# Sleep-Walking a Rarest Side Effect of Zolpidem

Harmanjit Singh, Pugazhenthan Thangaraju<sup>1</sup>, Navreet Kaur Natt<sup>2</sup>

#### ABSTRACT

A 46-years-old male, with past history of road traffic accident and with no current/past history of substance abuse and no family history of sleep-walking, took zolpidem 10 mg without any prescription and after few days, the patient's son noticed the patient waking up in the middle of night and walking into their room with a staring expression and some incoherent speech. The patient had no memory of this event in the morning. This sleep-walking episode was attributed to zolpidem, as no medication change was made besides new start of zolpidem and the patient had no history of such episodes in the past. Zolpidem treatment was stopped, and since then, no further complaints of sleep-walking were reported.

Key words: History, patient, sleep-walking, zolpidem

## INTRODUCTION

Sleep-walking or somnambulism is a complex motor behavior initiated during sleep and is characterized by events like rising from bed and walking about. It is most common between the ages of 4-8 years and resolves spontaneously and very less common in adults and elderly. It usually occurs during the REM stages 3 and 4 of sleep. During these episodes, the person is not fully alert and there is reduced responsiveness, a blank stare, usually not responding to efforts to be awakened by others and fail to recall about these events after awakening and may remain confused for some time. [2]

Zolpidem is a non-benzodiazepine hypnotic agent having a rapid onset and short duration of action.

Access this article online	
Walana	Quick Response Code
Website:	ENZWOTEN
www.ijpm.info	
DOI:	3505643
10.4103/0253-7176.150856	

It is advantageous in having milder adverse effects than those of benzodiazepines and barbiturates (commonly used for treating insomnia).<sup>[3]</sup> To our knowledge, there are 5 published articles related to zolpidem-induced sleep-walking.<sup>[4-8]</sup> Sleep-walking can be dangerous due to the possibility of accidental injury. Here, we present a case of somnambulism associated with zolpidem use.

# **CASE REPORT**

The patient in this case report is a 46-years-old male, who had a past history of road traffic accident and underwent subdural hematoma extraction through burr hole surgery. He is working as a medical store superintendent in a central government hospital. He had no current/past history of any substance abuse, and he is an occasional smoker and alcoholic with frequency ranges from 2 cigarettes per day with twice a month alcohol consumption. In his medical history, he is known type 2 diabetic and is morbid obese patient, and he is on medication with oral hypoglycemic drugs metformin 500 mg and glimepiride 1 mg single dose daily. The patient had no personal or family history of sleep-walking.

Department of Pharmacology, All India Institute of Medical Sciences (AIIMS), New Delhi, <sup>1</sup>Medical Officer, Central Leprosy Teaching and Research Institute, Chengalpattu, Tamil Nadu, <sup>2</sup>Medical Officer, District TB Hospital, Amritsar, Punjab, India

Address for correspondence: Dr. Harmanjit Singh

Department of Pharmacology, All India Institute of Medical Sciences (AIIMS), New Delhi, India. E-mail: Harman gmcp@yahoo.com

After the surgery, he was prescribed anti-platelet drug aspirin 75 mg, anti-anxiety alprazolam 0.5 mg, and multivitamin capsule neurobion forte. He received no other medication, including herbal supplements.

During the course of treatment, he began complaining of insomnia in spite of alprazolam 0.5 mg, for which zolpidem treatment was taken by him without prescription as he was somehow affiliated with a hospital. He took zolpidem 10 mg orally at bedtime and stopped taking alprazolam. After 10-15 days of the initiation of zolpidem treatment, the patient's son noticed the patient waking up in the middle of night and walking into their room with a staring expression and some incoherent speech. The patient had no memory of this event in the morning. This sleep-walking episode was attributed to zolpidem, as no medication change was made besides new start of zolpidem and the patient had no history of such episodes in the past. Zolpidem treatment was stopped, and since then, no complaints of sleep-walking have been reported.

### DISCUSSION

The patient in the present case report had attacks of sleep-walking after taking the zolpidem. After dechallenge (withdrawal of offending drug), the condition improved and no further attacks were noted. This observation points towards a strong causal relationship between the drug and occurrence of the sleep attacks.

It has been noticed that drugs can affect physiology of sleep, memory, awareness, and arousal.<sup>[9]</sup> Use of zolpidem is associated with suppression of REM sleep on EEG.<sup>[10]</sup> According to the present literature, some drugs can lead to physiological changes during slow-wave sleep that can clinically manifest as

somnambulism or sleep-walking.<sup>[11]</sup> A definitive diagnosis of somnambulism usually requires all-night sleep recordings,<sup>[11]</sup> which were not performed on our patient. We suggest that when seeking an etiology of somnambulism in a patient, a careful review of the patient's current medications should be performed.

#### **REFERENCES**

- Remulla A, Guilleminault C. Somnambulism (sleep-walking). Expert Opin Pharmacother 2004;5:2069-74.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4thed, text revision. Washington: American Psychiatric Association; 2000.
- Huapaya LV. Seven cases of somnambulism induced by drugs. Am J Psychiatry1979;136:985-6.
- Feinberg I, Maloney T, Campbell IG. Effects of hypnotics on the sleep EEG of healthy young adults: New data and psychopharmacologic implications. J Psychiatry Res 2000;34:423-38.
- Toner LC, Tsambiras BM, Catalano G, Catalano MC, Cooper DS. Central nervous system side effects associated with zolpidem treatment. Clin Neuropharmacol 2000;23:54-8.
- Yanes Baonza M, Ferrer García-Borrás JM, Cabrera Majada A,Sánchez González R. Sleep-walking linked to zolpidem. [Article in Spanish]. Aten Primaria 2003;32:438.
- Sattar SP, Ramaswamy S, and Bhatia SC, Petty F. Somnambulism due to probable interaction of valproic acid and zolpidem. Ann Pharmacother 2003;37:1429-33.
- 8. Harazin J, Berigan TR. Zolpidem tartrate and somnambulism. Mil Med 1999;164:669-70.
- Iruela LM. Zolpidem and sleep-walking. J Clin Psychopharmacol 1995;15:223.
- Mendelson WB.Sleepwalking associated with zolpidem.J Clin Psychopharmacol 1994;14:150.
- Charney DS, Kales A, Soldatos CR, Nelson JC. Somnambulisticlike episodes secondary to combined lithium-neuroleptic treatment. Br J Psychiatry 1979;135:418-24.

**How to cite this article:** Singh H, Thangaraju P, Natt NK. Sleep-walking a rarest side effect of zolpidem. Indian J Psychol Med 2015;37:105-6.

Source of Support: Nil, Conflict of Interest: None.