

cite the traditional use of paraldehyde and the lesser use of barbiturates and chloral hydrate in the treatment of delirium tremens. Although sedation had been regarded as symptomatic treatment, the Lexington group postulates that it may represent specific treatment in the sense that the sedatives used may be adequate pharmacologic substitutes for alcohol.

Since the advent of the newer psychopharmacologic agents—reserpine, the phenothiazines, meprobamate, the benzodiazepines, etc.—many of these drugs have been employed in the treatment of the acute alcohol withdrawal state. The early reports on the use of these agents tended to be optimistic. Postel and Cossa(13) cited a decrease in delirium tremens mortality from 65 percent in 1952 to 25 percent in 1955 following treatment with 25 percent alcohol, chlorpromazine, and vitamin B complex intravenously. Figurelli(4) reported a decrease in delirium tremens mortality from ten percent to 0.6 percent after changing treatment from paraldehyde to promazine.

More recent studies have been reported in a more sober vein. In a study comparing promazine and paraldehyde, Thomas and Freedman(15) found that in the milder alcohol withdrawal states more patients were symptom free after two days of treatment with promazine than were those treated with paraldehyde. However, if patients treated with promazine did not respond in two days the symptoms tended to become more severe, with a prolonged course ensuing. In four such patients (of a total of 34) severe delirium developed, one terminating fatally. All of the 33 patients treated with paraldehyde were free of symptoms by the fourth day. Of 39 other patients admitted in delirium tremens, 17 were treated with promazine and 22 with paraldehyde. There were six deaths in the promazine group (35 percent) but only one in the paraldehyde group (4.5 percent).

In another recent study Golbert and associates(6) treated 49 patients for alcohol withdrawal syndromes (agitated and tremulous states, including two patients with acute hallucinosis) with either promazine, chlordiazepoxide, alcohol, or a combination of paraldehyde and chloral hydrate. In the

alcohol group (12 patients), five developed delirium tremens, and one of them also had convulsions. In the promazine group (13 patients), seven developed delirium, one with convulsions; the only deaths (two) occurred in this group. In the chlordiazepoxide group of 12 patients, six developed delirium. In the paraldehyde-chloral group (12 patients), only one developed delirium.

Golbert and associates(6) treated 23 patients in delirium tremens with either promazine or the paraldehyde-chloral combination. In the promazine group of 12 patients, one developed convulsions and two died. There were no convulsions or deaths in the paraldehyde-chloral group. Thus in both promazine-treated groups there was a mortality rate of 16 percent, compared to no deaths in the other groups.

The literature is replete with reports on the clinical use of other psychoactive agents. Laties and associates(12) found promazine and chlorpromazine “essentially indistinguishable in performance” in the treatment of delirium tremens. Kaim and Rosenstein (11) reported that:

In the alcoholic with frank or impending delirium tremens and associated convulsive seizures, Librium [chlordiazepoxide], in higher dosage of 200 to 300 mg. daily, brings prompt and gratifying control of both the psychotic and the convulsive phenomena without the toxicity experienced with the use of phenothiazines, reserpine, or even the barbiturates.

Weiner(19) advocates the routine use of hydroxyzine parenterally as “the recommended drug” for treatment of the acute alcoholic states, with sodium amytal intravenously for “the few that do not respond.” He advises against paraldehyde (danger of sudden death) and phenothiazines (hypotensive risk). Victor(17) stresses that the newer psychoactive drugs “have proved of value only in the milder forms of the withdrawal syndrome. However, there are no adequate data to show that any of them is effective in preventing delirium tremens.”

In spite of the high incidence of alcoholism, there have indeed been very few large-scale studies evaluating the relative effectiveness of different drugs used in the treatment of the alcoholic during the acute withdrawal period.