Recovery After Ecstasy Intoxication.

by Joseph G. Rella and Lewis S. Nelson

To the Editor:

We read with interest "Survival After Massive Ecstasy Overdose" by Ramcharan et al.[1] and have only a few questions to ask. Although the literature contains numerous reports of complications from Ecstasy use including severe hyperthermia, serotonin syndrome, and hyponatremia, this report suggests that the serious complication, respiratory arrest, possibly resulted from the combination of benzodiazepines and ethanol. The patient's blood gas analysis revealed a respiratory acidosis, which is consistent with apnea. However, there is almost no metabolic component that would indicate or be expected following seizure activity. We are curious to know the patient's blood glucose, since hypoglycemia has been associated with Ecstasy toxicity[2,3] and can by itself precipitate seizures.

Was dantrolene given solely to lower body temperature? Although the fever may be due to a combination of seizure activity and Ecstasy ingestion, 38.6[degrees]C is not very high when considering that body temperatures as high as 42.8 [degrees]C have been reported in-patients rendered hyperthermic by Ecstasy. Typically, dantrolene is reserved for those rare cases of malignant hyperthermia where calcium sequestration into the sarcoplasmic reticulum fails. The resultant continuous stimulation of muscle contraction at a point distal to the motor end plate is untreatable by more conventional means, such as neuromuscular blocking agents. Was any other means of cooling attempted, such as terminating the seizure or the use of cooling blankets or mist and fan?

After the use of pancuronium, the patient's convulsions "subsided". Since pancuronium has no anticonvulsant activity, it is possible that central nervous system activity continued despite no outward manifestations. Was electroencephalogram monitoring performed to identify ongoing seizure activity? Were high doses of anticonvulsants administered, but not mentioned? Given the good outcome of the patient without adequate anticonvulsant therapy, might the "seizure" activity observed actually have been myoclonus, for which no specific treatment is needed?

Given the inadequacy of serum 3,4-methylenedioxymethamphetamine levels in predicting toxicity, the known risks of environmental conditions, and the potentially greater toxicity with concomitant use of other psychostimulant drugs, we agree that cooling, gastrointestinal decontamination, and supportive care are likely the optimal approach to patients suffering from Ecstasy intoxication.

REFERENCES

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