NEUROLEPTIC MALIGNANT SYNDROME: A CASE REPORT

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SUMMARY

The neuroleptic malignant syndrome is a rare but potentially fatal complication of neuroleptic administration. Many clinicians may not be familiar with this complication. This case report highlights the clinical features of neuroleptic malignant syndrome and its management.

CASE HISTORY

A 68-year-old married, Chinese, female was brought to the Psychiatric Clinic by her relatives in April 1985. There was a 12-month history of deterioration of her personality and gross neglect of personal hygiene. She would wander about the streets and remove her clothes in public.

Her memory was poor and she would accuse her children of persecuting her when she misplaced her personal belongings. There was no loss of weight or appetite. She was unable to sleep at night.

Prior to the onset of the illness, she was functioning well, being able to look after herself and her grandchildren as well as keep house. Her memory was good prior to the illness.

A thorough physical and neurological examination did not reveal any abnormalities, apart from a fixed deformity of her right wrist due to malunion of an old fracture. She was afebrile.

On admission, the mental state examination revealed a dishevelled unco-operative female. There was no clouding of consciousness. She talked loudly, incessantly and incoherently. She was extremely irritable and hostile, had delusions of persecution. She was disorientated to time and place. Her recent memory was impaired and she had no insight to her illness.

A provisional diagnosis of dementia with disturbed behaviour was made. The following investigations were conducted: full blood picture, VDRL, thyroid function test, urine examination, renal profile were normal; chest and skull X-ray reported as normal.

She was given Haloperidol 10 mgm I/M on admission and subsequently Thioridazine 50 mgm bd 100 mgm nocte. Two days after commencement of Thioridazine, she developed marked rigidity and pyrexia with elevated blood pressure, incontinence and sweating. Examination for sources of infection were negative and so were investigations of CXR, ECG and urine examination. There was no neck stiffness.

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The medication was stopped and she was given Procyclidine 10 mgm I/M. Good nursing care was provided with four-hourly observations and tepid sponging for her fever, which subsided in two days (Fig. 1).

One week later, she was given Promazine 50 mgm BD. She developed pyrexia and rigidity again within 48 hours. On stopping the neuroleptic, the fever subsided within two days.

DISCUSSION

When patients on neuroleptics develop fever, infective causes are the most common reason and this was carefully looked for in this patient. However she also had severe rigidity, elevated blood pressure and clouding of consciousness with sweating. A diagnosis of the neuroleptic malignant syndrome (NMS) must be considered. The description of this syndrome was first reported by Delay and Deniker and the cardinal symptoms are hyperpyrexia and rigidity. It is rare with few reports but the potential danger is that there is a mortality of 20% reported in one study.[1] This is especially so if the neuroleptics are continued and the NMS goes unrecognised.

The pathogenesis of NMS is uncertain. It is postulated that the neuroleptics block dopaminergic pathways concerned with thermoregulation.[2] This does not explain why only a few predisposed individuals develop the NMS. It is most likely to be an idiosyncratic reaction as reintroduction of the offending drug usually does not result in recurrence of NMS.[3]

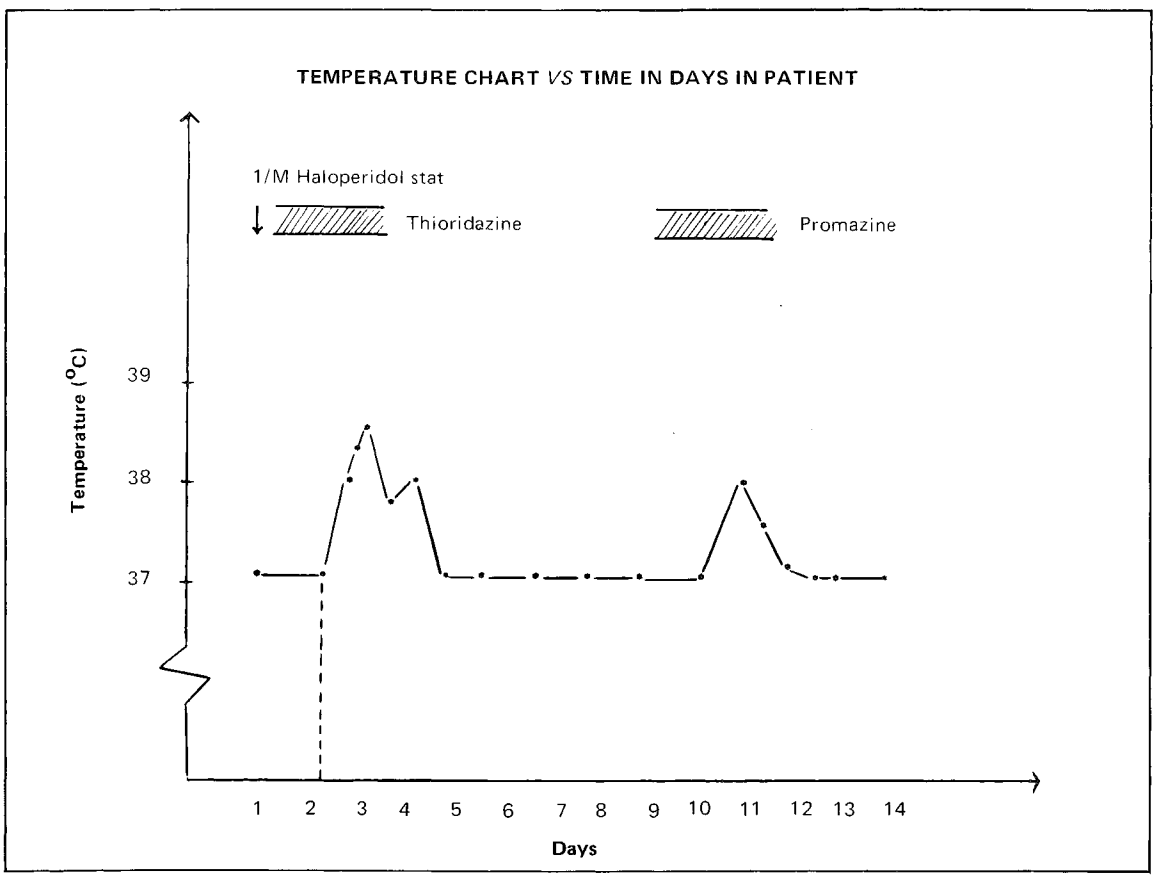

Fig. 1 Temperature chart indicating the days the patient was given medication and upon stopping.

Management of NMS is mainly supportive.[3] The offending drugs should be discontinued immediately and the patient given good nursing care – regards tepid sponging, feeding and monitoring vital functions. Diazepam, anticholinergics and dantrolene have been suggested and these arose mainly out of single case reports. No consensus has been reached as to the value of these treatments.

This patient recovered on conservative management and on stopping the phenothiazine. One unusual feature is that the NMS recurred on introducing another neuroleptic. Recent review of NMS suggest that reintroduction of neuroleptics often do not result in recurrence of NMS.[3]

REFERENCES

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