## **Short communication**

# Akathisia-induced suicidal behaviour

# MZ Azhar, SL Varma

Department of Psychiatry, USM, Hospital, Kubang Kerian, 16150 Kota Bharu, Kelantan, Malaysia (Received 8 April 1992; accepted 1 September 1992)

Summary – Three cases of akathisia-induced impulsive suicide attempts are reported. In all three cases the patients admitted that the suicidal ideas occurred suddently. The suicidal attempts may be a result of neuroleptic – induced akathisia as they disappeared as soon as the akathisia was treated.

akathisia / suicide / neuroleptics / schizophrenia

#### Introduction

Akathisia, a common and often profoundly distressing side effect of neurolpetic medication, affects approximately 20% of patients treated with neuroleptics (Braude et al, 1983). Akathisia is described as a subjective feeling of muscular discomfort that can cause the patient to be agitated, and feel quite dysphoric. The symptoms are primarily psychic but usually described with a psychic and motor component. The motor part can be controlled for a brief time only. It can appear at any time during treatment and is underdiagnosed because the symptoms are often mistaken for psychosis, agitation, or lack of co-operation.

Akathisia has also been linked to suicide. There have been case reports of completed suicides (Shear et al, 1983) and attempted suicides (Drake and Erlich, 1985), by patients who had been distressed by severe akathisia although the patients did not directly attribute their behaviour to this problem. There are many other reports on the pre-suicidal state of patients that give descriptions suggesting akathisia as a contributory factor. Planansky and Johnston (1971) found that 79% of 52 schizophrenic patients who had made suicide attempts showed 'restlessness, pacing, irritability, tension, and severe psychomotor upsets' at the time of the attempt.

We report three cases of serious suicide attempts directly attributed to akathisia, as expressed by the patients themselves.

## Case reports

Case 1

Mr R, an 18-year old student started behaving strangely while he was in the school hostel, two weeks prior to admission. He started to have sleep problems and was talking to himself. Ultimately, he started accusing teachers and colleagues of wanting to harm him by using charms. He felt as if they had summoned an evil spirit to control him. He gradually became uncontrollable and started disturbing his classmates and was extremely hostile towards his teachers. He was subsequently taken to the emergency department where he was sedated with an intravenous injection with 10 mg diazepam and shortly afterwards with 10 mg haloperidol. He was admitted to our psychiatric unit and a diagnosis of schizophrenic psychosis was made. Haloperidol was started at 15 mg daily and as he was disturbed, the dose of haloperidol was increased to 30 mg daily over the following three days. Gradually he became more restless and fidgety and started to pace up and down the ward. This made him more anxious. He tried to relieve the anxiety by pacing even more. He could not sit still and crossed and uncrossed his legs while sitting. Finally, the next day he became very anxious and attempted to jump from a window. As the windows were all fitted with bars, he ran through the fifth floor ward and attempted to jump from the stairs but was stopped by a doctor with

the help of other staff members. He was subsequently diagnosed as having akathisia and was treated with 30 mg diazepam in divided doses. His restlessness gradually improved and he was able to tell us that he suddenly felt the urge to end his life because he was unable to control the inner restlessness and the severe restlessness in his legs. He denied that it was due to voices or the belief that he was being controlled. The suicidal impulse disappeared as soon as the akathisia improved.

## Case 2

Mr TS a 20-year old homosexual started to experience third person auditory hallucinations and was deluded that his neighbours wanted to harm him because of his sexual preference. This happened about six months prior to admission to our unit. He managed to hide the symptoms for a few months before his family discovered that he was gradually becoming suspicious and was refusing to go out. When he finally came to us he was markedly suspicious. After hospitalization, a diagnosis of schizophrenia was made. He was started on 5 mg of haloperidol three times a day, but as a result of his suspiciousness, he had problems with drug compliance. As such, haloperidol injections (10 mg IM) had to be given on two occasions when he refused oral medication. Soon after he developed severe restlessness coupled with fidgeting and irritability. He could not sit still and was hyperactive and became agitated. He became very frightened and frequently disturbed the nurses asking them to control his hyperactivity. At one stage he felt so disturbed that he said "death would be a relief" and went to the occupational therapy room where he took a pair of scissors and attempted to stab himself. However, staff prevented him from doing so. Akathisia was diagnosed and he was started on 10 mg of diazepam three times a day. The akathisia improved over the following few days and the suicidal urge also disappeared.

#### Case 3

Mr J, a chronic schizophrenic was admitted to our unit due to a relapse of his symptoms after defaulting medication for three months. He started to hear voices three days prior to admission and began to have paranoid ideations. On the day of admission, he attacked his father without any provocation. He was brought to the psychiatric clinic by his brothers where he was sedated with an intravenous injection of 10 mg haloperidol. He was subsequently admit-

ted to the ward. He was then started on 8 mg of perphenazine three times a day. Three days later he began complaining that he had to move his legs back and forth and pace constantly to relieve anxiety. That evening he became extremely restless and broke a glass window with his bare hands and attempted to cut himself with a piece of glass but was stopped by staff. Upon examination, he constantly shifted his legs while seated and would get up from the chair many times to walk around the room. He started saying that "this restlessness is driving me crazy" and also said that "I tried to kill myself because of these anxiety symptoms. It was not the voices". He was diagnosed as having akathisia and propranolol was started at 40 mg three times a day until the symptoms of akathisia were reduced. Three days later propranolol was tapered and maintained at 60 mg/day for the next four weeks. The impulsive suicidal thoughts and behaviour disappeared when the akathisia was controlled.

## Discussion

All three patients expressed the feeling of inner restlessness and the need to move their legs and the severe anxiety associated with the symptoms. They maintained that the symptoms were uncontrollable and that they had never experienced them before. All patients said that the symptoms caused them to have a sudden suicidal urge and did not cause the psychotic symptoms.

We believe there are few cases whereby akathisia has been shown to be the direct cause of suicidal attempts. Akathisia has been associated with anger, violence, somatic complaints and suicide but few have been able to show a direct causal relationship as was the case in these three patients.

In clinical practice, many such cases go unnoticed due to the difficulty of diagnosing akathisia in a psychotic patient. Several features of akathisia can help to distinguish it from other forms of agitation. Akathisia begins after starting or increasing the dose of antipsychotic medication. Anxiety or agitation that precedes the use of these drugs is not due to akathisia but may be exacerbated by it (Drake and Ehrlich, 1985). Akathisia usually improves when the antipsychotic drug is reduced in dose or withdrawn. The majority of patients with akathisia manifest other extrapyramidal side effects (Van Putten et al, 1984). Once patients are treated for their akathisia, they rapidly seek relief from the next episode. Mild forms of akathisia are difficult to diagnose as the patients often have only vague complaints such as feeling tense, uncomfortable, and impatient which are frequently focussed on the legs (Braude et al, 1983).

The treatment of akathisia is still debatable. Several drugs have been tried but results have not been conclusive. Benzodiazepines and propranolol have some effect on improving the agitation and anxiety of these patients (Lipinski *et al*, 1984) although this has still not been proven beyond doubt. Our patients did show a response to these two drugs after some time.

We believe that akathisia can contribute to impulsive suicidal behaviour. This diagnosis should be strongly considered whenever a patient has been recently started on an antipsychotic drug or had the dose increased and subsequently develops suicidal behaviour. These three cases illustrate the importance of early diagnosis and treatment of akathisia and point out the importance of early detection in such cases.

#### References

Braude WM, Barnes TRE, Bore SM (1983) Clinical characteristics of akathisia: a systematic investigation of acute psychiatric inpatient admissions. *Br J Psychiatry* 143, 139–150

Drake RE, Ehrlich J (1985) Suicide attempts associated with akathisia: Am J Psychiatry 142, 449-501

Lipinski JF, Zubenko GS, Cohen BM (1984) Propranolol in the treatment of neuroleptic – induced akathisia. Am J Psychiatry 141, 412–415

Planansky K, Johnston R (1971) The occurrence and characteristics of suicidal pre-occupation and acts in schizophrenia. *Acta Psychiat Scand* 47, 473–483

Shear MK, Frances A, Weiden P (1983) Suicide associated with akathisia and depot fluphenazine treatment. *J Clin Psychopharmacology* 3, 234–236

Van Putten T, May Pra, Marder SR (1984) Response to antipsychotic medication: the doctor's and consumer's view. Am J Psychiatry 141, 16–19