DRUG-INDUCED AKATHISIA - A PRELIMINARY REPORT

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25 in-patients, 17 males and 8 females, were administered Barnes’ Scale for drug-induced Akathisia. Akathisia was found in 7 of them, 5 males and 2 females. One had pseudoakathisia and in the other, akathisia was questionable. The inter-rater reliability, assessed by weighted Cohen’s kappa, was found to be high.

Akathisia (Greek, a : privative, kathisis : a sitting) is probably the commonest neuroleptic-induced movement disorder (Lancet, 1986). It is characterised by a subjective component of inability to remain still and an objective component of repeated motor patterns like leg swinging, tapping of foot, hand ringing and rapid walking (Munetz and Corne, 1982; Gibb and Lees, 1986). It generally appears within 5 to 40 days of the start of neuroleptic treatment (Van Putten, 1975). The incidence of neuroleptic-induced akathisia vary widely across different studies, reportedly between 5 to 50% (Marsden et al., 1975). There may be various cause for it: (1) there was no consistent or clear operational definition, making it difficult to recognise mild akathisia, (2) tentative diagnosis tended to rely excessively on either the subjective or the objective component, (3) the limited nature of phenomenological description posed problems in distinguishing akathisia from illness-related motor restlessness, restless leg syndrome and tardive dyskinesia (Gibb and Lees, 1986).

MATERIAL AND METHOD

25 Consecutive admissions to our institute, all of whom fulfilled Research Diagnostic Criteria (Spitzer et al., 1989) for schizophrenia and affective disorders and did not receive any drug for three weeks before the index admission were included in the study. Consent to participate in the study was obtained. A modified version of the Leeds Anxiety Scale was administered on the day of admission to assess the clinical anxiety prior to somatic therapy. This anxiety scale was administered on the fifth day of hospitalisation just before assessment of drug-induced akathisia.

Patients were observed in the sitting and standing position for at least three minutes each, while they were kept engaged in neutral conversation. The patients were also observed in other situations like attending community programmes. Lastly the subjective phenomenon were elicited by asking the patients specifically for inner restlessness, inability to stand or sit still or awareness of a compulsion to move about. Each of the two raters assessed every patient separately but on the same day. The interval between the two assessment did not exceed 15 minutes. The inter-rater reliability

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was estimated by linearly weighted Cohen’s kappa.

RESULTS

The sample included 17 males and 8 females. The mean age of the sample was 29.6 years (range 17-50 years). 14 patients (10 males and 4 females) received a diagnosis of schizophrenia and (7 males and 4 females) of affective disorder. Most of the patients were treated with haloperidol, either alone (15) or in combination with lithium (3) or tricyclic antidepressant (2). Others received trifluoperazine (4) and fluphenazine decanoate (1).

Akathisia was seen in 7 out of 25 patients (28%), 5 males (schizophrenia: 3, affective disorder: 2) and 2 females (both diagnosed to be manic). A female schizophrenic had pseudoakathisia, while the phenomena was doubtful in a male patients with mania. Akathisia developed in 3 out of 13 patients below the age of 30 years and 4 out of 12 patients age 40 years or more. The mean CPZ equivalent dose was not significantly different between the two groups. Four patients developed akathisia within five days of pharmacotherapy, one after 12 days and the other 2 after 26 days.

The inter-rater reliability of the various items in the akathisia scale ranged from 0.903 to 1.000 (table-1). There was complete agreement between the two raters regarding the objective items. The agreement was also complete regarding the awareness of distress related to restlessness - only 2 of the 25 cases came forth with a subjective appraisal of distress. One case complained of non-specific restlessness to one rater but not to the other. The raters also agreed on the presence of akathisia (a rating of more than 1 on the clinical assessment item). They disagreed on the severity of akathisia in one case where the score of awareness of restless and hence the global clinical assessment differed by one.

| Rating Scale Item                   | Linearly weighted Cohen’s kappa |
|-------------------------------------|---------------------------------|
| Objective                           | 1,000                           |
| Subjective                          |                                 |
| Awareness of restlessness            | 0.903                           |
| Distress related to restlessness     | 1,000                           |
| Global clinical assessment          |                                 |

DISCUSSION

The importance of akathisia in psychiatric practice cannot be overemphasized. Besides being probably the commonest and most distressing movement disturbance associated with antipsychotic drugs (Lancet, 1986), they have an important role in drug non-compliance (Van Putten, 1974), and may result in suicide (Drake & Enrlich, 1985). Moreover, non-recognition of akathisia may be misinterpreted as part of the primary illness processes and so lead to an unwitting increase in antipsychotic dosage.

In this study on acutely admitted psychiatric inpatients, we found 28% of patients to show akathisia on Barnes’ akathisia rating scale. This estimate is in keeping with the recently reported figures (Braude et al., 1983). We found a very high inter-rater reliability on the Barnes’ akathisia rating scale. This instrument is currently being used in studies throughout U.S.A. and Europe (Barnes’, 1990; personal communication).
However, one important difference emerged from this study. Only 2 out of the 7 patients with akathisia complained that the condition was distressing. We can think of two possibilities to explain this finding. Firstly, the study involved acutely hospitalized psychiatric inpatients. As most of these patients came from outstations, hospitalization means a rather prolonged separation from the family. Any voluntary appraisal of distress may have been construed by them as a factor that may prolong their hospital stay. Secondly, Indians are reported to show more dependency in the context of doctor-patient relationship and may be less likely to complain of subjective distress as an aftermath to drug treatment. Other factors might as well be operative.

Currently, we are using the Barnes' akathisia rating scale on a large sample of consecutively admitted case to this Institute to study the various aspects of akathisia.

REFERENCES

Barnes, T.R.E. (1989). A rating scale for drug-induced akathisia, British Journal of Psychiatry, 154, 672-676.