

49 - References

References

Addictions and substance misuse CHAPTER 4 References

1. Kamal RM, et al. Pharmacological treatment in gamma-hydroxybutyrate (GHB) and gamma-butyrolactone (GBL) dependence: detoxification and relapse prevention. *CNS Drugs* 2017; 31:51-64.
2. Bell J, et al. Gamma-butyrolactone (GBL) dependence and withdrawal. *Addiction* 2011; 106:442-447.
3. Abdulrahim D, et al. Textbook of Clinical Management of Club Drugs and Novel Psychoactive Substances: NEPTUNE Clinical Guidance. Cambridge: Cambridge University Press; 2022.
4. LeTourneau JL, et al. Baclofen and gamma-hydroxybutyrate withdrawal. *Neurocrit Care* 2008; 8:430-433.
5. Siefried KJ, et al. Inpatient GHB withdrawal management in an inner-city hospital in Sydney, Australia: a retrospective medical record review. *Psychopharmacology (Berl)* 2023; 240:127-135.
6. Floyd CN, et al. Baclofen in gamma-hydroxybutyrate withdrawal: patterns of use and online availability. *Eur J Clin Pharmacol* 2018; 74:349-356.
7. Liao PC, et al. Clinical management of gamma-hydroxybutyrate (GHB) withdrawal delirium with CIWA-Ar protocol. *J Formos Med Assoc* 2018; 117:1124-1127.
8. Habibian S, et al. Successful management of gamma-hydroxybutyrate (GHB) withdrawal using baclofen as a standalone therapy: a case report. *J Addict Med* 2019; 13:415-417.
9. Dijkstra BA, et al. Detoxification with titration and tapering in gamma-hydroxybutyrate (GHB) dependent patients: the Dutch GHB monitor project. *Drug Alcohol Depend* 2017; 170:164-173.
10. Beurmanjer H, et al. Tapering with pharmaceutical GHB or benzodiazepines for detoxification in GHB-dependent patients: a matched- subject observational study of treatment-as-usual in Belgium and the Netherlands. *CNS Drugs* 2020; 34:651-659.
11. National Poisons Information Service. 2024; <https://www.npis.org>.
12. TOXBASE®. 2024; <https://www.toxbase.org>.
13. Freeman G, et al. Phenobarbital to manage severe gamma-hydroxybutyrate withdrawal: a case series. *Drug Alcohol Rev* 2023; 42:27-32. Pre-withdrawal ■ ■Discuss treatment plan with the patient and person who will be supporting them ■ ■Encourage patient to keep a week-long diary of GBL use including dose frequency and quantity ■ ■Encourage patient to cease 'on-top' drug use such as mephedrone and crystal methamphetamine before elective withdrawal ■ ■Start baclofen 10mg PO tds 3-7 days before target withdrawal

date ■ ■ Encourage patients to reduce GBL dose as much as tolerable either by reducing each dose by 0.1mL every 1–2 days or increasing the time period between doses

Withdrawal ■ ■ On day 1 of planned ambulatory withdrawal, ask patient to attend having used no GBL for a minimum of 2 hours, and advise them to dispose of their remaining supplies of GBL ■ ■ Advise patients they will need to stay at the clinic for up to 4 hours on day 1, that they cannot drive motor vehicles during withdrawal, and should not drink alcohol or take other sedatives during withdrawal ■ ■ Increase baclofen to 20mg PO tds ■ ■ Initiate benzodiazepine treatment once signs and symptoms of withdrawal develop - tachycardia, sweaty palms, fine tremor and anxiety. Start diazepam 20mg, review after 2 hours and monitor for anxiety/sedation/respiratory depression. Repeat up to 20mg PO diazepam if indicated ■ ■ Once 6 hours have passed since last GBL usage the patient may be given up to a further 40mg diazepam, and then seen daily on the following 2 days ■ ■ At each daily visit, review diazepam dosage and titrate to symptoms. Diazepam is seldom needed beyond 7 days. Typical initial daily doses of diazepam are around 40–60mg/day

Post-withdrawal ■ ■ Continue baclofen 20mg PO tds following benzodiazepine withdrawal, reducing over 4–6 weeks. One of the few trials in this area successfully used 45–60mg a day for 3 months for relapse prevention¹¹ ■ ■ After withdrawal, persisting anxiety and insomnia are common, and there is a high risk of relapse. Before initiating elective withdrawal management, a plan should be in place to monitor and support patients for a minimum of 4 weeks to minimise risk of relapse

GBL, gamma-butyrolactone; PO, by mouth; tds, three times a day.

Revision #1

Created 2026-01-04 20:16:14 UTC by Omar Ayman

Updated 2026-01-04 20:16:14 UTC by Omar Ayman