

Managing GHB withdrawal with early baclofen loading: A retrospective case series

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Introduction: People who regularly consume gamma-hydroxybutyrate (GHB) may develop dependence that can result in a withdrawal syndrome. Currently, there are limited data to guide pharmacological management of GHB withdrawal. Baclofen is a gamma-aminobutyric acid (GABA)-B agonist and candidate pharmacotherapy for GHB withdrawal.

Methods: Inpatient medical records (calendar year 2024) were reviewed. Cases were eligible if admitted for GHB withdrawal and received early/loading dose of baclofen (20mg every 1-2 hours until 60mg or light sedation). Cases were assessed for demographics, patterns of GHB use, concomitant substance use, medical and psychiatric comorbidities, medications administered, physiological responses (heart rate, blood pressure), incidence of delirium and intensive care.

Results: 14 cases were identified in 12 patients (mean age 33.5 years, 66.7% women), 13 cases (92.8%) reported daily GHB use, and median GHB use prior to admission was 4 months (range: 1 month-25 years). All cases concurrently used methamphetamine. Seven patients (58.3%) self-reported anxiety disorder. Duration of inpatient admission ranged from 0-8 days. All cases received a loading dose of 60mg baclofen, the average dose was 87mg (85mg median) in the first 24 hours. One case (7.1%) continued baclofen following discharge. All cases (100%) received concomitant diazepam and olanzapine, with total doses during admission ranging from 10mg–140mg for diazepam and 2.5mg–40mg for olanzapine. Cases remained hemodynamically stable through their admission, however in seven of 14 cases (50%) hypertension was present ($\geq 140/90$ mmHg) at some point during admission. One case (7.1%) demonstrated features of delirium, on day 3. No case was referred to intensive care. Seven cases (50%) self-discharged.

Discussions and Conclusions: In this sample, GHB withdrawal with early baclofen loading was safe and feasible.

Implications for Practice or Policy: This case series adds to emerging literature on the use of baclofen to in GHB withdrawal while avoiding complications such as medical deterioration or adverse events.

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