

Abuse Liability of Baclofen

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TO THE EDITOR

I read with interest the case report on baclofen abuse by Ghosh and Bhuyan¹⁾ in May issue of *Clinical Psychopharmacology and Neuroscience* 2017. The patient reportedly was prescribed quetiapine 100 mg, escitalopram 20 mg, mirtazapine 15 mg, lorazepam 2 mg and baclofen 20 mg after initial detoxification, for depression and insomnia along with relapse prevention. As mentioned, escitalopram was added as depressive symptoms persisted while on mirtazapine. However, it is not clear why mirtazapine was continued when it was ineffective for depression. Similarly, the reason why lorazepam was continued is not clear; it is always advisable to avoid benzodiazepines after the initial detoxification.²⁾ For those with persisting insomnia associated with alcohol dependence several medications are found to be useful, but trazodone has the most data suggesting efficacy.³⁾

At follow up, the patient was using high doses of baclofen 80 mg (frequency not mentioned) along with mirtazapine 15 mg and lorazepam 2 mg daily, for the euphoric effects. The duration of the euphoric symptoms after each usage of high dose baclofen is not clear from the report. However, it is quite possible that in this case the combination of baclofen and lorazepam has additive effects, as both are GABA agonists. Combinations of psychotropic drugs for higher euphoric effect has been reported before.⁴⁾

The authors assert that baclofen abuse has not been reported before. Perry *et al.*⁵⁾ in 1998 first reported baclofen abuse by 14 adolescents during a party where they con-

sumed between 60 to 600 mg of baclofen and presented with toxicity symptoms; however, the euphoric effects were not described. Nasti and Brakoulias⁶⁾ have reported baclofen abuse up to 75 mg/day in a 61-year-old lady, who presented with delirium after abrupt discontinuation. Kamal *et al.*⁷⁾ have reported baclofen abuse up to 80 mg with gamma-hydroxybutyrate (GHB) for sedative and anxiogenic effects, which resulted in fatal overdose. In a case study from India by Das *et al.*⁸⁾ a 24-year-old male abused baclofen up to 600 mg/day with euphoric effects.

Baclofen is predominantly a selective GABA-B agonist, but at higher doses it may lose selectivity for GABA-B. Also, baclofen has structural homology with GHB, another GABA-B agonist with high abuse potential and is illicitly used as a party-drug. It is postulated that abuse liability of GHB in contrast to baclofen could be because of different receptor subtype of GABA-B.⁹⁾ However, such selectivity may be lost with higher doses of baclofen leading to euphoric effects.

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