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Perceptual Distortions Associated With Protracted Benzodiazepine Withdrawal Syndrome

Karen D. Antwiler* and Thrasher KDDepartment of Family Medicine,
Eisenhower Health Family Medicine
Residency Program, Eisenhower Medical
Center, California, United States

Abstract

High-dose benzodiazepine dependence is notorious for unsuccessful discontinuation attempts. Despite the propensity for dependence, a well established protocol for high-dose BZD withdrawal management is lacking. In this review, we discuss the development of rare perceptual distortions in an elderly patient upon tapering of the benzodiazepine with a positive outcome. Family medicine providers must be vigilant to individualize benzodiazepine tapers and be aware of rare withdrawal symptoms to avoid undue stress in patients.

Keywords: Benzodiazepine; Tactile hyperesthesia; Dysgeusia; Alprazolam; Anxiety; Withdrawal

Corresponding author:

Karen D. Antwiler

Department of Family Medicine, Eisenhower
Health Family Medicine Residency Program,
Eisenhower Medical Center, California,
United States

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 karen.devadoss@yahoo.com

Introduction

Benzodiazepines (BZDs) have become one of the most commonly used and misused drug classes due to their wide range of action and low toxicity profile. As per the National Survey on Drug Use and Health, 12.6% of U.S. adults (30.6 million adults) report past-year BZD use, with misuse accounting for 17.2% of overall use. Although BZDs are highly effective as short-term treatments for certain disorders, they also are potentially addictive agents. Providers must be aware of withdrawal symptoms beyond rebound anxiety and seizure precipitation. This case report demonstrates the development of tactile hyperesthesia and dysgeusia, lesser known but documented complications of BZD withdrawal, while showcasing a successful individualized dose taper in a geriatric patient [1].

Case Presentation

A 69 year old female with past medical history of gastric ulcer, osteoarthritis, generalized anxiety disorder, and major depressive disorder presented to the primary care clinic for BZD use disorder. Her current dose of Alprazolam had been slowly increased throughout the 18 year duration from 0.5 mg to 2 mg daily, with no other psychotropic medications for concurrent anxiety and depression. The patient had unsuccessful discontinuation attempts due to a strong desire to control her panic attacks with Alprazolam and previous withdrawal symptoms of dizziness, palpitations, and mood disturbances. She reported diminishing ability to take care of obligations at home [2].

Vitals were unremarkable. Despite the mental status exam demonstrating a normal mood and affect, composite measures of depression and anxiety include Patient Health Questionnaire-9: 11 and General Anxiety Disorder-7: 11. Her physical examination was unremarkable. The most recent labs (complete blood count, lipid panel, comprehensive metabolic panel) had been completed a few months prior and were within normal limits with the exception of slight elevations in the total cholesterol, triglycerides, and low-density lipoproteins. As per DSM-V, the patient met the criteria for severe BZD use disorder.

Considering the potential risks associated with long-term BZD use, a slow taper was initiated with a longer-acting equivalent. The patient was started on the equivalent dose of Chlordiazepoxide 100 mg per day with an add on trial of Paroxetine.

At week 2 of the taper, the patient had completed reduction to 75 mg with reports of tactile hyperesthesia, dysgeusia, facial twitching, and anxiety. To address the subacute withdrawal symptoms, Gabapentin 300 mg was added to the regimen.

At week 8, the patient's dose of Chlordiazepoxide was decreased to 60 mg (25 mg twice daily in the morning and 10 mg at noon). Sensory abnormalities were still present but the patient reported improvement. She reported new symptoms of vivid dreams,

nightmares, and fatigue. Prazosin 1 mg was added to the regimen along with an increase of dosage in Paroxetine.

At week 52, she was stabilized on Chlordiazepoxide 15 mg (5 mg thrice daily). For mild anxiety, Hydroxyzine 25 mg PO TID PRN anxiety was added.

At week 88, the patient decreased her Chlordiazepoxide use of 5 mg to every 4 days. She reported recurrence of intermittent dysgeusia. Gabapentin dose was modified to 100 mg address subacute withdrawal symptoms.

At week 91, the patient is advised to stop Chlordiazepoxide. She was started on the trial of Gabapentin 200 mg QHS. Patient was advised that after the taper of Gabapentin is completed, she may embark on the trial to taper Paxil.

Discussion

Physiological dependence on BZDs is accompanied by a withdrawal syndrome commonly characterized by sleep disturbances, irritability, increased anxiety, and panic attacks. Perceptual distortion and dysgeusia are infrequently reported as symptoms of BZD withdrawal. The pathogenesis of these distortions is poorly understood but may be indirectly related to the sudden decrease in γ -aminobutyric acid (GABA) signaling during benzodiazepine withdrawal. Upon review of the available literature, there was a rarity in cases describing perceptual distortions upon discontinuation or tapering of a BZD. Primary care providers must be attentive to development of rare withdrawal symptoms and accordingly modify their treatment plan to most effectively treat patients [3].

There are three basic approaches to a benzodiazepine taper: (1) Utilize the same medication for tapering; (2) Switch to a longer-acting equivalent; (3) Utilize adjunctive medications to help mitigate potential withdrawal symptoms. There remains insufficient evidence to support the use of a particular BZD for tapering in geriatric adults. This patient was switched to a long-acting BZD, Chlordiazepoxide with a gradual decrease of the dose. As no clear evidence suggests the optimum rate

of tapering, it is essential to individualize schedules. This patient's schedule was consequently individualized, with a 25% dose reduction in 2 weeks followed by reductions of 5-10% as tolerated. The substitution of Chlordiazepoxide allowed a gradual reduction of the serum levels, thereby greatly reducing withdrawal symptoms and symptom reemergence. Gabapentin, Paroxetine, Hydroxyzine, and Prazosin were used as adjunctive agents to mitigate discomfort. Upon research, Paroxetine was noted to have the lowest occurrence of panic attacks in social settings during BZD tapers. Gabapentin was utilized as previous BZD withdrawal reports noted a drastic decrease in cravings for BZDs along with tolerance of rapid withdrawal with minimal discomfort. Given evidence of benefit with Hydroxyzine based on limited data, it was used as a transient support as patient was withdrawn from a long term lorazepam treatment. Lastly, despite Prazosin's limited studies, it was utilized to prevent the increased anxiety during subsequent abstinence that is a risk factor for relapse BZD use disorder. As this protocol was successful, further studies with a larger number of patients are needed to confirm the applicability, efficacy, and safety of adjuncts.

Conclusion

Discontinuation of long-term BZD use in older adults is feasible. Family medicine physicians must be cognizant of the rare adverse effects of BZD withdrawal. Current reports do not provide enough evidence to make specific recommendations regarding the prevention of BZD withdrawal-induced perceptual distortions or dysgeusia. Taper protocols for complicated withdrawal phenomena require further research.

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