MEDICATIONS FOR ALCOHOL WITHDRAWAL

Several detoxification medication regimens are appropriate for use in outpatient alcohol withdrawal. Chlordiazepoxide (Librium), one of the most frequently used medications, has a well-documented efficacy profile. This drug has a wide therapeutic window and is "self-tapering" because of its long half-life. Thus, chlordiazepoxide is an ideal drug for use in outpatient detoxification. One treatment option is to "front load" the patient to provide adequate sedation. Then small amounts of the drug are added as needed during the detoxification period.

Treating Alcohol Withdrawal with Chlordiazepoxide (Librium)

SCHEDULE	*DAY 1*	*DAY 2*	*DAY 3*	*DAY 4*
Rigid	**50 to 100 mg four times daily**	**50 to 100 mg three times daily**	**50 to 100 mg twice daily**	**50 to 100 mg at bedtime**
Flexible	**50 to 100 mg every 4 to 6 hours as needed based on symptoms**	**50 to 100 mg every 6 to 8 hours as needed**	**50 to 100 mg every 12 hours as needed**	**50 to 100 mg at bedtime as needed**

Chlordiazepoxide therapy should be stopped if a patient does not respond as expected to an adequate dosage of the medication. Failure to respond may reflect complete down-regulation of the γ-aminobutyric acid–neuron benzodiazepine receptors, which renders the medication ineffective.

Pregnant women should not be treated with chlordiazepoxide. The drug also should not be given to patients with liver failure. Because the liver's ability to oxidize substances declines before its ability to conjugate substances, medications conjugated by the liver, such as lorazepam (Ativan) should be used in place of chlordiazepoxide.

Alternative Treatment Regimens for Alcohol Withdrawal

MEDICATION	*DOSAGE*
Lorazepam (Ativan)	**1 to 4 mg every 3 or 4 hours for 3 to 5 days**

Except in patients with liver failure, short-acting benzodiazepines such as lorazepam generally should not be used in the outpatient setting because of the potential for breakthrough seizures. Intravenous administration of lorazepam is an acceptable option in hospitalized patients who are in

stage III withdrawal. These patients can be given an initial loading dose of 2 to 4 mg of lorazepam, with subsequent doses titrated until adequate sedation is achieved. The use of lorazepam in this setting allows more precise titration than can be obtained with longer acting medications.

Long-acting benzodiazepines such as clorazepate (Tranzene), diazepam (Valium) and clonazepam (Klonopin) appear to have no advantages over chlordiazepoxide and may be more expensive. Thus, when alternative treatment regimens are indicated lorazepam is an appropriate choice.