RABBIT SYNDROME : AN UNCOMMON SIDE EFFECT OF NEUROLEPTICS

MANILAL GADA

ABSTRACT

The rabbit syndrome, a neuroleptic induced extrapyramidal side effect with late onset, consists of rapid fine rhythmic movements of the lips that mimic the chewing movements of a rabbit. This syndrome was first described by Villeneuve in 1972. Unlike the buccolingual movements of the tardive dyskinesia, the rabbit syndrome improves with antiparkinsonian medication. The condition is reported to be rare. To the best of knowledge of the author, no case has been described or reported from India. A case of rabbit syndrome is described with review of the literature.

Key words: Rabbit syndrome, neuroleptics, antiparkinsonian medications

Rabbit syndrome is a perioral involuntary, extrapyramidal movement disturbance associated with long use of neuroleptics (Villeneuve, 1972; Berger and Roxroth, 1980). The disturbance involves the oral and masticatory musculature except for the tongue; it is similar in appearance to the movements of rabbit's mouth. Quickly alternating, regular movements along a vertical axis occur at frequency of approximately 5 Hz. There is an associated popping like sound produced as the lips rapidly separate. Differential diagnosis between tardive dyskinesia and rabbit syndrome is often confused; tardive dyskinesia also can involve orofacial musculature but is manifested by chewing like movements that include writhing or thrusting tongue motion. Differentiation between the two conditions is made clinically. Abnormal movements in tardive dyskinesia are significantly slower and less regular than in rabbit syndrome. Although both disorders are sequelae of long-term neuroleptic treatment (Jus et al., 1979), rabbit syndrome responds to antiparkinsonian medication, while tardive dyskinesia is often exacerbated by such therapy.

Rabbit syndrome was first described by Villeneuve in 1972. The condition is reported to be rare (Todd et al., 1983).

CASE REPORT

Ms A, 46 years old medical graduate, had undergone treatment for psychosis from psychiatrists. She was hospitalised several times. Results of physical examination and CT scan were normal. She was diagnosed to be suffering from chronic schizophrenia with acute exacerbations off and on. She was on oral flupenthixol for last one year without any antiparkinsonian medication. Earlier she was given other neuroleptics like haloperidol, trifluoperazine etc.

She was noticed to have rapid involuntary orofacial movements without lingual involvement. Her jaw moved alternately up and down. The movements decreased in severity with voluntary activity including talking. No other extrapyramidal signs were present. A diagnosis of rabbit syndrome was made. Oral flupenthixol was stopped and trihexyphenidyl HCL 2 mg three times a day was started. Within 4 days, she responded to the treatment and in a fortnight, all the movements stopped.

Flupenthixol was reintroduced later along...
with trihexyphenidyl HCl. No abnormal movements were noticed later.

DISCUSSION

The rabbit syndrome has been reported primarily in middle-aged and elderly patients (Jus et al., 1979). It occurs with a variety of neuroleptics. Following neuroleptics have been reported to produce rabbit syndrome—haloperidol, fluphenazine, perphenazine, trifluoperazine, thioproperazine and mesoridazine (Sovner and Mascio, 1977; Todd et al., 1983; Yassa and Lal, 1986).

Anticholinergic agents in general aggravate or uncover tardive dyskinesia, although in some cases no effect or occasionally amelioration occurs (Gerlach et al., 1974). In contrast, anticholinergics consistently improve the rabbit syndrome, as was noted in the present case.

The rabbit syndrome is uncommon in patients chronically treated with neuroleptics. Yassa and Lal (1986) reported the incidence to be 2.3%. The reasons for the apparent infrequency of rabbit syndrome may be related to the following factors: (1) many patients receive concomitant antiparkinsonian medication; (2) it is not a well-known side effect and may be mistaken for tardive dyskinesia; (3) in some patients the syndrome is mild and only elicited by a distracting task and (4) most scales used to evaluate extrapyramidal symptoms do not include an item for the rabbit syndrome (an exception is the Simpson Rating Scale for Tardive Dyskinesia). Failure to recognize the rabbit syndrome and concern over aggravating tardive dyskinesia may lead to withholding highly effective treatment with anticholinergic agents or unnecessarily reducing the dose of required neuroleptic.

REFERENCES

Berger, P. & Rexroth, K. (1980) Tardive dyskinesia. In: Haloperidol Update 1958-1980, (Ed.) Ayd, F.J.; Baltimore: Ayd Medical Communication.

Gerlach, J., Reisby, N. & Randrup, A. (1974) Dopaminergic hypersensitivity and cholinergic hypofunction in the pathophysiology of tardive dyskinesia. Psychopharmacologia, 36, 21-35.

Jus, A., Jus, K. & Fontaine, P. (1979) Long-term treatment of tardive dyskinesia. Journal of Clinical Psychiatry, 40, 72-77.

Sovner, R. & Dimascio, A. (1977) The effect of benztropine mesylate in the rabbit syndrome and tardive dyskinesia. American Journal of Psychiatry, 134, 1301-1302.

Todd, R., Lipmann, S. & Manshadi, M. (1983) Recognition and treatment of rabbit syndrome; an uncommon complication of neuroleptic therapies. American Journal of Psychiatry, 140, 1519-1520.

Villeneuve, A. (1972) The rabbit syndrome: a peculiar extrapyramidal reaction. Canadian Psychiatric Association Journal, 17 (Suppl 2), 69-72.

Yassa, R. & Lal, R. (1986) Prevalence of the rabbit syndrome. American Journal of Psychiatry, 143, 656-657.

MANILAL GADA, Head & Hon. Prof., Dept. of Psychiatry, D.Y. Patil Medical College (affiliated to University of Bombay). Residence: Manosmruti Polyclinic, Prabhukrupa, L.B.S. Marg, Ghatkopar (W), Mumbai 400 086.