

The Many Faces of Akathisia

Theodore Van Putten

AKATHISIA, a common side effect of neuroleptic therapy, is an emotional state and "refers not to any type or pattern of movement, but rather to a subjective need or desire to move."^{1,2} Akathisia, in contrast to the other drug-induced extrapyramidal reactions, is subjective, and for this reason it may be difficult to diagnose.

Historically, the predominant mental manifestations of akathisia have caused confusion. Haskovec,³ who originally described the syndrome in 1901, concluded that the disorder was of hysterical origin. Bing⁴ viewed akathisia as a "psychosis" characterized by a "morbid fear of sitting down," but in another chapter he explained it as a way of overcoming the muscular rigidity of Parkinson's disease. Oppenheim⁵ considered akathisia as a form of neurosis, "usually a form of phobia." Wilson⁶ designated it "hysterical" in one chapter of his classic textbook, but he also described the syndrome in association with Parkinson's disease in a later chapter.

Akathisia can be mistaken for an exacerbation of the original mental illness.⁷⁻⁹ Hodge¹⁰ stated that akathisia "may appear like an anxiety state . . . in which real anxiety can be neither recognized nor verbalized." Raskin¹¹ found that patients often are unable to distinguish between anxiety and restlessness, and he warns that "indications of anxiety-like symptoms" such as "uneasiness," "hyperactivity," "pacing," "vague complaints about medication," and "insomnia" may be subtle reflections of akathisia.

It is the purpose of this paper to stress the clinical importance of this side effect and to aid the clinician in its detection.

METHOD

The data described herein are derived from clinical observation of 110 patients who were treated with conventional dosages of the major tranquilizers—either phenothiazines or the butyrophenones. The ward setting, manner of drug administration, and manner of recording of extrapyramidal symptoms have been described previously.¹² In order for a particular emotional state to be scored as akathisia, the following test had to be passed: disappearance or marked improvement after intramuscular administration of 5 mg biperiden (Akineton), and no improvement after a placebo injection (double blind).

THE MANY FACES OF AKATHISIA

1. The floridly psychotic and disorganized patient often cannot articulate feelings of inner restlessness or agitation, thereby making the diagnosis especially difficult. For example: Patient 1: A 44-year-old woman with hebephrenic schizophrenia started to bang her head against the wall three days after an injection of 25 mg of fluphenazine enanthate. Her only utterance was: "I just want

From the Brentwood Veterans Administration Hospital, Brentwood, Calif., and the Department of Psychiatry, UCLA School of Medicine, Los Angeles, Calif.

Theodore Van Putten, M.D.: Assistant Professor of Psychiatry in Residence, UCLA School of Medicine, Los Angeles, Calif.

© 1975 by Grune & Stratton, Inc.

to get rid of this whole body." Patient 2: A 43-year-old woman with a schizo-affective illness, excited type, was so disorganized in her thinking that rational contact was impossible. On the 5th day after the injection of 12.5 mg of fluphenazine enanthate, she regularly developed a peculiar constellation of behaviors consisting of severe headaches, an upsurge of hallucinations, screaming, even more bizarre thinking, aggressive and also self-destructive outbursts, and agitated pacing or dancing.

2. Akathisia is often associated with strong affects of fright, terror, anger or rage, anxiety, and vague somatic complaints. Secondary symptoms are often exacerbated during akathisia. For example: Patient 3: A 35-year-old woman with chronic schizophrenia was treated with fluphenazine enanthate, 25 mg i.m. every 2 weeks. On this regime, she usually developed an episode of akathisia during the week following her injection. She described several such episodes as follows: "I just get these attacks of tension. I don't feel right. My stomach feels strange. It's like I'm churning inside. I feel hostile and I hate (with intense affect) everybody. I'm in a homosexual panic. As soon as I sit down, the voices start . . . they call me names like queer. I feel afraid. I want to fight. I just get these hurry-up feelings. I'm frantic. I just can't get my emotions under control. All of a sudden I feel terrified and I want to run." (She had run away from the hospital frequently.) "I can't stand to feel this way. Mentally I feel like I'm going 90 miles per hour."

3. The inner restlessness and agitation of akathisia can occasionally be experienced as sexual torment. Patient 4: A 52-year-old woman with chronic paranoid schizophrenia had always experienced much guilt over her homosexual urges. Overt homosexual activity had alternated with periods of celibacy during which she practiced a strict Catholicism. On the 9th day of treatment with haloperidol, 4 mg daily, she requested readmission to the hospital "because I get these terrible sexual feelings. I can't control it. I want to masturbate all the time. I've never had sexual cravings like this. It's intolerable. It's tearing me apart; it's not right, but I can't help it." These sexual "cravings," which the patient found qualitatively different from "normal" sexual desires, were experienced as ego-alien in an affective state of extreme fright and were associated with a vague inner restlessness. Biperiden, 5 mg i.m., completely suppressed this sexual torment; a placebo injection had no effect.

4. Akathisia has been, at times, associated with dramatic exacerbations of psychosis.^{7,8} These exacerbations were in the direction of the original psychosis and did not resemble a toxic psychosis. During such decompensations thought processes became disorganized, secondary symptoms recurred, quality of contact deteriorated, and many complained of an abject fear or terror that was difficult to articulate. Onset was often sudden, and some attacks were self-limited. Most important, these exacerbations in all patients were reversed by biperiden, 5 mg i.m. Patient 5: A 48-year-old woman had a long-standing and well-organized delusional system to the effect that a NASA computer system controlled her mind and actions. She was quite calm and conversed quite rationally as long as the delusional system was avoided. She was given fluphenazine enanthate, 25 mg i.m., and for the next 4 days remained quietly delusional. On the 5th day she burst into the therapist's office panic-stricken. She was extremely agitated and talking in pressured fashion. "I was hit by ultrasonic sound. A war ma-

chine has been used against me. You can get polio with these lasers. Please, can't you see I'm wasting away." No rational contact could be established. She had a mild tremor of her fingers and would not sit down. One hour after 5 mg i.m. biperiden she was a changed person. She felt "relaxed" and spoke very coherently. Six hours after the biperiden, moderate anxiety recurred. A placebo injection had no effect.

5. Patients have described the inner restlessness and agitation of akathisia in many other ways, such as: "My nerves are just jumping; I feel like I'm wired to the ceiling; I just feel impatient and nasty. I can't concentrate; it's like I got ants in my pants; my nerves are raw; I just feel on edge; I feel just nasty; I feel like jumping out of my skin; if this feeling continues, I would rather be dead. I can't describe the feeling; I'm quivery from the waist up; I want to climb the walls; I feel all revved up; it's like I got diaper rash inside."

6. The milder akathisias were not infrequently experienced as vague feelings of apprehension, irritability, impatience, or general unease. Regardless of the severity of the akathisia, patients will usually indicate that they feel "restless inside," once this terminology is suggested to them. Further questioning often elicits that they feel more comfortable standing up or moving about. Yet patients with mild akathisia may sit without moving a muscle (particularly if they experience a concomitant akinesia), or the inner restlessness in the sitting position may be expressed by fidgetiness, frequent minor changes in posture, or foot tapping. Patients with severe akathisia, however, cannot sit quietly for more than a few seconds at a time, and at times the "impatience musculaire" can result in running, agitated dancing, or rocking.

FREQUENCY OF AKATHISIA

Akathisia is a frequent side effect of neuroleptic therapy. Of 110 patients treated in this study with antipsychotic drugs, 49 (45%) experienced akathisia at some time during their treatment course. Ayd¹³ studied 3,775 patients treated with all varieties of phenothiazines and found that 21.2% had akathisia. Freyhan,¹⁴ in his study of extrapyramidal symptoms secondary to phenothiazine administration, found akathisia in 12.5% of the subjects. He indicated, however, that more subtle symptoms of akathisia could be found in a higher percentage of patients. The higher percentage of patients experiencing akathisia in the present study is almost certainly due to the fact that prophylactic antiparkinsonism agents were never prescribed, that the subtler akathisias were included, and that patients were continuously observed by a staff trained in the recognition of extrapyramidal side effects.

CHARACTERISTICS OF AKATHISIA

Akathisia is often associated with other extrapyramidal side effects. Thus 59% of patients with akathisia concomitantly experienced akinesia, parkinsonian tremor, or dystonia. This association is helpful diagnostically because akathisia can be difficult to distinguish from psychodynamically determined anxiety. The well-established interaction between anxiety and extrapyramidal symptoms makes it even more difficult to distinguish a mild akathisia from anxiety. The distinction is clinically important, however, and for doubtful cases a trial of an oral

antiparkinsonism drug, or a test dose of 5 mg i.m. biperiden, is recommended. Other characteristics are that akathisia is nearly always experienced as ego-alien, that the inner agitation and restlessness are difficult to articulate, and that once a patient has gained relief from akathisia he will seek relief from the next episode.

CONSEQUENCES OF AKATHISIA

The inner agitation of akathisia is always subjectively stressful. Kalinowsky¹⁵ states that akathisia can be "more difficult to endure than any of the symptoms for which [the patient] was originally treated," and he cautions that it may be mistaken for an "agitated depression." Fouks¹⁶ refers to akathisia as the "syndrome of impatience" and stresses that it often is associated with severe anxiety, peculiar bodily sensations, and bizarre mentation. Consequently it is not surprising that refusal to continue prescribed therapy with phenothiazines has been found to be strongly associated with akathisia.¹²

Akathisia is tolerated very poorly by hostile paranoid patients in that they tend to misinterpret the inner agitation of akathisia as further proof that they are being poisoned or controlled by outside malevolent forces. Consequently, they often refuse to take their medications or run away from the hospital. Cautious increments in dosage and early or prophylactic use of antiparkinsonism drugs are advisable in this group of patients who are difficult to treat.

CONCLUSION

Akathisia, therefore, requires immediate treatment with antiparkinsonism agents and, where possible, a reduction of neuroleptic dosage. Failure to treat the patient with akathisia may lead to a refusal to continue with prescribed neuroleptic drugs, sudden elopements from the hospital, "paradoxical" responses to phenothiazines, and, at times, exacerbations of psychosis. Since many of life's activities require sitting, a sustained akathisia is a severe hardship. The subtler akathisias often go unrecognized by the physician—but not by the patient! Even a mild akathisia can preclude sitting through the dinner hour, a movie, a therapy session, or a sedentary job.

REFERENCES

1. Duvoisin RC: Neurological reaction to psychotropic drugs, in Efron DH (ed): *Psychopharmacology: A Review of Progress*, 1957-1967. Washington, D.C., U.S. Government Printing Office, 1968, pp 561-573
2. Crane GE, Naranjo ER: Motor disorders induced by neuroleptics. *Arch Gen Psychiatry* 24:179-184, 1971
3. Haskovec L: Nouvelles Remarques sur l'Akathisie. *Nouvelle Icon* 16:287-296, 1903
4. Bing R: *Textbook of Nervous Diseases*. St. Louis, C. V. Mosby, 1939
5. Oppenheim H: *Textbook of Nervous Diseases*, vol II. G. E. Steckert & Co., 1911, p 1160
6. Wilson SAK: *Neurology*. Baltimore, Williams & Wilkins, 1940
7. Van Putten T, Mutalipassi LR, Malkin MD: Phenothiazine induced decompensation. *Arch Gen Psychiatry* 30:102-105, 1974
8. Van Putten T, Mutalipassi LR: Fluphenazine enanthate induced decompensations. *Psychosomatics* (in press)
9. Chien CP, DiMascio A: Drug-induced extrapyramidal symptoms and their relations to clinical efficacy. *Am J Psychiatry* 123:1490-1498, 1967
10. Hodge JR: Akathisia: The syndrome of motor restlessness. *Am J Psychiatry* 116:337-338, 1959
11. Raskin DE: Akathisia: A side effect to be remembered. *Am J Psychiatry* 129:345-347, 1972
12. Van Putten T: Why do schizophrenic patients refuse to take their drugs? *Arch Gen Psychiatry* 31:67-72, 1974

13. Ayd FJ: A survey of drug-induced extrapyramidal reactions. *JAMA* 175:1054-1060, 1961

14. Freyhan FA: Extrapyramidal Symptoms and Other Side Effects in Trifluoperazine—Clinical and Pharmacological Aspects. Philadelphia, Lea & Febiger, 1958

15. Kalinowsky LB: Appraisal of the "tranquilizers" and their influence on other somatic treatments in psychiatry. *Am J Psychiatry* 115:294-300, 1958

16. Fouks, Perivier, Mathis, et al: Le Syndrome d'impatience. *Ann Medico-psychol* 135:719-723, 1968