

Zolpidem Dependency

Jamshid Ahmadi^{1*}, Saxby Pridmore²

¹Substance Abuse Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

²Professor of Psychiatry, University of Tasmania, Tasmania, Australia

***Corresponding author:** Jamshid Ahmadi, Professor of Psychiatry, Founder and Director, Substance Abuse Research Center, Shiraz University of Medical Sciences, Shiraz, Iran, E-mail: Jamshid_Ahmadi@yahoo.com

Abstract

Background: Zolpidem dependency is not an uncommon addiction.

Objective: To explain case report of a last-year medical student medicated with zolpidem due to insomnia but during years he increased doses of zolpidem to 900 mg per day and gradually developed addiction.

Results: This happening illustrates that zolpidem administration can cause dependency.

Discussion: Our case report makes clear that zolpidem dependence is a recent addiction. Therefore, physicians should be cautious in prescribing zolpidem.

Conclusions: This experience can be a new finding.

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Introduction

Now a days, the rate of addictive drugs/substances is raising, such that, policy makers, researchers, mental health professionals and pharmacists have been spending more time and expenses on the management^[1-3], etiology, epidemiology, prevention and treatment of these kinds of psychiatric disorders^[4-8].

The most common cause of addictions and drug dependencies is mental disorder. Some patients self-medicate to treat their mental problems such as, insomnia, depressive disorders, anxiety, aggression, agitation, pain and sexual dysfunctions. Considering going up rate of mental diseases in the world, substance use and substance induced diseases, have been regarded as raising enigma. Currently, hospital referrals of psychiatric diseases resulted from substance abuse are increasing.

Zolpidem is a selective agonist of benzodiazepine type 1 receptor. The selectivity of the medication for the type 1 receptor may not be absolute and is dose dependent. In comparison to the benzodiazepines, zolpidem dependence is not common. However, at higher than physician advised doses for elongated terms, its habit-forming potential could be the same as benzodiazepines^[1].

Case Description

Patient was a single, 25-year old medical intern (last year student of medical school). He resided with his parent in the capital city of Shiraz city in Fars province, an area in south of Iran. He developed insomnia at age of 22.5 when he was a 5th year medical student. Then, he referred to a psychiatrist to be treated. The physician prescribed 2.5 mg zolpidem per night for two weeks duration only. The patient not only continued zolpidem after two weeks, but also stepwise increased the dosage such that six months later (two years prior to the current outpatient admission) he was abusing 300 mg zolpidem per night. Since 18 months prior to admission, he gradually developed depression and anxiety. At the time of admission he was consuming 90 tablets of 10 mg zolpidem per night (900 mg zolpidem). He did not report history of any other drug/substance abuse except for zolpidem. He did not mention any history of IV drug abuse. The patient did not give any history of substance abuse in his family. Because of anxiety, depression and zolpidem dependence he referred to outpatient clinic. Urine drug screening test was positive for zolpidem only. Psychological tests showed moderate anxiety and depression. During full psychiatric interview and precise examinations he was depressed and anxious. In detail physical and



neurological examinations, no abnormal findings were detected. Based on DSM-5 and full medical, psychiatric, and substance use history he was diagnosed as severe zolpidem use disorder.

Discussion

Illegal and illicit drugs and substances in the country of Iran include marijuana, hashish, opium, heroin, amphetamines, ecstasy, cocaine, hallucinogens and alcohol (tobacco products such as cigarettes are lawful).

Zolpidem is a non-benzodiazepine medication approved for the short-term treatment of insomnia. It is a selective agonist of benzodiazepine type 1 receptor. The selectivity of the zolpidem for the type 1 receptor may not be absolute and is dose dependent. In comparing to the benzodiazepines, dependency to zolpidem is not common. However, at higher than physician advised doses for protracted periods, its habit-forming potential could be similar to benzodiazepines.

This report simplifies that zolpidem may induce dependency. So, physicians should be very careful when prescribing zolpidem.

Conclusions

Our study illuminated that zolpidem has the potentials of abuse and dependency.

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