors have suggested that the suicidal ideations or attempts in this context actually constitute a reaction to akathisia since they can be clearly differentiated from the suicidal thought patterns typically described by depressed or psychotic patients[4,5]. It should be noted that in most case reports, as well as our patients, the symptoms of akathisia made them feel miserable to the extent that life ceased to be worth living. Moreover, any suicidal tendency disappeared as soon as the symptoms of akathisia had been relieved. Therefore, it seems reasonable to conclude that suicidal thought patterns and tendencies to be were secondary to akathisia in these vulnerable patients.

Clinically, it is sometimes extremely difficult to diagnose akathisia in psychotic or depressed patients since the patients themselves do not recognize it as a side effect of drugs. The clinicians also may easily confuse it with anxiety, depression, psychosis, or mania. Several clinical features observed in our patients, as well as others, however, provide some clues to distinguish it from other forms of agitation. Firstly, the onset of akathisia correlates with starting or increasing dosages of neuroleptics or antidepressants. The duration of various symptoms, however, is variable, ranging from a few hours to years. Anxiety or agitation occurring before administration of the respective drug is not related to akathisia. Secondly, patients often report inner restlessness, fear of losing control, going "crazy" or "going out of their mind". Thirdly, suicidal thought patterns disappear as soon as akathisia is successfully treated.

Regarding therapeutic measures, first and foremost is that patients need to be educated and informed of akathisia being an adverse effect of certain medication and as such it is treatable[2,5]. Upon the appearance of the symptoms switching to low potency drugs or discontinuing the medication in question altogether have proven useful, as observed in our patients. Blaisdell suggested beta-blockers, anticholinergics, clonidine or benzodiazepine to be tried in the treatment of fragile individuals[2]. In that regard, trihexyphenidyl in combination with benzodiazepine have proven effective medication in our study. Adler et al also reported the efficacy of propanolol in treating akathisia, as observed in one of our patients (case 5)[12]. In addition, it is extremely important for clinicians to be aware of the emergence of suicidal thought patterns along with akathisia in patients on a regimen of high potency neuroleptics or fluoxetin. Special precautions are required as soon as patients begin to fantasize about "jumping off a high place" after having developed akathisia. Hence, early recognition and accurate diagnosis are essential in order to prevent the rather high probability of suicide in these patients.

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ยาชักนำอาการอาคาธิเซียและอัตวินิบาตกรรมในผู้ป่วยทางจิต

*ดวงใจ กสานติกุล, พ.บ.**

รายงานผู้ป่วยทางจิต 5 ราย เมื่อได้รับยาต้านโรคจิตชนิดประสิทธิภาพสูงแล้วมีอาการ akathisia ร่วมกับมีความคิดฆ่าตัวตาย เนื่องจากมีอาการหงุดหงิด กระวนกระวายในจิตใจ และกระสับกระส่ายจนนั่งไม่ติด อยู่ไม่เป็นสุข เมื่อรักษาโดยการหยุดยาหรือเปลี่ยนไปเป็นยาต้านโรคจิตชนิดประสิทธิภาพต่ำร่วมกับยาต้านพาร์คินสันหรือยากลุ่มเบนโซไดอาเซฟีน ปรากฏว่าอาการ akathisia และความคิดฆ่าตัวตายหมดไป แพทย์จึงควรตระหนักว่าความคิดฆ่าตัวตายอาจเกิดขึ้นกับผู้ป่วยที่มีอาการ akathisia การวินิจฉัยได้รวดเร็วและให้การรักษาได้ทันทีจะช่วยป้องกันอันตรายจากการฆ่าตัวตายได้มาก

* ภาควิชาจิตเวชศาสตร์, คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย, กรุงเทพฯ 10330