TARDIVE DYSTONIA IN CHINESE

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ABSTRACT

Three Chinese patients with the under-recognized condition of tardive dystonia are described. This is a physically and socially handicapping complication of neuroleptic treatment. A past history of acute dystonia does not appear to predict the future development of tardive dystonia. The need for judicious indication of neuroleptics is emphasised.

Keywords: Tardive, Dystonia, Chinese

SING MED J. 1989; NO 30: 441 - 443

INTRODUCTION

Tardive dystonia is a term coined by Keegan & Rajput (1) in 1973 to denote dystonic reactions occurring as a late complication of neuroleptic drug treatment. Its diagnostic criteria (2) include: presence of chronic dystonia, history of antipsychotic drug treatment preceding or concurrent with the onset of the dystonia, exclusion of known causes of secondary dystonia and a negative family history of dystonia.

Since then there have been some more reports on the condition and its treatment. The drugs that have been found most useful are tetrabenazine and the anticholinergic drugs (3). Other drugs like lisuride (4), bromocriptine (5), clonidine (6) and baclofen (7) have been used with anecdoctal successes. Electroconvulsive therapy was successful in 1 case (8).

As far as we know, there are no Chinese patients reported except one in a series of 42 patients (2). We would like to report on three Chinese patients we saw in Hong Kong. All of them had normal birth and developmental history, no family history of movement disorders, good past medical health, normal plasma caeruloplasmin level and an unequivocal schizophrenic illness.

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CASE 1

Miss A is a 27-year old single Chinese factory worker. In 1982 she presented with auditory hallucinations, delusions of reference and thought broadcasting. She was put on oral neuroleptic drugs and fluphenazine decanoate injection 25 mg 4 weekly. However, she had not been taking the oral medications at all. Since 1985, she began to experience dystonia involving her neck and left upper limb. This was initially intermittent but progressed in severity. When first seen in May 1978 by us, she had torticollis to the left side and dystonic extension movement of her left upper limb. The dystonia occurred at rest and was more marked when she moved her limbs or walked. Sensory tricks by touching her face were useful in temporarily relieving the torticollis. She has pain over her neck and was embarassed by her dystonia. Neuroleptic drugs were withdrawn and she was put on benzhexol 5 mg tds only. Her dystonic symptoms improved and eventually disappeared over the next 5 months. She resumed working and had no recurrence of psychotic symptoms.

CASE 2

Miss B is a 27-year old single Chinese typist. In 1981 she presented with auditory hallucinations, delusions of persecution and was treated with trifluoperazine 10 mg and benzhexol 2 mg bd. She had several episodes of minor relapses over the years. Since 1985, she began to have twisting of her neck to the right side with dystonic extension movement of her left upper limb. The dystonia was initially intermittent but gradually progressed in severity. When seen in May 1987, she had torticollis to the right, extension dystonia of her upper limb at rest, and intermittent dystonic movement of her right lower limb on walking. She had pain over her neck and was much distressed by her dystonic symptoms which stopped her from walking. Trifluoperazine was stopped. Tetrabenazine 50mg tds and benzhexol 8 mg tds led to no improvement after 10 months of treatment.

CASE 3

Mr D is a 27-year old single unemployed Chinese. In February 1982 while in University, he was admitted for hearing voices and was put on oral fluphenazine and benzhexol. He relapsed in May 1986 and was put on molindone 20mg nocte, fluphenazine 2.5 mg qd, benzhexol 4 mg tds and lorazepam 0.5 mg gid. His mental state improved gradually but he developed involuntary truncal movement so that his trunk was arched backwards. When seen by us in March 1987, he had intermittent tonic extensor spasm of his trunk which was arched backwards. This occurred even at rest and when he sat down, he would frequently slip to the floor. He did not complain of pain over his trunk but was much embarrassed by his abnormal posture. Apart from this, he had intermittent dystonia of both upper limbs. He was put on thioridazine 25 mg tds, orphenadrine 100mg tds and nocte and diazepam 5mg tds. In the next few months, he suffered several episodes of mild relapse of his psychosis necessitating an increase of thioridazine to 75 mg tds and nocte. At the time of writing, he is in psychotic remission and is on thioridazine 50 mg tds, orphenadrine 100 mg tds and diazepam 5mg om and nocte. His dystonia has improved markedly and he only has mild intermittent arching of his trunk on walking.

DISCUSSION

These 3 patients fit the criteria of tardive dystonia (2). The delay in diagnosis in Case 1 and 2 reflects a low level of recognition of this condition in Hong Kong. We believe that this condition is not rare. Suspected risk factors include young males (9,10), brain damage and previous ECT treatment (11) while the importance of the total amount and duration of neuroleptic treatment remains unclear (2). An interesting question is whether subjects with a history of acute dystonia would be more at risk. All of our patients have been given anticholinergic drugs early in treatment as a prophylaxis against acute dystonia which occurred only in our male patient. It would seem that the occurrence of acute dystonia cannot be used as a predictive factor.

In contrast to patients with tardive dyskinesia, all our patients are aware of the dystonia and have varying degrees of pain and disability. Case 1 and 3 have seen significant improvement after treatment despite the delay in diagnosis. The usefulness of withholding neuroleptics and early treatment with anticholinergic drugs or tetrabenazine needs to be confirmed. Burke et al (2, 12) found that neuroleptics had been prescribed for subjects with anxiety state. Until further data are available for preventing tardive dystonia, the need for careful indication of neuroleptic treatment cannot be overemphasized.

Table I
A SUMMARY OF CHARACTERISTICS OF THE THREE PATIENTS

	Case 1	Case 2	Case 3
Sex	F	F	М
Age at onset of dystonia	23	23	24
Duration of drug treatment before tardive dystonia	3 yrs.	4 yrs.	4 yrs.
History of acute dystonia	Nil	Nil	Yes
Awareness of dystonia	Yes	Yes	Yes
Pain related to dystonia	Yes	Yes	No
Gait disturbance	Nil	Nil	Yes
Intelligence	Normal	Normal	Normal
Evidence of brain damage	Nil	Nil	Nil
Present drugs	Withdrawal of neuroleptics Benzhexol	Benzhexol Tetrabenazine	Thioridazine Orphenadrine Diazepam
Response to treatment	Symptom free	No improvement	Marked improvement

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