

LETTER TO THE EDITOR

INTERACTION BETWEEN PIPERAZINE AND SOME PHENOTHIAZINE DERIVATIVES

Sir,

Convulsions in a child under chlorpromazine therapy were attributed by Boulos and Davis (1) to interaction with piperazine which the child had received in recent past. The workers confirmed their observations in puppies and goats by eliciting convulsions using large doses of piperazine and chlorpromazine. Armbrecht (2) however, failed to observe any interaction between piperazine and chlorpromazine in puppies and goats.

We have studied the possible interaction of piperazine with four different phenothiazine derivatives in albino rats. Chlorpromazine (25 mg/kg), prochlorperazine (10 mg/kg), promethazine (25 mg/kg) and promazine (10 mg/kg) were administered intravenously to groups of 5 albino rats of either sex weighing between 100 - 150 gm, pretreated with piperazine citrate given orally either in a single dose of 500 mg/kg, or 75 mg/kg daily for 6 days. Convulsions were not observed in any of the group of animals. On the contrary, the movements and the alertness was found to be remarkably decreased. All the animals showed full recovery from the depressant effects of phenothiazine derivatives and none of the animals died in the 72 hours' period of observation. The present study does not reveal any interaction between piperazine and phenothiazine derivatives, in adult rats.

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REFERENCES

1. Boulos, B.M. and L.E. Davis. Hazards of simultaneous administration of phenothiazine and piperazine (letter). *New Eng. J. Med.*, 280 : 1245, 1969.
2. Armbrecht, B.H. Reaction between piperazine and chlorpromazine (letter). *New Eng. J. Med.*, 282 : 1490, 1970.