Published in final edited form as:

Am J Addict. 2007 ; 16(5): 426. doi:10.1080/10550490701525467.

Quetiapine Treatment of Zolpidem Dependence

John J. Mariani, MD and Frances R. Levin, MD

New York State Psychiatric Institute, New York, New York

Division on Substance Abuse, Columbia University College of Physicians and Surgeons, New York, New York

We report the case of Mr. A, a 52-year-old man with a lifelong history of substance use disorders who developed a dependence on zolpidem, which was successfully treated with quetiapine. Zolpidem is a short-acting nonbenzodiazepine hypnotic that potentiates gamma-aminobutyric acid by binding to benzodiazepine type 1 receptors. Zolpidem is thought to have low abuse potential,¹ but at higher than recommended doses, its behavioral pharmacology resembles that of benzodiazepines,^{2,3} and several dozen case reports of zolpidem abuse have been reported.⁴

Mr. A had a history of alcohol, cannabis, and cocaine dependence, but had denied using any alcohol, marijuana, or cocaine for more than five years. As a treatment for insomnia, Mr. A received a prescription for zolpidem 10 mg per day from his internist. Over a six-month period, his use escalated to a minimum of 40 mg per day, but on multiple episodes took as much as 250 mg. He purchased zolpidem from Internet-based pharmacies. High-dose zolpidem use resulted in intoxication and amnesia. Mr. A was admitted to an inpatient detoxification unit, and withdrawal symptoms were treated with clonazepam over a five-day period. After discharge, patient experienced severe insomnia and craving for zolpidem. A trial of trazodone in doses of up to 200 mg QHS was initially effective, but the patient rapidly developed a tolerance to the sedating effects. A trial of gabapentin followed the same pattern: initial efficacy and a rapid development of tolerance to the sedating effects. Quetiapine treatment was initiated at 50 mg QHS and titrated to higher doses as the patient developed tolerance to the sedating effects. The patient eventually stabilized at quetiapine 800 mg each night, with good hypnotic effects and no craving for zolpidem. Six months after detoxification from zolpidem, he has maintained abstinence from zolpidem and reports no craving. Lipids and glucose remain within normal limits. The patient continues to receive e-mail and telephone solicitation to buy zolpidem from Internet-based pharmacies 3–5 times per week.

Quetiapine is a second-generation antipsychotic medication with known sedating effects. While zolpidem is a relatively safe drug compared to conventional hypnotics, patients with substance abuse histories may be at risk for abuse. In cases of zolpidem abuse or dependence, the use of another sedating agent with lower abuse potential should be considered.

Address correspondence to Dr. Mariani, 1051 Riverside Drive, Unit 66, New York, New York 10032. E-mail: E-mail: jm2330@columbia.edu.

Publisher's Disclaimer: Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>. This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden. The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

References

1. Darcourt G, Pringuey D, Salliere D, Lavoisy J. The safety and tolerability of zolpidem—an update. *J Psychopharmacol* 1999;13:81–93. [PubMed: 10221362]
2. Rush CR. Behavioral pharmacology of zolpidem relative to benzodiazepines: a review. *Pharmacol Biochem Behav* 1998;61:253–269. [PubMed: 9768560]
3. Rush CR, Baker RW, Wright K. Acute behavioral effects and abuse potential of trazodone, zolpidem and triazolam in humans. *Psychopharmacology (Berl)* 1999;144:220–233. [PubMed: 10435388]
4. Hajak G, Muller WE, Wittchen HU, Pittrow D, Kirch W. Abuse and dependence potential for the non-benzodiazepine hypnotics zolpidem and zopiclone: a review of case reports and epidemiological data. *Addiction* 2003;98:1371–1378. [PubMed: 14519173]