



### Acute treatments for ethanol withdrawal

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In 1969 a controlled trial in over 500 patients with alcohol withdrawal demonstrated the superiority of oral chlordiazepoxide over a phenothiazine, an antihistamine, thiamine, or placebo in the prevention of seizures and delirium tremens. Unfortunately many clinicians and experts continued to use alternative choices for their patients. In later work, animal models supported the superiority of benzodiazepines over neuroleptics in withdrawal seizures. Although benzodiazepines eventually took hold as the mainstays of therapy, many practitioners ignored evidence of superiority of diazepam over lorazepam. For years people continued to debate the optimal drug and regimen with survey data from USA treatment centers in the early 1990s showing wide practice variations in choice of drug and dosing regimen. Finally, in a landmark study, Saitz and co-workers demonstrated that symptom triggered therapy with oral chlordiazepoxide using a standardized assessment tool (CIWA score) resulted in a shorter duration of care, with less total drug and no worsening of progression to seizures or delirium tremens. Before and after data using historical controls suggested a survival advantage for this approach.

While there is some support for phenobarbital and GABA agonists either alone or in combination with a benzodiazepine, the data is limited, with ongoing concerns about respiratory depression. As such these agents should still be considered second line therapies. Likewise some authors suggest a role for non-GABA agonists such as dexmedetomidine or ketamine, but in the presenter's opinion, the data are insufficient to recommend their routine use at this time. Finally although drugs like baclofen find promise, a recent systematic review concluded that the existing data were insufficient to comment on the safety or efficacy of baclofen when compared to standard therapies. Its use as an adjunct was not discussed.

Thus at the present time, the presenter recommends that routine cares consist of initial therapy with oral chlordiazepoxide (or parenteral diazepam when oral therapy is not appropriate) based on clinical symptoms and not a fixed dose. The addition of phenobarbital is suggested in patients felt to be resistant to benzodiazepine therapy. Data are insufficient to recommend the routine use of other agents as first or second line therapies.