Non-medical use of baclofen: A case series and review of the literature

Jean Marc Pelerin¹, Lisa Fristot¹, Valérie Gibaja¹, Bruno Revol², Pierre Gillet³, and Juliana Lima-Tournebize¹

July 12, 2021

Abstract

Aims: Baclofen is widely used for spastic disorders, and most recently for addictive disorders. The first signals of baclofen abuse occurred in the last decade. This study aims to assess the motives, diversion sources and routes of administration associated with the non-medical use of baclofen and examine health problems related to the non-medical use of baclofen. Methods: Spontaneous reports of baclofen abuse reported to the addictovigilance center of East France were analyzed. A literature search was simultaneously conducted using PubMed®, Web of Sciences®, and Google Scholar® databases. Both searches were performed in February 2021 without a time limit. Results: Forty-six cases were analysed (33-from the literature review and 13-from addictovigilance base). Baclofen's non-medical use mainly affected male subjects with addictive history, but cases of primary abuse in subjects without any substance abuse history were also observed. Euphoria search was the most common reason for misuse. Route of administration included oral, snorting and sublingual use. Physicians were a common source for misused baclofen, but cases involving illegal sources were also observed. Most of the patients misusing baclofen presented serious complications, mainly represented by neurological and respiratory disturbances. Physical and psychological dependence to baclofen was observed in three persons. Conclusion: Although baclofen abuse remains relatively infrequent or (most likely) underestimated, this study helped to confirm the intrinsic abuse potential of baclofen and make visible the baclofen, and emergency departments should be aware of baclofen dangers in abuse situations.

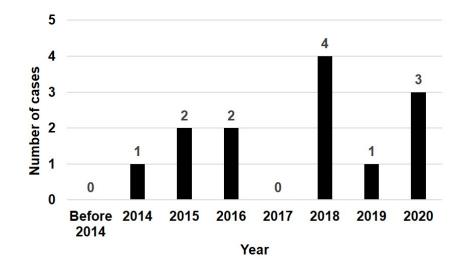
Hosted file

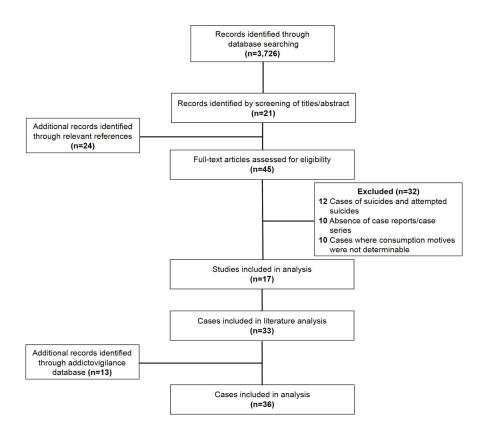
Main text.docx available at https://authorea.com/users/425196/articles/530069-non-medical-use-of-baclofen-a-case-series-and-review-of-the-literature

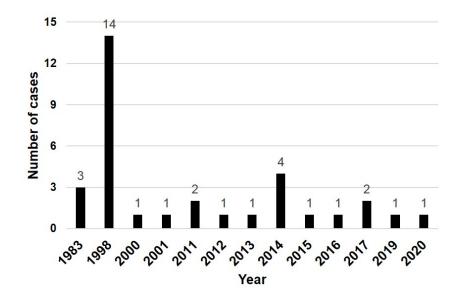
¹CHRU de Nancy

²Centre Hospitalier Universitaire Grenoble Alpes

³University Hospital of Nancy







Hosted file

Table 1.docx available at https://authorea.com/users/425196/articles/530069-non-medical-use-of-baclofen-a-case-series-and-review-of-the-literature

Hosted file

Table 2.docx available at https://authorea.com/users/425196/articles/530069-non-medical-use-of-baclofen-a-case-series-and-review-of-the-literature