Treatment Program

Because of the serious nature of this condition and its widespread occurrence in the 166 Veterans Administration hospitals, a large-scale cooperative study was initiated to evaluate the relative efficacy and safety of four drugs commonly used in treating the withdrawal symptoms of the alcoholic. Chlordiazepoxide, chlorpromazine, hydroxyzine, and thiamine were evaluated against a matching placebo control in 23 VA hospitals using a common protocol.

All newly admitted patients who had been drinking heavily for a period of at least two weeks immediately preceding hospitalization were considered for the study, as well as patients who were originally admitted for relatively minor medical or surgical conditions and who developed alcohol withdrawal symptoms during the early part of hospitalization.

Patients selected for the study had to show at least four of the following eight symptoms of withdrawal: gastrointestinal distress (anorexia, nausea, or vomiting), sweatiness or flushing, insomnia, tremulousness, irritability, apprehension, depression, and clouded sensorium or confusion.

Patients were excluded from the study for any of the following reasons: over 55 years of age, frank schizophrenia or obvious chronic brain syndrome, complications requiring primarily medical or surgical attention, delirium tremens at the time of hospitalization, and known epilepsy or diabetes.

Procedure

Successive patients who fulfilled the selection criteria were assigned by random code to one of the five treatment groups. On the first day all patients received, every six hours, either: 50 mg. of chlordiazepoxide intramuscularly, 100 mg. of chlorpromazine orally, 100 mg. of hydroxyzine intramuscularly, 100 mg. of thiamine intramuscularly, or placebo.

On the second through tenth days a flexible dosage schedule was employed within decreasing limits. During the last four days of the ten-day treatment period half of each treatment group was changed to placebo. All treatment was oral after the first day. During the first day patients on intramuscular medication also received placebo capsules; patients on oral medication also received intramuscular placebo injections.

During the ten days of the study no other psychoactive drugs, conventional sedatives, or hormone or vitamin preparations could be prescribed. Fluids were prescribed orally or intravenously as needed in accordance with good medical care. Other supportive treatment (counseling, psychotherapy) was also provided as seemed indicated.

The principal investigator at each participating hospital was responsible for the coordination of the research team and for the collection of the laboratory and scale data. The research team consisted of an evaluation group (nurse and nursing assistant) from each shift and the treatment physician. The ward evaluation team was responsible for completing the following items: Nurses' Alcohol Symptom Scale (at the end of each eight-hour shift), medication record (during each shift), Lorr and McNair Mood Scale (once daily), and alcadd test (during the sixth treatment day). The treatment physician was responsible for completing the Symptom Check List daily and the Global Rating on the first, sixth, and tenth days.

Patients could be dropped from the study because of refusal to take oral medication, inadequate control of symptomatology, development of delirium tremens or other serious complications, or intercurrent illness. In such cases the patient was promptly rated and the reasons given for the termination on the Early Terminator Record.

When a patient completed or was dropped from the study, all his forms were forwarded for processing to the Central Neuropsychiatric Research Laboratory, VA Hospital, Perry Point, Md.

Results

Significant results are found in the group of patients who had to be terminated early, which numbered 106 of the 537 patient population studied. As seen in table 1, 39 patients were lost from the study because they left the hospital against medical advice or without leave or were allowed to leave